A CASE STUDY ON THE CURRENT STATE OF IN-SERVICE TRAINING IN A PUBLIC

SCHOOL BASED ON TEACHERS' AND ADMINISTRATORS' EVALUATION

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Thesis Abstract

Hüseyin Ala, "A Case Study on the Current State of In-service Training in a Public School

Based on Teachers' and Administrators' Evaluation"

This case study examines the current state of in-service training activities in a public school based on teachers' and administrators' evaluation. It is a qualitative analysis addressing three categories of questions which relate to the current state of in-service training activities in a public school along with teachers' and administrators' evaluation of in-service training activities provided by the Ministry of National Education.

The participants of the study are the teachers and administrators of a public elementary school situated in a low income, high migration area in Ümraniye, Istanbul. Regarding the data collection, in the first phase, there was an analysis of documentation and an interview with the assistant manager responsible for the implementation of in-service trainings was performed to understand the current situation of in-service training activities in the school. In the second phase of the study, semi-structured interviews were applied according to the Teachers'/Administrators' Evaluation of In-Service Training: Semi Structured Interview Form.

The findings indicated that the school where this research was performed had brought about a general perspective on the current instances of in-service training and opened new matters of discussion related to the design of in-service training practices. There appear significant problems regarding teachers' and administrators' approaches toward in-service training, trainers, time, place, prior analysis of needs and trainings on technology.

Tez Özeti

Hüseyin Ala, "Bir Devlet Okulunda Hizmetiçi Eğitimin Mevcut Durumu Üzerine Öğretmen

ve İdareci Değerlendirmelerine Dayalı Bir Örnek Olay Çalışması"

Bu çalışma öğretmen ve idareci değerlendirmelerine bağlı olarak bir devlet okulundaki hizmet içi eğitim etkinliklerini incelemektedir. Çalışma, bir devlet okulunda öğretmen ve idarecilerin Milli Eğitim Bakanlığı tarafından sağlanan hizmet içi eğitim etkinliklerini değerlendirmeleri beraberinde hizmet içi eğitimin şu andaki durumuna yönelik üç kategori soruyu ortaya atan nitel bir analizdir.

Çalışmanın katılımcıları, İstanbul'un Ümraniye ilçesinde düşük gelir düzeyli yüksek göç alan bir bölgede yer alan bir devlet ilköğretim okulunun öğretmenleri ve idarecileridir. Verinin toplanmasına ilişkin olarak, ilk aşamada bir doküman analizi ile hizmet içi eğitimlerin uygulanmasından sorumlu müdür yardımcısı ile okuldaki hizmet içi eğitimlerin şu andaki durumunu anlamaya yönelik bir görüşme yapılmıştır. Çalışmanın ikinci aşamasında, Öğretmenlerin/İdarecilerin Hizmet İçi Değerlendirmesi: Yarı Yapılandırılmış Görüşme Formu doğrultusunda öğretmen ve idarecilerle görüşmeler uygulanmıştır.

Bulgular, araştırmanın gerçekleştirildiği okulun şu andaki hizmet içi eğitim örneklerine genel bir bakış açısı kazandırmış ve hizmet içi eğitim uygulamalarının planlanması üzerine yeni tartışma konuları açmıştır. Öğretmenlerin ve idarecilerin hizmet içi eğitime yaklaşımları, eğitimciler, zamanlama, yer, ihtiyaçların önceden analizi ve eğitim teknolojisi üzerine hizmet-içi eğitimler konularında önemli sorunlar olduğu görülmektedir.

ACKNOWLEDGEMENTS

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ABBREVIATIONS

MNE   Ministry of National Education

IST   In-service Training

TEV   Turkish Education Foundation

CHAPTER I

INTRODUCTION

Statement of the Problem

In an era of rapid and complex development in all aspects of life, it is crucial to search and gain knowledge that could be applied to new spheres and the notions as 'lifelong learning', 'professional development' and 'skill based learning' are becoming more important. Through a lifetime of learning, teachers need to make a continuous effort; thus, educational in-service training becomes rather critical in the fields of adult education and teacher training.

Darkenwald and Merriam (1982) see training activities forming a division of adult education which could be defined as a process in which individuals with adult characteristic roles go through systematic and preserved learning activities to create changes in knowledge, attitudes, values or skills.

Adult education activities are referred to as vocational training or in-service (on-the-job) educational activities by organizations that offer education for its employees. With respect to in-service training, the term professional development is often used interchangeably but has slightly different meanings. According to OECD (the Organization for Economic Cooperation and Development):

> Professional development signifies any activity that develops an individual's skills, knowledge, expertise and other characteristics as a teacher. These include personal study and reflection as well as formal courses.
>
> In –service education and training refers more specifically to identifiable learning activities in which practicing teachers participate (ERO Report, 2000).

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Educational in-service training are considered crucial since they provide the teachers with the relevant knowledge and skills needed to function effectively in the schools they teach and to keep up with the demands stemming from the developments in the theory and methodology of their profession. In-service training of teachers, thus, comprises of structured training activities or educational in-service programs that are intended to increase skills and capabilities of teachers.

Moving from this, it can be stated that development of in-service training programs necessitates a complex process including the analysis of needs, discerning the context, identifying program ideas, sorting and prioritizing program ideas, developing program objectives, designing instructional plans and formulating evaluation plans (Caffarella, 2002).

Historical Development of In-service Training in Turkey

About the historical development of in-service training of teachers in Turkey, it can be learned that in-service training needs of teachers' in early years of the Turkish Republic were met by the Bureau of Pedagogy (Pedagoji Şubesi) which was a part of Gazi Education Institute (Gazi Eğitim Enstitüsü). In 1937-1940s Travelling Trainers of Teachers (Gezici Başöğretmenler) served to fulfill the in-service training needs of the teachers all around the country (Bağcı&Şimşek, 2000).

In-service training turning out to be an issue of vacation faced with restrictions in terms of finance, location and time, In-Service Main Office (Hizmetiçi Eğitim Dairesi) was responsible for providing in-service training programs for more than 500.000 teachers. Under these unfavorable conditions and above mentioned restrictions, the office was able to serve only a very limited number of teachers. To cope with these limitations, Ministry of National Education (MNE) issued the Provincial Directorates of National Education (İl Milli Eğitim

Müdürlüğü) with the power to develop and apply in-service education programs. With the advent of this change, the number of in-service education activities tripled (Şaban, 2000).

Ministry of National Education (MNE) currently provides two types of in-service training for the teachers:

a) In-service training for trainee teachers in the first year of their service comprises of Basic Training, Preparatory Training and on the Job Practice. At the end of the basic and preparatory trainings, trainee teachers are supposed to get informed about the aims of national education. They are supposed to be aware of their status, responsibilities and rights as a teacher and act accordingly and consequently get adjusted to the national education system. On the Job Practice is where the trainee is to demonstrate that s/he can function effectively as a teacher in the national education system putting the knowledge acquired from the Basic and Preparatory Trainings into practice.

b) After the first year, in-service training activities aim to increase the abilities and productivity of the teachers and prepare them for superior ranks (M.E.B. Tebliğler Dergisi, 1994-2417, m. 24).

On the other hand, about the evaluation of in-service education programs of Turkish Ministry of Education, Yalın (2001) states that "research has revealed that in-service programs implemented were not sufficient and effective; no needs analysis was carried out in the planning of in-service training activities or the needs analysis carried out was not based on scientific, objective methods." (p.150)

Another study that points out the need to evaluate the in-service training programs of Ministry of National Education in a systematic manner is by Ünal, Varol, Kar, Oyman and Aslan (2000). The study attempts to find out the educational needs and satisfaction of the teachers from the in-service training programs. 90 out of 146 teachers in the study have 1-5 years of teaching experience and 84% of the teachers indicate that no needs analysis was carried out to specify the type and content of the training. Additionally, 55,6% of the teachers state that in-service training programs have not been useful for them at all. The areas the teachers point out as their urgent needs are teaching methods and techniques, classroom management skills, managing time and curriculum effectively.

These points places emphasis on the limitations of in-service education and training programs that Ministry of National Education provides and it will be rather useful to see the evaluations of all teachers and administrators of a school, the direct targets of such in-service programs. Also, a detailed qualitative analysis of in-service training activities organized in a school setting would provide useful insights into the nature of such programs.

The purpose of this study is twofold. The first aim is to analyze the state of in-service training activities in a public school setting. Second, it is to provide an insight into teachers' and administrators' evaluation of in-service training programs and activities based on a public elementary school setting.

Questions of the Study

Focusing on the in-service training activities in a public elementary school setting and teachers' and administrators' evaluation of the in-service training activities in their school, the study addresses the following research questions:

1. What is the current state of in-service training activities provided to teachers and administrators in a public elementary school by the Ministry of National Education?

   i. What are the main characteristics of in-service educations provided by the Ministry of National Education?

   ii. Which training programs have been organized by other institutions rather than those by the Ministry of National Education?

   iii. What are the main qualifications of in-service training providers?

2. How do teachers evaluate in-service training?

   i. What do the teachers think and how do they feel about in-service training?

   ii. What are the strengths and limitations of in-service training programs of the Ministry of National Education according to teachers?

   iii. What are the possible solutions to the limitations of in-service training programs and activities according to teachers?

   iv. What is the role of in-service training of the teachers and administrators in enhancing the quality of educational services provided to students according to teachers?

3. How do administrators evaluate in-service training?

   i. What do the administrators think and how do they feel about in-service training?

ii. What are the strengths and limitations of in-service training programs of the Ministry of National Education according to administrators?

iii. What are the possible solutions to the limitations of in-service training programs and activities according to administrators?

iv. What is the role of in-service training of the teachers and administrators in enhancing the quality of educational services provided to students according to administrators?

Significance of the Study

In recent times, much has been said about in-service training of teachers in Turkey (Taşçı, 2003, Yıldız, 2006, Tanman, 2006, Karagöz,2006, Özçallı, 2007, Ortaçtepe, 2006, Yıldırım,2007) but still there is a strong need to understand the dynamics of the in-service training programs for teachers as these works were mainly related to specific areas of teaching such as teaching arts, science and technical education. They also focus on the determination of teacher needs for training programs. However, this case study examines the current situation of in-service training in a public school case and focuses on teachers' and school administrators' evaluation of in-service trainings in a particular school setting. What is special in the current case study is also the aim to fully grasp the in-service training practices in a school together with the participant evaluations of these programs without narrowing it down to a specific subject.

When we consider the fact that the lack of evaluation of in-service training programs offered to teachers is a worldwide concern, the need to engage in an evaluation of the in-service training offered to teachers in Turkey intensifies. The evaluation of in-service training has always been problematic worldwide, even in countries that invest a great deal in in-service training. Most countries, however, recognize the need for change and are devoting considerable effort to improve their evaluation systems (ERO Report, 2001).

In evaluating training, the research methodology can be qualitative or quantitative. According to Marshall (1996) "the choice between quantitative and qualitative research methods should be determined by the research question, not by the preference of the researcher." However today, qualitative research is preferred and considered to be more satisfactory. The reason is that qualitative evaluation techniques provide a possibility for a more comprehensive analysis is that they require more time. In addition, the main advantage

of qualitative research is the provision of detailed and comprehensive data about the problem on hand (Yildirim and Simsek, 2003).

This study aims to provide information on the implementation of in-service training programs in a public school and an insight into how teachers and administrators feel about or what they think about the current in-service programs and activities.

Besides, this study gives a practical view of the current situation of in-service training in a public school together with the teachers' and administrators evaluation of the in-service training programs of the Ministry of National Education.

Therefore, the present study investigating the above mentioned issues in the case of a Turkish public school can have significant contribution to the in-service training activities provided by the Ministry of National Education in Turkey.

CHAPTER II

LITERATURE REVIEW

In-Service Training

Locke (2006) states that "as the agents of change in the educational system, teachers need to have the necessary knowledge and skills to educate all students to meet increased expectations and performance standards and to be credible competitors in a global economy (p:664)." In the light of Locke's idea it could be claimed that in-service training programs serve best for teachers' individual and professional development.

"A society is to raise all its individuals in accordance with its social and economic goals to develop. This necessity covers all the acquisition of knowledge and skills creating the basis for the efforts to get oriented with the society they exist in, to motivate them, to improve their personalities, and to enhance their occupational qualifications (Taymaz, 1997. p.1)." Keeping this in mind, it should be noted that while doing this for individuals working in the field of education, in-service training becomes rather crucial.

As this research mainly deals with the in-service trainings in the Ministry of National Education (MEB), it is necessary to grasp the meaning of in-service training as a branch of adult education. In a changing world and changing educational system itself, it is needed to fully understand the theory backing training in general and in-service training in the field of education.

To define the term 'professional development', it can be stated that it is an activity developing an individuals' skills, knowledge, expertise and other characteristics as a teacher (Centre for Educational Research and Innovation, 1998). In fact, professional development is

widely provided via in-service training in many institutions. That's why, in this part of the literature review of this study, the related issues will be discussed about in-service training in terms of the definitions, importance and types of in-service training.

Definition

In the organizations, in-service training is defined as a process in which individuals acquire special attitudes and skills they need to carry their own responsibilities, they reach to the desired performance and where the personal and organizational goals are combined (Thomas, 1992).

The term 'In-Service Training' is defined by Okçabol (1994) as the training activities designed for the current personnel of an organization in order to inform them about the new inventions in their field and to prepare them for the higher positions in the organization. Accordingly, Turkish Language Association (2009) defines the term in-service training as an educational activity continuously influencing the general working systems of institutions and aiming to promote individuals' productivity and to enhance knowledge and skills leading to development.

Importance

Taymaz (1997) summarizes the necessity of in-service training relating it to the fact that many people develop their skills left covert after starting work during in-service training. Also, sometimes the knowledge provided by the school can't be enough to solve certain problems later in the service. Besides, the cultural, social and economic structures of the society continuously change and develop, and teachers' adaptation to these innovations can only be achieved through education.

In service training is used in order to make the service best in the profession, to realize organizational goals, to enhance knowledge and skills, to develop general cultural and social behaviors and knowledge, to eliminate problems during the development of institution, to promote educational goals and objectives, to improve teaching sources and tools, to improve learning atmospheres and conditions (Yıldız, 2006). All these are some of the listed functions and aims of in-service training programs. For any institution or organization these features come out to be noteworthy and significant.

If asked why to study in-service training, then, it would be right to say that there are certain reasons that lead the researcher to the field. Together with the social, cultural and economic goals of in-service training, it is an undeniable fact that there are problems faced in general. Tanman (2006) groups these reasons into six main categories:

1. The knowledge provided before the in-service training is inadequate.
2. There is a strong need catch up with the developments and changes in the service.
3. Some of the knowledge and skills can only be acquired or learned during the service.
4. There is also a need to learn and improve one's own.
5. The formal education does not give the chance to explore talents and skills.
6. In-service training puts coincidental learning into a systematic form.

Therefore, in-service training should be studied thoroughly to fully grasp the problems and try to balance them via scientific solutions.

Especially, in-service education of the personnel is crucial because: time gradually erodes the competence of even a fully adequate staff as conditions change. Moreover there is a real discrepancy between the real situation of schools and the ideal conditions. For this reason, schools are attempting to cope with a number of significant educational changes such as new curricula and new grading system. These changes require new expertise, and that expertise must come from currently employed teachers. This could only be done via the in-service training of teachers (Özdemir, 2009).

In-Service Training in the Field of Education

Professional development for teachers is a strategy of great importance that has potential to influence many outcomes, including improved instruction, teacher retention, and higher student achievement (Sykes & Dibner, 2009). Therefore, if defined as an organizational goal of the school/institution, it may well have an outcome related to such crucial elements of the educational facilities applied in the school itself. As a tool for educational personnel to obtain necessary skills, knowledge, culture, attitudes and so forth in-service training becomes the target strategy for professional development of teachers and administrators.

Although money, materials, time, space, facilities, and curricula are important for the operation and success of schools, people make the crucial difference in the school operation. As long as people make the crucial difference in the school operation, their pre-service and in-service education will be a vital concern (Oldroyd & Hall, 1991).

The heavy reliance on people to perform nearly all tasks required for developing and maintaining quality educational programs is a reality that must be admitted (Harris, 1989). It is also very important to emphasize that there are still advanced countries such as the USA or the UK where the possession of a university degree, without any qualification in education as such, is sufficient basis for the award of qualified teacher status. Therefore, training those who do not possess a diploma from the relevant field of education on teaching is a crucial element of the educational systems where such applications and regulations exist. In Turkey, it is possible to find such teachers working as trainers, substitute teachers and preliminary study teachers.

Also, to adjust to new developments in educational technology, the growth of human knowledge, and the problem of creating a relevant and appropriate curriculum from the enormous range of material available is a really hard burden for teachers. According to

UNEVOC-UNESCO (2009) is can be noted that the individual qualifications of workers are a key element of competitiveness around the globe, and the quality of teacher education is determines the skills of those workers to a great extent. Furthermore, there will be new understanding of how children develop and learn as scientific studies are applied all around the world. The society will continue to change and all these factors will affect the ways in which teachers are trained as they serve.

For Birgitte (2009), "the diversity and complexity of the post-modern era places new and important challenges on teacher education. The crucial role that personal dispositions have for professional learning needs to be better understood and acknowledged. Teacher training programs need to focus more on objectives such as promoting conflict literacy, self-awareness, empathy, leadership and collaborative skills, i.e. taking into account not only the cognitive but also the social and emotional aspects of human development(p.77)." "Thus, the behavior and attitudes of teachers towards teaching and learning and their knowledge banks are the result of the impact of in-service training claims Ramatlapana (2009, p.153)."

Huberman (1993) finds in his study that teachers had very critical perspectives about the teacher trainings they received. Besides, in his findings, 30-40 year experienced teachers stated that they had been very well prepared for the profession whereas younger teachers claimed that the pre-service training could be taken a control mechanism rather than a meticulously designed training in preparation for a profession. Another example of the negative thoughts of teachers on training has been put forth by Blandford (2000): Teaching Training Agency in England organized a survey among teachers on the value and effectiveness of in-service training programs and found teachers were complaining about the efficacy of the existing programs although there was a huge investment of around £400 million per year.

Accordingly, Day (1999) suggests that the application of a national survey and follow-up work in elementary and secondary schools in five local education authorities in England empirically showed the lack of appropriate infrastructures for the effective professional trainings of teachers and it was reported that the training needs of the teachers were not met in today's school managed in-service education and training.

Also, it is noted in the OECD report on in-service training and teacher professional development (1998) that in 1994, National Commission on Teaching and America's Future made a research on the standards for teachers professional development and found that "… roughly 25 per cent of newly hired teachers lack qualifications for their jobs, more than 12 per cent enter the classroom without any formal training and 14 per cent do not meet state standards (p.172)." Thus, without the prior knowledge and expertise, the teachers mentioned in the research are certainly in need of in-service education.

Schmid & Scranton claim that despite the motives being good, the traditional and up to date practice with an 'expert' speaking before a group of captive audience causes dissatisfaction for almost everyone. In-service training activities are regarded as unimportant and therefore many teachers resist attending those activities (1972). Parallel to this, it is generally thought by teachers that the planning of in-service training activities is performed in such a way not to meet particular classroom practices. Moreover, communication and guidance after activities are inadequate to enhance the integration of the new ideas and methods into daily implementation (Sapp, 1996). Moreover, it would be a good opportunity for such teachers to improve their skills and knowledge in teaching if they are provided well organized in-service training.

In-Service Training in the Ministry of National Education in Turkey

According to the Ministry of National Education In-Service Training Regulation in the Official Journal (Resmi Gazete) dated April, 8 1995 (No: 22252), the goals of in-service training programs are listed as follows:

- To orientate those new in the institution coming from the pre-service training,
- To help the personnel fully grasp the meanings of the aims and principles of Turkish National education and to create a medium for application,
- To clear up the drawbacks of pre-service training with respect to professional competency,
- To improve the Professional understandings and competencies of the personnel,
- To assign eager and skillful personnel to higher ranks,
- To provide required skills and knowledge for those coming from out of the profession to make vertical promotion,
- To provide integrity in the interpretation of Turkish National Education policy,
- To integrate the applications of basic principles and techniques,
- To help improve the educational system.

To reach these goals, basic principles to take into account can be stated as the continuity of training, the appropriateness of the trainings to the needs of the staff, the responsibility of the administrators for their staff to be provided the trainings, the importance and high proportion of on-the-job training, the equality in the availability of the training for all the personnel, the appropriateness of the training places, the continuous evaluation and development of in-service trainings, the cooperation with the public and private institutions and organizations and monitoring the achievement and performance of the personnel participating in the in-service training activity (Karagöz, 2006.)

According to Ereş and Üstün's (2009) study which was carried out with 180 teachers in elementary schools working in the center of Amasya provinces on their evaluation of in-service trainings, elementary schools' teachers thought in-service trainings as necessary but they thought that in-service training practices are not effective. It was found, that there was not a significant difference between opinions of branch teachers and class teachers. Education

planners should determine education necessities of teachers', arranging a favorable medium

for education and control outputs of education. Actually, the law (No: 657) has brought a

requirement for the civil servants to get in-service training in their service. In addition, the

same law reads that there is a 'requirement' for the civil servants to be provided in-service

trainings but not an obligation. For this requirement, it is required for any institution to have

'training unit'.

In line with such regulations it can well be expected that there are adequate numbers

and varieties of in-service training activities in Turkey. To understand the nature of the variety

of in-service training activities, it will be wise to analyze contents of the annual plan of In-

Service Education Main Office.

<div align="center">Contents of In-Service Training Programs</div>

As a summary of the in-service trainings, the In-Service Main Office announces the

following data on its website in its annual plan for in-service training activities in Turkey. In

the last three years (2006, 2007, 2008), the total number of in-service training activities

organized by the In-Service Main Office is 2460. The number of trainings organized directly

for the teachers and administrators is 297 out of 688 activities in 2006, 275 out of 842

activities in 2007 and 405 out of 930 activities in 2008. These in-service trainings can be

grouped under eight categories according to their field of study; pre-schooling, elementary

schooling, secondary schooling, male vocational schooling, female technical schooling, the

teaching of trade and tourism, the teaching of religion and counseling and guidance. Also the

trainings can be grouped in terms of their themes and/or their scopes and some main

categories could be those related to skill formation, methodology, professional knowledge,

cultural and social development, legal responsibilities, legal rights, and so on.

According to Karagöz (2006), in-service trainings are prepared for the educational

needs of the personnel and it is possible to find training activities on pedagogic formation,

teaching principles and techniques, research methods and techniques, program development, Atatürk's principles and reforms, educational administration, computer knowledge and foreign language learning.

Problems and Limitations of In-service Training Programs

In Yalın's (2001) study the problems of in-service training activities in the schools of the Ministry of National Education are listed according to their frequency as "crowded classrooms, no provision of course materials, unprepared and inadequate instructors, no clean space for the training activity, lack of necessary teaching equipment, no participant grouping, insufficient duration and inappropriate location." Parallel to this, the author made the following recommendations about the future of in-service training programs:

1. In-service training programs should be developed in a systematic and planned manner in align with the needs of the participants.
2. Participants should be chosen for the in-service training programs according to their needs and objectives of the program and they should be grouped in terms of their levels to ensure a productive teaching/learning environment.
3. In-service training activities and materials should be designed to enhance active participation of the participants in the teaching/learning process and to provide a meaningful and purposeful learning.
4. The location of the programs should be chosen on the basis of cost/effect analysis instead of simple concerns about the cost of the training.
5. Each and every in-service training program should be evaluated systematically and the evaluation should be based on correct and objective data.
6. Instructors should be assigned considering both their expertise in their subject matter and knowledge and skills of teaching methods (Yalın, 2001).

In addition, Özdemir (2009) notes that in-service training in Turkey is not as successful as it should be because of the following reasons:

1. Poor planning and organization.
2. Courses focus on information dissemination rather than stressing the use of the information or appropriate practice in the classroom.
3. Principles of adult learning are not used.
4. Unclear course objectives.
5. Staff responsibilities are not clear.
6. A decided lack of modeling.
7. In-service trainers are not carefully selected.

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In another example, Gönen and Kocakaya (2005) note that though the most of the participants stated that the in-service-education is necessary, the quantity of in-service-education which they join is less than expected. In this subject it was determined that the quality and quantity of in-service training activities given by The Ministry of National Education (M.N.E.) is not sufficient. As mentioned above, although there are a variety of approaches and theories for in-service training design and methods, Turkish in-service training activities still lack many key features.

CHAPTER III

METHODOLOGY

The purpose of this case study is to analyze the current state of in-service training activities together with teachers' and administrators' evaluation of in-service training activities in which they participated. The research is based on a qualitative analysis addressing three categories of questions which relate to the current state of in-service training activities in a public school along with teachers' and administrators' evaluation of in-service training activities provided by the Ministry of National Education.

Creswell (1998) states that "a researcher uses a qualitative study because of the need to present a detailed view of the topic (p.17)." He also believes that it can be used "when individuals are studied in their natural setting which also involves going out to the setting or field of study gaining access and gathering material (p.17)."

According to Creswell (1998), "a case study is an exploration of a 'bounded system' or a case (or multiple cases) over time through detailed, in-depth data collection involving multiple sources of information rich in context (p. 61)." Creswell (1998) also notes that the focus in the case study may be on the case "because of its uniqueness, because it requires study or it may be on an issue with the case used instrumentally to illustrate the issue (pp. 61-62)." The rationale of this research lies in the fact that the kind of problem studied is one that requires a case study approach.

Population and Sampling

The population of the study is the teachers and the administrators of a public elementary school situated in Ümraniye, Istanbul, which was founded in 1996 with the cooperation of Turkish Educational Foundation (TEV) and Garring Foundation and started its

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educational facilities with fifteen classrooms in 1997 providing regular education services as a public elementary school.

Due to the high rate of migration in the region and the lack of schools in adequate numbers, the number of classrooms was increased from fifteen to twenty-three in 1999. Starting from this date, the school started educational facilities in shifting hours having half of the students in the morning period until 12.30 and the rest from 12.40 to 17.30.

The technical equipment including a computer and a projector was provided in all classrooms. Total area the school is situated on is 3426 square meters and the school serves today (2009-2010 school year) in two buildings (one main and one new building) with thirty-five classrooms, one music room, one multi-purpose culture hall, one computer lab, one science lab, one language lab, one library, one sports room, one counseling and guidance room, two teachers' rooms, two rooms for janitors, and one print room.

The school has a computer network connected to all units. All the computers in the network have internet connection set up for teachers' to make use in the lessons in all classrooms with the program Mobidies installed. There are computers and projectors ready to use. There is also a canteen to meet students' basic needs. This year (2010) the service is provided to 2810 students, by five administrators, forty six classroom teachers, forty one teachers in various fields of teaching, four pre-school teachers, one special education teacher, one guidance and counseling teacher, one state   contracted and eleven private-contracted cleaning personnel and 110, in total of school personnel.

The school was preferred as the research site based on two factors. First, the researcher had access to the teachers and administrators and was able to reach first-hand data to fully understand and see the practices of in-service training programs since the school was the researcher's workplace. Second, such a convenience sampling enabled the researcher to find and interview as many teachers and administrators as possible about their evaluation of the in-

service training activities organized in and out of their school by the Ministry of National Education and by other organizations/institutions.

Situated in a very low income and high migration area the school presents a significant case to analyze to understand the implementation of in-service training for teachers and administrators and their role in the improvement of the quality of the educational service provided.

Data Collection

Data for the study is collected in two phases. Firstly, documents were analyzed and an interview with the assistant manager responsible for the implementation of in-service training was conducted to understand the current situation of in-service training activities in the school. The documents that were analyzed consisted of any kind of official letters, total quality management reports, official notices and letters of assignment and school's self evaluation reports.

In the second phase of the study, semi-structured interviews were conducted using the Teachers'/Administrators' Evaluation of In-Service Training: Semi Structured Interview Form, developed by the researcher (See: Appendix A, B: Öğretmenlerin/İdarecilerin Hizmet İçi Eğitim Değerlendirmesi: Yarı Yapılandırılmış Görüşme Formu).

As an operational definition, in-service training that is mentioned in this research can be defined as any activity that includes training and information for teachers and administrators of the school provided either by the Ministry of National Education or other institutions. These may include training programs, courses, seminars, conferences and meetings as it is understood that all these activities are systematic approaches to enhance teachers' and administrators' practice and thus the quality of the education at the school.

The teachers and administrators in the study consist of those officers with state contracts and are tied to Law numbered 657 and its new regulation 4B. Other private contracted and substitute teachers are not regarded in the definition due to their temporary working conditions.

Development of the Semi Structured Interview Form

While the instrument was being developed and the questions of the semi-structured interview form were determined a pilot study was conducted at the school. A group of 4 teachers and an administrator were asked to think about and discuss the in-service training that had been provided by the Ministry of National Education in the last 2 years. After the discussion, they were asked to write down any question that could be asked and/or answered during an interview on teachers' and teacher administrators' evaluation of the in-service training activities provided by the Ministry of National Education in Turkey.

The questions were gathered and listed by the researcher and revised not to cause any misunderstanding during the interviews. Later on, working on the questions, the researcher consulted expert opinion and shaped the order and the categorization of semi structured interview form.

After the determination of a frame for the form, two in-depth interviews were made in a second pilot study to find out whether there any redundancies or to see any perspectives that could be missed. It was then understood that the technology aspect of in-service training had not been dealt with at all and this was added in the final draft of the semi structured interview form.

Data Coding and Analysis

During the first phase of data coding MS Excel 2007 was used to compile a list of the documents consisting of any kinds of official letters, total quality management reports,

official notices and letters of assignment and self evaluation reports of the school, along with the notes gathered from the interview with the assistant manager responsible for the implementation of in-service training. The recordings of the interviews were transcribed into text immediately after each interview. The transcription was done in MS Word 2007. This way, it was possible to analyze the data in each interview in itself at first. Analysis of each question was conducted through content analysis and it was a concurrent analysis of the data with the data collection. Throughout the data coding and analysis processes, the latest version of the qualitative data analysis software QSR NVivo 8.0 was used.

Using the same program, a codebook was also created to find out the similarities and / or frequencies in responses. This served as a cross case analysis for participant responses.

In analyzing my interview data, I used code patterns, "which are explanatory or inferential codes that identify an emergent theme, pattern, or explanation that the site suggests to the analyst (Miles and Huberman, 1994, p. 67)." I summarized the data into smaller segments and determined four sub categories. These were the answers related to teachers and administrators, the in-service training activities provided by the Ministry of National Education, the in-service training the teacher or the administrator participated in, and lastly, the approaches toward the in-service training activities. The second sub category, the answers related to the in-service training activities provided by the Ministry of National Education, was also divided into four sections regarding the general condition, place and time, in-service trainers, and planning.

In Table 3 (Appendix C: Code Definitions with Frequencies), the analyzed codes, their definitions and frequencies with respect to teachers' and administrators' evaluations of the in-service training programs are provided. At the end it was possible to reflect on syntheses of answers. In the report of results, quotations and narrations are also used to support the arguments.

As a last point, the researcher knows and acknowledges that a possible threat to the validity of the research is to impose one's own meanings and perspectives rather than those of the participants and for this threat on the research, inter-coder reliability was applied.

According to Stone (2001), content analysis has turned into an umbrella term which has various procedures for making reliable and valid inferences from qualitative data. While traditional content analysis usually enlist statistical analyses to test hypotheses, many of qualitative researchers do not start with hypotheses, but carefully search for patterns in their data. Qualitatively, content analysis can involve any kind of analysis where communication content (speech, written text, interviews, images ...) is categorized and classified (Krippendorff, 2004).

Neuendorf (2002) suggests that when human coders are used in content analysis, reliability translates to inter-coder reliability or the amount of agreement among two or more coders. Tinsley and Weiss (2000) note that the more specific term for the type of consistency required in content analysis is inter-coder (or inter-rater) agreement. "It is needed in content analysis because it measures only "the extent to which the different judges tend to assign exactly the same rating to each object (Tinsley & Weiss, 2000, p. 98)."

For this reason, 26% (n=5) of the interview data randomly selected from the list (every 5th) was coded by a second researcher. The second researcher was a graduate of Boğaziçi University English Language Teaching Department with a master's degree from Harvard University, Faculty of Education, Technology in Teaching and currently a PhD student in Cambridge University. He was quite knowledgeable on the use of the software and he was given the prior training on the research and the coding scheme (Appendix C).

After the completion of second coding, the QSR NVivo's feature of Coding Comparison Query was applied to see the degree of agreement between the researcher and the

second coder. To assess the inter-coder reliability, Cohen's Kappa Coefficient (κ) was calculated. The result of the query, Coding Comparison for Inter-coder Reliability including Kappa Coefficient, can be found in the Appendix D.

Thereby, the agreement between the two coders was measured. The equation for κ is:

$$\kappa = \frac{\Pr(a) - \Pr(e)}{1 - \Pr(e)},$$

and in the formula above $\Pr(a)$ is the relative observed agreement among coders, and $\Pr(e)$ is the hypothetical probability of chance agreement, which uses the observed data to calculate the probabilities of each observer randomly marking each category. If there is a complete agreement between the two coders, then $\kappa = 1$. If there is no agreement among the coders other than the agreement that could be expected by chance, then $\kappa \leq 0$ (Sim, and Wright, 2005).

The mean Kappa Coefficient for all codes was 0,927 showing the fact that there was a strong agreement between the two coders. It should also be noted that the factual information was not included in the inter-coding effort as it would affect the Kappa Coefficient.

CHAPTER IV

RESULTS

In this chapter the results of the qualitative analysis of the data collected via document analysis, interview with the assistant manager of the school responsible for the implementation of in-service training activities, and the content analysis of the interviews with teachers (n=15) and administrators (n=4) will be presented. There were initially a total of 6 administrators at the school but one of the assistant managers was assigned to another school and left, and one was already interviewed during the pilot study. Therefore, data from 4 administrators were included in the eventual content analysis.

The first part of the report covers the document analysis and assistant manager interview on the current state of the in-service training provided for the teachers and administrators at the school regarding the first question of the study. In the second and third parts, the results are presented regarding the teachers' and administrators' evaluation of the in-service training programs provided by the Ministry of National Education and/or other institutions, as addressed in the second and third research questions.

Findings about the Current State of In-service Training in the School

Along with the analysis of documentation and interview with the assistant manager responsible for the implementation of in-service training activities, the researcher tried to understand the current state of in-service training activities provided to teachers and administrators at the research site by the Ministry of National Education and other institutions. To do this, the answers of the following sub-questions were searched.

i. What are the main characteristics of in-service training provided by the Ministry of National Education?

ii. Which training programs have been organized by institutions other than the Ministry of National Education?

iii. What are the main qualities of in-service training providers?

Before and during the document analysis the researcher was always in contact with the assistant manager of the school to understand further how the in-service training programs were implemented. Based on the information gathered via the analysis of official documents and the notes taken through the analysis process a table showing basic characteristics of the in-service training activities was organized. As the assistant manager noted, there were various types of in-service training programs with different characteristics that is provided by the Ministry of National Education, its Provincial and District Directorates and other institutions or foundations which made necessary procedural operations to provide certain kinds of in-service training.

It is important to note that the school is supported both financially and in terms of in-service training programs to enhance the quality of education by the Turkish Education Foundation (TEV). The assistant manager also notes that although they do not have any planning or design for in-service training needs of the teachers and administrators, they can participate in the planning and the implementation of the training and seminars provided by TEV. It is also mentioned that the demands of teachers on educational and training needs are considered by TEV and responded in a short span of time.

Through the document analysis it has been found that there have been 20 different in-service training, twelve of which were provided by the Ministry of National Education and its Provincial and District Directorates. The providers of the other 8 in-service training activities were TEV, Istanbul Aydın University, Private Okyanus Educational Institution, Istanbul Kültür University (2), S. Ö. A. Onay Elementary School, Marmara University and Provincial Directorate of Health. All of the in-service training activities appear to be

organized when the school was open and only three of the programs were implemented in the school.

Out of these twenty in-service training programs, only ten of them provided certificates for participants upon completion. Eleven out of twenty training programs appear to be provided in less than five days, two in five days and the rest (seven) in more than five days. However, seven of those programs which took less than five days (eleven) were mandatory while four of those which took more than five days (seven) were mandatory either immediately (two) or through one's career (two). Besides there were nine obligatory, nine optional programs together with another 2 the certificates of which are required through one's career.

In Table 1 below, the names, providers, dates, topics, certificate status, durations, participant numbers, mandatory status (obligatory, optional, and obligatory through one's career), and fees, if any, of the in-service training activities are listed.

The topics of in-service training programs during the past year are general (seven), technology and design, project development, counseling, science and math (two), technology (two), administration, counseling, religious culture and moral knowledge, special education, SBS, traffic and environmental knowledge, physical education.

When asked about the in-service training activities, the assistant manager said that "it was not a proper educational atmosphere mainly because of the crowded atmosphere and not enough qualified instructors." He also added that he didn't think teachers considered these activities as useful based on his observation of the activities organized in the school.

Moreover, the assistant manager also commented on the extent of the applicability of what is learned in the real classroom environment and processes. He thought that the conditions at the school determined what is applied and to what degree it could be applied.

Table 1: The state of in-service training activities in the school

Name	Provider	In the school	Date	Certi-ficate	Duration	Number of Participants	Status	Fee	Subject/Area
1. Training Course for Technology and Design Teachers	MNE (IST Dept. Annual Announcement)	No	29 January, 2009	No	1 day	49	Obligatory	No	Technology and Design
2. Project Based Educational Development Seminar	TEV	Yes	November / December/ February 2009	Yes	3 days 9 hours in total	60	Obligatory	No	General, Project Development
3. Memory Improvement and Alternative Teacher Techniques	Istanbul Aydın University	No	13 March, 2009	No	1 day	28 (No demands)	Optional	Yes	General
4. Creative Drama Seminar	MNE	No	19 March, 2009	No	1 day	1	Obligatory	No	Counseling
5. 3. Laboratory Days	Private Okyanus Educational Institution	No	21-22 March 2009	No	2 days	6	Obligatory	No	Science & Maths
6. Web-based Content Development 1, 2, 3,4,5,6,7	MNE	No	2-23 March, 13 April, 5 May, 1 June, 2009	Yes	90 Hours	52 (No demands as of 2008-2009)	Obligatory through Career	Yes	Technology
7. Basic Computer and Internet Usage 1, 2, 3,4,5,6,7	MNE	No	2-23 March, 13 April, 5 May, 1 June, 2009	Yes	75 Hours	52 (No demands as of 2008-2009)	Obligatory through career	No	Technology
8. Engineering Approach to Curriculum and Program Development in Department Management	İstanbul Kültür University	No	4 April, 2009	Yes	72 hours	31 (No demands)	Optional	Yes	General
9. Ümraniye Seeks for Better Examples in Education –Conference	Ş.Ö. A. Onay Elementary School	No	4 April, 2009	No	1 day	24	Optional	No	General

10. Certificate Program in Professionalism in Education Administration and School Management	Istanbul Kültür University	No	5-7 April, 2009	Yes	72 hours	31 (No demands)	Optional	Yes	Administration
11. The Problems and Solutions in Mathematics Education in Our Country-Conference	Marmara University	No	11 April, 2009	No	1 day	48	Optional	No	Science and Technology, Maths
12. Basic Skills Test 7-11 Informative Seminar	MNE	No	16 April, 2009	No	1 day	1	Obligatory	No	Counseling
13. Supportive Project for Teacher Training for Critically Thinking Youth: Trainer Seminar	MNE	No	May/ June 2009	Yes	10 days	48 (No demands)	Optional	No	General
14. Introductory meetings for Religious Culture and Moral Knowledge Teachers	MNE	No	28 February - 1 March, 2009	No	1 day	2	Obligatory	No	Religious Culture and Moral Knowledge
15. Special Education Seminar	MNE	Yes	24 February -9 March, 2009	Yes	5 days 15 hours	56	Obligatory	No	Special Education
16. Seminar on Sense of Mission, Communication, Motivation	MNE-Umraniye	No	March 2009	No	1 day	54 2 demands	Optional	No	General
17. Parent and Student Attitudes in SBS System	MNE-Umraniye	No	23 February, 2009	No	1 day	7	Obligatory	No	SBS
18. Teacher Education for the Subject of Traffic and Environmental Knowledge and Driving Trainer Course	MNE-Umraniye	No	2-20 March, 2009	Yes	15 days	55	Optional	TL 100	Traffic and Environmental Knowledge
19. Physical Education Formatter Training Course	MNE	No	June 2009	Yes	Not given	1	Optional	Yes	Physical Education
20. Basic First Aid Seminar	Provincial Directorate of Health	Yes	3 March, 2010	Yes	5 days 16 Hours	55	Obligatory	No	General

About the problems related to the district the school is located in, he made a very important remark as he said:

> For instance, there was this course in which the instructor came many times to talk about special education and autism. Actually, it is impossible to understand who has which problem. Most of the students here have certain kinds of special education needs due to behavioral and social disorders as well as those about their achievement capabilities in terms of their levels of intelligence. These come from their family cultures and environments in most cases. In my opinion even classifying them is very hard for our school.

Notwithstanding the above mentioned problem, the assistant manager stated that there should be more in-service training programs regarding technology related issues. However, he thought it should include the participant practice because he observes that most of such seminars and trainings involve little or no practice chance for the teachers and administrators. He thought most of the seminars are done just to be declared that it has been done or for the teachers to acquire certificates. He identified the lack of prior notice and preparation for the teachers who are required to receive the training as the main cause of this problem.

Demographic Information about the Participants

The demographic information gathered about the participants covering the first 6 questions of the semi structured interview form is listed in Table 2 below.

Participant	Teacher / Administrator	Gender	Experience (years)	Grad. from a Relevant Faculty	Number of IST in the Last 5 Years	Number of IST in 2008-2009	Number of IST on Demand	Types of IST Participated in General	Types of IST Participated on Demand
Participant 1	Teacher	Male	5	Yes	1	1	0	Civil Defense and First Aid	-----
Participant 2	Administrator	Male	14	Yes	4	4	0	Counseling and Guidance Computer and smart board usage Project development Special education	-----
Participant 3	Teacher	Male	12	Yes	3	2	1	Civil Defense and First Aid Special education Computer and smart board usage English	-----
Participant 4	Teacher	Female Male	15	No	2	1	0	Special education Science Laboratory Usage	-----
Participant 5	Administrator,	Male	17	Yes	3	0	0	Science Laboratory Usage Computer usage Communication	-----
Participant 6	Teacher	Male	10	Yes	3	2	0	Science Laboratory Usage Children at Risk and Child Abuse Constructivist approach	-----
Participant 7	Teacher	Female	9	Yes	1	1	0	Teaching religious culture and moral knowledge	-----
Participant 8	Teacher	Male	12	Yes	4	0	0	Civil Defense and First Aid Counseling and Guidance Special education Computer and smart board usage	-----
Participant 9	Teacher	Female	7	Yes	2	2	0	Civil Defense and First Aid English Project development	-----

Table 2: Demographic Information of Participants

Participant 10	Teacher	Male	12	Yes	4	4	1	Civil Defense and First Aid Project development Project based school development Counseling and Guidance	Project development
Participant 11	Teacher	Female	7	Yes	3	2	0	Civil Defense and First Aid Children at Risk and Child Abuse Computer and smart board usage	-----
Participant 12	Teacher	Female	4	Yes	2	2	0	Civil Defense and First Aid Project based school development	-----
Participant 13	Teacher	Female	3	Yes	3	3	0	Civil Defense and First Aid Special education Children at Risk and Child Abuse	-----
Participant 14	Teacher	Female	10	Yes	4	4	0	Civil Defense and First Aid Special education Project development Learning to learn	-----
Participant 15	Teacher	Male	12	No	5	4	0	Civil Defense and First Aid Counseling and Guidance Special education Project based school development Prevention of violence	-----
Participant 16	Teacher	Male	35	Yes	1	1	0	Special education	-----
Participant 17	Administrator	Male	42	Yes	1	0	1	Administration	Administration
Participant 18	Teacher	Male	4	Yes	3	3	1	Project Development Chess training Civil Defence and First Aid	Chess training
Participant 19	Administrator	Male	11	Yes	1	1	0	Administration	-----

Out of fifteen teachers interviewed, there were three teachers who have up to five years of experience while twelve of teachers had five or more years of experience in teaching. Also thirteen teachers were graduates of relevant faculties with two graduated from different departments of faculties of education such as Vocational Teaching for Machinery and Teaching Philosophy who serve as classroom teachers. Still, it is an advantage for these teachers to have been graduated from faculties of education although they do not work for what they had been educated to understand the dynamics of their classrooms.

Teachers mentioned the following different in-service training activities and/or training topics when they were asked about which in-service training activities they have participated in the last five years.

- Civil defense and First aid,
- Counseling and guidance,
- Special education,
- Science laboratory usage,
- Children at risk and child abuse,
- Constructivist approach,
- Teaching religious culture and moral knowledge,
- Computer usage,
- English,
- Project development,
- Project based school development,
- Prevention of violence,
- Chess training,
- Learning to learn.

Teachers mentioned all the same in-service training activities and/or training topics when they were asked about which in-service training activities they have participated in the last one year excluding science laboratory usage, constructivist approach, computer usage and English. However, they noted autism, teacher-parent interaction and some unofficial meetings for teachers of religious culture and moral knowledge for the first time here.

The mean number of in-service training activities teachers said they have participated in the last one year is 2.4. Only two teachers reported that they had participated in optional in-service training programs, on chess training and English.

Findings about Teachers' and Administrator's Evaluation of In-service Training Programs

Below teachers' and administrators' evaluations of in-service training activities and programs are reported separately and the above given frequencies are discussed in detail with direct references and quotations from the source semi-structured interview data.

How do teachers evaluate in-service trainings?

Teachers stated that they attended or would attend optional in-service training activities when/if the activities

- attracted their attention (freq=2),
- helped them in their fields of teaching,
- gave a chance to meet their deficits (freq=2),
- provided information that could be used at school,
- gave the chance to share experiences with other colleagues from different schools (freq=2),
- provided different approaches to teaching,
- gave the chance to see different places like different camping areas,
- were really useful (freq=4),
- gave the chance to update knowledge and reflect that knowledge to students (freq=7),
- were effective,
- gave the details of a sports they play.

Thus, teachers want in-service training to contribute to their knowledge about the field and in-class practice. However, it is well known fact that training activities are organized in large halls where teachers from various schools come together, thus giving little chance to see applications of new information to the in-class practices. This could be overcome by

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increasing the number of in-service trainers and training activities. Especially, in metropolitan areas, bringing teachers from three-four schools together would cause hundreds of teachers to be in a school's conference hall, which results in a noisy and crowded atmosphere making it almost impossible for the trainer to reach everyone in the training.

The teachers noted that the in-service training activities provided by the Ministry of National Education are about

- how to help students better,
- how to develop projects (freq.=2)
- special education (freq=3),
- civil defense(freq=2),
- teaching and learning (freq=2),"
- computer programs,
- teaching programs and curricula,
- driving licenses.

In this respect, in-service training activities were related to a variety of basic educational needs promoting instruction and practice through a range of different topics. Yet, the fact that there were in-service training activities does not come to mean that they were effective on the quality of education provided or the socio-cultural development of teachers'.

What do the teachers think and how do they feel about in-service training?

When they were asked about how they felt about the assignment to attend in-service training only two teachers noted that they become happy and enthusiastic and they actively participated in the activity (Participants 7, 14). As they did not mention any specific name or topic for these trainings and this was a general statement about their attitude toward the in-service training, it is possible to say that what motivated them could be the fact that they were open for personal development and they have a good vision of their roles as teachers in a rapidly changing teaching climate to enhance their in-class practices.

Nevertheless, they also gave negative remarks on their feelings towards the assignment and all fifteen teachers stated negative feelings and comments. Their feelings about the fact that training was mandatory can be listed in an exhaustive manner with direct quotations according to their frequency of occurrence as follows:

- Inappropriate (Participant 7, 13),
- Bored, reluctant and busy (Participants 11, 14),
- Reactive (Participant 1),
- Angry, demoralized, confused (participant 3),
- Surprised and cramped (Participant 4),
- Excited at the beginning but disappointed later (Participant 6),
- Negative (Participant 8),
- Weary and tired (Participant 9),
- Not again! (Participant 10),
- Seminar again! (Participant 12),
- Abandoned (Participant 14),
- Troubled (Participant 15),
- Hesitant and uncomfortable (Participant 16),
- Responsible and thus nervous (Participant 18).

It is meaningful to find out that in-service training turned into a surprise for teachers as it was not properly planned and notified teachers. Accordingly, expressions such as "not again" and "seminar again" shows that teachers were fed up with the unplanned and useless in-service trainings they even did not want to participate. It is possible to say that there must have been dissatisfactory in-service trainings for the fact that there were hesitant and disappointed teachers even before the training was organized.

Eight teachers gave positive remarks on school administrators' approach toward in-service training using adjectives such as sensible (Participant 6), excited (Participant10), interested (Participant 12), and promoting (Participant 13, 16,18), however there were also some common negative remarks such as,

- They do no care much either (Participant 1, 8),
- They are only responsible and they notify teachers (Participants 3, 7, 9, 11, 14),
- They think it is a chore like we do and they never participate (Participant 6).

As it is clear from what Participant 6 said, administrators do not attend to all in-service training activities. However, it should be kept in mind that a representative of the school administration in the hall where the training is conducted can symbolically contribute to training's success meaning that the training is necessary and it is serious activity that would help improve certain skills, awareness or understanding.

It is meaningful to find out that although all the teachers felt negatively towards assignment to participate in in-service training activities, six teachers pointed out positive teacher approaches toward mandatory in-service training. These positive remarks included the following statements:

- My colleagues are generally enthusiastic (Participant 7, 16),
- Fifty percent. Sometimes they react positively (Participant 6),
- There are also people who really care (Participant 12),
- They participate voluntarily (Participant 13),
- The effect of this peaceful atmosphere in the school reflected on in-service trainings (Participant 15).

Nevertheless, the fact that there are enthusiastic or voluntary teachers places more emphasis on the mandatory status of training. In other words, if all the training activities were optional, there would be a certain number of teachers participating with intrinsic motivation. Alternatively, there are teachers who really internalized the necessity of in-service training.

<p style="text-align:center">What are the strengths and limitations of in-service training programs of the Ministry of National Education according to teachers?</p>

Two teachers reported that there were no in-service training activities organized by other institutions than the Ministry of National Education, while 13 teachers said there were, and twelve out of these thirteen teachers mentioned project development and project based school development in-service training activities provided by the Turkish Education

Foundation, while one of the teachers noted there were in-service training programs on drama and entrepreneurship provided by Turkish Education Volunteers Foundation.

It is interesting to learn that there were teachers unaware of a certain set of in-service training activities provided by other institutions although there even was a training provided by the Provincial Directorate of Health when the interviews were conducted. This finding shows that the letters of notifications were sometimes signed without necessary attention on the topic or the provider of the training.

Fourteen of the teachers said there was a physical facility to conduct in-service training in the school and they all said that the place was a multi-purpose conference hall, with 1 exception noting that there was not such a place even to perform their own school oriented tasks. The reason for this teacher to claim such a thing was the fact that she hadn't thought it was a proper place for in-service training as there had been an English course organized by one of the teachers of the school before and the hall could not be used for that. Instead the place changed every time when there was the English lesson. The teachers who wanted to learn English even went to the sports room as there was a portable whiteboard to use and enough seats for the participants of the course.

Ten teachers thought that places were suitable for in-service training both in the school and elsewhere but two of them also noted that there were some exceptional cases. Therefore, the number of those who claimed that places were not suitable for in-service training was seven. They pointed out problems about places as follows:

> Our multi-purpose hall is theoretically substantive and enough but not in practice (Participant 8).

> These are not specially designed places. They are places like conference halls and school theatres, and they are not feasible enough (Participant 13).

> No, they are not suitable places as there were also activities requiring one-to-one interaction (Participant 15).

Actually it depends on your perspective. When I attended for chess training, there were not chess tables for everyone. Only a conference hall was allotted and there was a projector presentation. There are of course problems about implementation (Participant 18).

It is apparent that there was training in the hall which required practice but the hall in the school was very big and the seats could not be moved. So, it was not even possible to divide participants into groups for any educational activity.

I think they are too crowded and the problem can be because of us because there is too much noise. This is the most important problem for me. They are too noisy (Participant 11).

The basic reason for the noise during the training is the crowded atmosphere as mentioned earlier. The trainings are organized with a large number of participants as the provincial districts contain more than six-seven schools. Also, these districts are provided one or two trainers and teachers of at least three schools are brought together for most training.

All of the participants noted that time of the in-service training was not suitable. They said,

Time is a big problem. Now, we have lesson until noon and after being so tired, it is unproductive to be participating in training. Second, it is unplanned and this is disturbing. Yesterday we were notified and today we are expected to attend a seminar (Participant 3).

If I speak with respect to those I attended, for instance today, I woke up at 5:30 a.m. I had six lessons at school. Now, I am hungry and I want to go home but I have to attend a seminar of about two and a half hours. Although it is a seminar I consider to be of great use, I am reluctant now. If I was given an option to go, I could choose it indeed and this is a bad thing. Time is really very important (Participant 9).

It is really terrible. Like everyone, I also have complaints about this issue (Participant 8).

I can say it is total scandal. Three days ago a notice came and the time was from 3p.m to 6p.m. However, our school finishes at 5:30p.m. So we cannot attend (Participant 18).

Participants were reactive when they were asked about the timing of the in-service training activities. Although the agenda of in-service training is announced at the beginning of each year, still there are a number of activities organized by either the Provincial Directorate of Education or other institutions during the school year. The problem with these trainings is that they are not generally well planned and the letters of notification arrive at schools short before the trainings due to last minute changes. Therefore, this situation creates strong objection among teachers which turns into a generalized reaction for all in-service training programs.

There were six participants who thought trainers were sufficient in terms of both in number and qualifications, but nine teachers said they were not qualified enough to give the training. The positive remarks by teachers about trainers included:

- sufficient (Participants 4,7,9),
- good at communication (Participant 15),
- experts in their fields (Participant 16),
- having a good command of the subject (Participant 18).

The positive remarks, on the other hand, were made regarding the trainers of other institutions than the Ministry of National Education such as Turkish Education Foundation (TEV) and Marmara University. Only Participant 16 said that the trainer of Special Education program was an expert and was capable of answering teachers' questions.

When they were asked about problems regarding trainers they mentioned the following issues:

- they were not knowledgeable enough (Participant 1),
- they did not have enough expertise and they were there just because they were assigned (Participant 3),
- they were a part of a formality (Participant 6).
- they are some old inspectors doing what they have to do sometimes (Participant 8),
- they did not know how to present the information (Participant 10),
- they only have presentations (Participant 11),
- they were not able to answer specific questions when they were asked about what they were presenting (Participant 12),

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- they did not have enough sources with them (Participant 13),
- they tried to look as if they knew something but sometimes they really had very little knowledge (Participant 14),

This clearly shows that the assignment of a trainer to a training activity should be done carefully. For teachers, trainers should answer their questions and should not be there as only a part of a formality to fulfill some paperwork. Instead of doing the chore of the assignment with some paperwork, they should be effective, communicating, helpful and knowledgeable. They should also have various ways of presenting their topic to adjust to the physical requirements and conditions of schools.

What are the possible solutions to the limitations of in-service training programs and activities according to teachers?

All teachers interviewed responded that they needed to be asked about their opinions while in-service training was planned. Most of them noted that the in-service training should meet their demands and needs but only four teachers thought that their needs were considered. Only 3 teachers said that in-service training programs met their needs, with an additional seven who thought in-service training partially meet their demands. These seven teachers also noted that 'they needed more (Participant 3)' or "it can also depend on the person and to what extend that person internalized the subject (Participant 10)." On the other hand, five of the teachers thought that their needs were not met.

Teachers were also asked about their criteria that should be taken into consideration while planning in-service training during the interviews. Important points to consider while designing in-service training according to teachers can be listed as:

- It should be productive (Participant 1,6, 8, 11, 12),
- It should be applicable to the school (Participants 1,14,18),
- It should be based on a needs assessment or a pre-test (Participant 3),
- It should be well planned and organized with respect to time and place (Participants 4,7,15,19),

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- Financial conditions should be set before (Participant 15),
- Fields of teaching should be taken into account (Participant 7, 9),
- It should promote active participation (Participant 8),
- It should be optional (Participant 8).

Therefore, possible solutions to the limitations of in-service training programs and activities for the in-service training providers are as follows.

1. Teachers should actively participate in the planning processes and their needs and interests should be assessed prior to the design of in-service training programs.

2. There should be evaluative efforts to see the effect of certain in-service training programs after they are conducted.

3. The number of in-service training activities and trainers should be increased.

4. The in-service training programs should be designed considering the social context of schools.

5. The timing and the location of in-service training should be designed in such a way not to influence educational activities in the school negatively and the seminar periods before and after each school year should be used effectively.

6. There should be training activities with direct results and applications to the in-class methods and practices.

7. While the trainings are planned different fields of teaching should be taken into account.

8. In-service training activities should be provided to teachers and administrators optionally but there should also be a variety of training activities for teachers and administrators to choose from.

What is the role of in-service training of the teachers and administrators in enhancing the quality of educational services provided to students according to teachers?

Ten teachers stated that in-service training resulted in a partial change in their attitude towards students, with an additional three who believed there was a partial effect, but there were also two teachers who said that there was no effect of in-service training on their attitude towards students.

Participant 14 noted that it was possible to apply the new knowledge in real life conditions soon after the training but in time this could change. However Participant 15 gave the example that after the first aid training it was possible for him/her to act more professional and cold-blooded at an accident. Moreover, Participant 16 confessed that she/he was oppressing students with learning difficulties but after a training, in time, he noticed this was not a correct attitude. Whereas there was also Participant 7, who claimed that no in-service training activities had been organized concerning their attitudes towards students.

All the teachers reported that in-service training resulted in a change in their cultural or social development, three stating that it was a partial change. For example, Participant 6 said "First, you get in a new social environment. You attend such training with different groups of people. If the training is organized not in the school but elsewhere, different teachers come from various schools and you make new acquaintances. You also make use of their experiences and culturally you share others experiences."

Moreover, thirteen teachers thought that in-service training resulted in a change in their in-class methods and techniques. They gave examples such as:

> Generally, for instance, I was using a more teacher centered approach but after some in-service trainings and seminars I started to use a student centered model (Participant 16),

> For example, we are teaching in crowded classrooms and we try to accomplish a hard task. However, we are always expected to be idealistic and friendly. Right after these seminars, I can feel that idealism and I try to apply my knowledge (Participant 14),
>
> They helped me with respect to classroom control in crowded classrooms (Participant 7).

It can be seen that some in-service training activities resulted in a positive change in teachers' in-class methods and techniques as they gave the chance to see how teachers should adapt their methods to the new curricula. Showing teachers how to be effective in reaching their goals added to the contributions of in-service training. Apparently, teachers complained about the crowded classrooms they had to teach in and there should be in-service training activities directly addressing this problem, especially for metropolitan schools situated in high-migration areas. Also, in-service training programs on how to teach students with social and behavioral disorders would help teachers understand and control the students in their classrooms.

Eleven teachers stated training resulted in a change in their knowledge about their teaching area while four teachers said there was no change. There were teachers who believed that trainings could be effective in the follow-up although they do not cause a sudden change, and that the new information can be applied in the classroom, (Participants 3, 4, 6, 13, 15, 16). The training provides new experiences about teaching by itself (Participants 6, 9, 10).

Teachers mentioned the following positive remarks about in-service training programs related to technology in education such as:

> There was a very nice seminar on smart boards and I think it was very useful because the new generation is a screen generation. I mean the television screen, the computer screen or the mobile phone screen. For this reason, the seminar on smart boards was very useful and we use it now in the school (Participant 8).

In fact, these should be emphasized more because I myself even do not know how to use PowerPoint. I think we live in an age of technology and I do not think teachers are knowledgeable on this. There are a lot of very old teachers still in the profession and this could be really beneficial for them (Participant 9),

It is of course useful if we will have the chance to apply that knowledge. I mean, what use does training on smart boards have if we do not have smart boards in our classrooms? (Participant 13).

However, there were also some negative remarks on in-service training programs related to technology in education. For instance Participants 7 and 11 stated that the programs are too difficult for them, whereas Participants 6 and 8 said that there was nothing new in the trainings.

In-service training activities related to technology in education are considered useful by teachers as long as they enhance the teaching activity in the classroom. Parallel to this, in-service training activities should be designed in an appropriate way for schools to utilize available technological instruments.

Besides, program syllabuses contents should be designed in different levels of proficiency on a specific task. Rather than training teachers who do not know how to use computers effectively on how to use smart boards, it is better to divide the teacher populations in schools into focus groups for certain proficiency.

On the contribution of in-service training to catch up with new technology, 5 teachers remarked positively while another six said in-service training had not helped them with technology use in education. In addition, there were also four teachers who stated that they had never taken in-service training on technology in education. Although one of the most rapidly developing aspects of education is the technological instruments that could be utilized in classrooms, it is interesting to find out that there were teachers who had never received training on technology.

Also, six teachers mentioned that they made use of the knowledge they had acquired from in-service training in their classroom practices. On the other hand, almost half of the teachers (seven) expressed that in-service training had not helped them use new technology in the classroom with an additional two teachers who had no comment on the issue during their interviews. It is also important to note that all the classrooms of the school where the research was conducted had a computer and a projector but it is not possible to say that they are effectively used in lessons by teachers.

When they were asked about the areas to which in-service training contributed most, the teachers gave the following areas:

- Pedagogy (Participant 3),
- Problem solving skills (Participant 3),
- Adoption to a new program or curriculum (Participant 4),
- Self esteem (Participant 6),
- Social and cultural development (Participant 9, 10, 14),
- Classroom management and practice (Participants 7, 13),
- Project development (Participant 8),
- Productivity (Participant 8),
- Technology (Participant 8),
- Attitudes towards students (Participant 15, 16),
- Knowledge about the field of teaching (Participant 18).

However there were also 3 teachers who believed in-service training had no contribution. Participant 1 claimed that "there was a discrepancy between what was taught and the reality. That's why they did not have any contribution at all."

When asked about the effect of the trainer on the success or failure of in-service training programs, eight teachers responded that trainer plays an important role and they remarked positively about the trainers of the programs (Participants 3, 6, 7, 8, 9, 13, 15, 16). However, there were six teachers who also believed that trainers were important but still the ones they met during the in-service training activities were:

- Not qualified or did not have a good command of the topic (Participant 4, 10, 11)
- only performing their assignment (Participants 14, 16),
- 20-30% effective only (Participant 18),

How do administrators evaluate in-service trainings?

All four administrators who participated in the research had more than five years of experience and all of them graduated from relevant faculties of education. They pointed out the following different in-service training activities and/or training topics when they were asked about which in-service training activities in which they participated in the last five years either optional or mandatory.

- Project based school development (Participant 2),
- Special education (Participant 2),
- Smart board usage, (Participant 2),
- Science laboratory usage (Participant 5),
- Administration (Participants 19,17),
- Computer usage (Participant 5),
- Communication (Participant 5).

Administrators mentioned the same in-service training activities and/or training topics when they were asked about which in-service training activities they have participated in the last one year excluding the in-service training activities on communication and computer usage. The mean number of in-service training activities administrators said they participated in the last one year is 2.4. Only one of the administrators reported to have participated in an optional in-service training program on educational administration (Participant 17).

The administrators stated the following reasons to attend optional in-service training programs:

- To catch up with the development in time (Participant 5),
- To refresh knowledge (Participant 5),
- To gain experience (Participant 17),
- To have new hobbies (Participant 19).

It can be seen in administrator responses that the basic aim of in-service training is to keep up with the changes that are possible to occur in the educational arena. However, these reasons were given as general thoughts on what could the reasons be to attend optional in-service training. Only, Participant 17 stated that he participated in an optional training and it was about administrative skills.

Accordingly, it can be concluded from this finding that administrators do not consider any reasons to attend in-service training based on its effect on the in-class practices. What is more meaningful is that, they did not mention any communicative skills while talking about in-service trainings. Also another interesting fact is that no administrators brought about topics related to issues such as discrimination of any kind, crisis management, leadership and possible risks for students at schools.

What do the administrators think and how do they feel about in-service training?

Three administrators stated that they felt positive towards the assignment to attend any in-service training, while one said that he didn't like trainings as they were obligatory (Participant 19).

An interesting finding was that there was one administrator (Participant 2) who found administrators' approach towards in-service training activities negative. Others reported that they were doing their responsibilities (Participant 19), they believe there should be more in-service training (Participant 5), and they both participate and promote trainings (Participant 17).

The common thought addressed by administrators and teachers are related to the numbers of in-service trainings. Administrators said that more in-service trainings were needed just as the teachers did. However, administrators' understanding of responsibility is a different from teachers' understanding in that they define responsibility as an obligation. If

training is mandatory, it automatically turns into a responsibility for them but teachers regarded responsibility in way to promote their teaching affairs and teachers felt themselves responsible for the students instead of feeling responsible for the government.

Accordingly, Participant 17 thought that their teacher colleagues participate in trainings enthusiastically. Nevertheless, the other administrators stated that teachers were not willing to attend and they did not consider trainings as important.

What are the strengths and limitations of in-service training programs of the Ministry of National Education according to administrators?

They stated that there was in-service training almost about everything and schedules are provided by the Ministry of Education. They also indicated that optional in-service activities were organized during the summer holiday, as well.

Besides, they reported that in-service training activities are organized by other institutions in the school other than the Ministry of National Education. All of them noted the in-service training programs provided by Turkish Education Foundation (TEV), but Participants 5 and 17 also noted that there were other programs about health or environment provided by different institutions.

According to the administrators of the school, there are places such as the multi-purpose conference hall or two different empty classrooms in the afternoon to organize in-service training activities. Then it is possible either to say that the other classrooms had never been used before for training purposes as no teachers mentioned them when they were asked or that the classrooms were not regarded as substantive places to organize in-service training.

One administrator (Participant 17) stated that places were suitable for in-service training both in the school and elsewhere; however three administrators said there were problems regarding the location of in-service training activities. Participant 19 said they were too crowded while Participant 5 noted that the place was not chosen according to the

educational activity and Participant 2 stated that there were problems concerning the practice during training. The reasons for the places of the training to be crowded were discussed earlier in the teachers' evaluation of in-service training activities.

It was a common thought among the administrators that the time of the in-service training was not suitable. Participant 5, for instance, noted that

> In many aspects, it is not proper to organize such activities when the school is in session. If a teacher has to teach and if there is a very long training, then it is necessary to think how this can affect teachers' performance at the school.

Accordingly, this necessitates the planning of in-service training according to the school reality. It is almost impossible for any training to become successful when the participants are tired, reluctant and difficult to motivate.

Participant 5 thought that the trainers themselves perceived training as a part of a formality, and also Participant 19 stated that trainers were not qualified enough. However, Participants 2 and 17 expressed positive remarks on trainers and they reported that they found the trainers qualified enough.

What are the possible solutions to the limitations of in-service training programs and activities according to administrators?

All the administrators responded that they needed to be asked about their opinions while in-service trainings are planned. two of them thought that their needs were considered whereas the other two said otherwise. Participant 5 pointed out that in-service training partially met their needs and Participant 2 reported that they met his/her needs. However, according to Participants 17 and 19, trainings did not meet their needs.

The following important points are listed by the administrators to be considered while designing in-service training:

We should make an application to Ministry of National Education (Participant 2),

There should be a needs analysis and the time and characteristics of the program should be dealt with care (Participants 5, 19),

First it should be on education and then teaching (Participant 17),

It should be voluntary (Participant 19).

Different from what the teachers suggested as solutions administrators stated the importance of the paperwork. As they are officially responsible to notify teachers in time before the training they are asked to prepare and record letters of notification in the archives. Actually, it is those archives that made it possible to collect data for the first question of this study.

What is the role of in-service training of the teachers and administrators in enhancing the quality of educational services provided to students according to administrators?

Three administrators said that there was a change in their attitude towards students while one noted that it was a result of the in-service training programs, but rather the experience gathered through time (Participant 5). On the other hand, Participant 19 expressed that he had been getting easily angry towards students, but this changed now as he made empathy more often than in the past.

One administrator said that training resulted in a partial change in his/her cultural or social development (Participant 5) with another two noting that there was a change (Participants 2, 17). However, there was also one administrator who thought that training resulted in no change in his/her cultural or social development (Participant 19).

According to administrators, training resulted in a change in their in-class methods and techniques. They reported to have taught a course on traffic and sometimes visited classrooms. Participant 2 also pointed out that there were over 2800 students in the school and

almost everyday there are at least two-three incidents among students which ended up with injuries. It was possible to respond to such incidents, as a result of training.

Three administrators noted that in-service training resulted in a change in their knowledge about their field, mostly about legislation, administration (Participant 5) and educational perspectives (Participant 2), with one claiming that there was no change related to his/her knowledge about the field.

All four administrators commented positively about the in-service training activities related to technology in education. For example, Participant 19 said that such trainings were very necessary and there were still teachers who could not still use a computer well and thus hesitant to use it in the classroom.

Also, the administrators have a common thought that in-service training helped them catch up with new technology, and three of them said that training had helped them use new technology in the classroom, but one administrator told that he learned his classroom applications through individual effort (Participant 17).

According to the administrators, the areas in-service training contributed most were:

- In-class practices (Participant 2),
- Human relations, communication and democratic administration (Participant 5),
- Education and teaching (Participant 17),
- Enhancing experiences (Participant 19).

Two administrators remarked positively about the role of the trainer on the success or the failure of in-service training programs (Participants 17, 19) while one of them criticized the trainers (Participant 2). According to him, trainers came to training without any preparation and they just want to fulfill their responsibility. Also, Participant 5 made no comment on the trainers' effect on the training.

CHAPTER V

CONCLUSION

This case study was conducted to explore the current state of in-service training in a state school setting based on the evaluation of teachers' and administrators' of the school. Thus, findings can be grouped into three distinct categories, such as the findings related to the school and in-service training practices there, those related to teachers' evaluations, and those related to the administrators' evaluations.

Firstly, the information gathered about the school has shown that although it has many disadvantages such as being situated in a low income high migration area, with more than 2800 students, as many as twenty in-service training programs were notified to the teachers three of which were hosted by the school itself. In addition, there is both financial and educational support from the Turkish Education Foundation (TEV). Getting this support also gives them to chance to analyze their training needs and to be effective on the planning and the implementation of the seminars and trainings which are provided by the Turkish Education Foundation (TEV).

Secondly, the data on teachers' evaluation of in-service training practices and programs has shown that they were willing to participate in in-service training, if the activities are interesting, helpful, correcting, useful, improving, effective, detailed and providing new experiences. Teachers mostly made positive comments on the place, the necessity of better planning and the requirement of a needs analysis to be carried out before the program is designed.

However, the teachers pointed out serious problems regarding the timing of training programs, and the trainers who conduct in-service training. Under these circumstances, it can

be expected that teachers have negative approaches to mandatory training. Nonetheless, they believe in-service trainings contribute to their personal or educational qualities as they reported that there were positive changes in their behaviors towards students and knowledge related to their profession.

Third, administrators see in-service training as a part of their duty and they are obliged to fulfill that task. Just as most of them had positive attitudes toward in-service training, they also believe that via training they could catch up with the new technology. They thought that in-service training requires better planning, just as the teachers did. They also expressed that in-service training programs should be need-oriented, and applied by schools via necessary legal applications. They consider in-service training as a way of promoting educational quality in the school.

As a conclusion, it should be noted that every school's experience of in-service training is relatively different as long as the individual participants are different people with different backgrounds. However, the school where this research was performed has brought about a general perspective on the current instances of in-service training, and opened up new issues of discussion related to the design of in-service training practices. There appear significant problems regarding teachers' and administrators approaches toward in-service training, in-service trainers, time and places of activities, prior assessment and analyses of needs and in-service training programs on technology.

Suggestions for In-service Training

Only by taking one or two aspects of in-service training or dealing with planning for all training types is not appropriate to enhance in-service training in the Ministry of National Education. The results of this study provide suggestions for in-service training facilitators, as

well. The facilitators of in-service training programs should immediately consider the way they organize in-service training. They should create a desirable atmosphere for the teachers and administrators to communicate, learn, interact, and practice better.

Material development, evaluating training, effective planning, and active participation should be meticulously considered when in-service training activities are organized. Lastly, trainers should be chosen and/or assigned carefully to respond to any possible question about the issue to be discussed.

Suggestions for Further Research

Further research is needed to fully understand possible ways of planning in-service training country wide. In addition, there could be more in-depth analyses to fully grasp key factors that influence participation of teachers. The prejudices and/or presumptions of teachers and administrators about in-service training should also be studied. The investigation of these aspects of in-service training can also influence teachers' and administrators' perceptions of the training. Also, the prerequisites of the social context of the school can determine the success or failure of an in-service training and there should be more studies dealing with the current state of in-service training in public schools.

Limitations of the Study

It is necessary to note two types of limitations of the study; namely, the generalization of findings and the ethical concerns.

The purpose was to find out about the place, organization and the importance of in-service training activities in a public school setting in this research. What is limited about this is that it is difficult to generalize the findings from data to the schools across the country.

Nonetheless, it will help the future research and researchers to understand the practices of in-service training activities in Turkey in a public school setting. Thus, it can be said that this research provides a distinct example of a case where it is possible to see the implementation of in-service training and teachers' and administrators' evaluation of those programs.

Nevertheless, it is possible to claim that there would be ethical concerns about the analysis of the data gathered from the workplace of the researcher. However, coding the data from taped and transcribed interviews and further checks were performed by another researcher from the same field of study to ensure the consistency of the implementation of the coding system. Besides, it is also important to note that the research questions do not regard any strengths or weaknesses of the selected school setting or relations among teachers and administrators there. Therefore, it is an outside activity or service that is evaluated by the teachers and administrators, not one provided by them.

As the data gathered is about an activity which is not delivered by the teachers or the administrators, but rather by the Ministry of National Education and/or other institutions, the teachers and administrators could discuss and evaluate the programs without feeling any pressure that could be questioned ethically.

There are also some disadvantages of the fact that the research site is the workplace of the researcher. Thus, the researcher was very careful not to be personally over-involved which could have biased research results. It is very well acknowledged by the researcher that a high degree of personal involvement can possibly affect the way people perceive events and situations especially when situations involve conflict or stress.

Another disadvantage is that in situations where there are the decision makers who plan what is to be done while others are the doers who are expected to take the action, there could be a lack of enthusiasm for participation, but the researcher clearly expressed that the participants was not only contributing to a research on in-service training activities in their

school but also adding up on the knowledge and expertise for future researchers, teachers and administrators in the field of education. For this purpose, a semi structured interview form was developed by the researcher. To sort out the timing problem they were also asked to schedule the interview themselves at their most convenient time and they willingly participated in the research as they determined the time and place of the interview. The participants were interviewed on a one on one basis in rooms isolated from the noise and crowd of the school.

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APPENDICES

Öğretmenlerin/İdarecilerin Hizmet İçi Eğitim Değerlendirmesi: Yarı Yapılandırılmış
Görüşme Formu

A) Öğretmen/İdareciyle İlgili Sorular
1. Öğretmenlik mesleğinde kaçıncı yılınız?
2. Okuldaki göreviniz? (Öğretmen/ İdareci)
3. Mezun olduğunuz fakülte ve bölüm nedir?
4. Son 5 yılda hangi hizmet-içi eğitim faaliyetlerine katıldınız?
5. 2008-2009 eğitim öğretim yılında katılmış olduğunuz hizmet içi eğitim sayısı?
6. Son 5 yıl içerisinde kendi isteğinize bağlı olarak herhangi bir hizmet içi eğitim etkinliğine katıldınız mı?
7. İsteğe bağlı olan hizmet içi eğitim programlarına katılma nedenleriniz nelerdir (ya da henüz katılmadıysanız neler olabilir)?

B) MEB Hizmetiçi Eğitim Faaliyetleriyle İlgili Sorular
Genel Durum:
8. Okulunuzda ve/veya dışarıda MEB tarafından ne tür eğitim faaliyetleri düzenleniyor?
9. Okulunuzda MEB tarafından sağlananların dışında hizmet içi eğitim faaliyetleri düzenleniyor mu? Örneklendirebilir misiniz?

Yer ve Zaman:
10. Okulunuzda hizmet içi eğitim çalışmalarının sürekli uygulanabileceği bir yer var mı?
11. Katıldığınız hizmet içi eğitimlerde eğitimin verildiği yer eğitime uygun muydu?
12. Hizmet içi eğitimlerde zamanlamanın uygunluğu konusunda neler düşünüyorsunuz?

HİE Personeli:
13. Hizmet içi eğitimlerde görevli eğitimciler sizce sayı ve nitelik açısından yeterli miydi? (Hizmet içi eğitimlerde görevli eğitimcilerde hangi açılardan eksiklikler dikkatinizi çekti?)

Planlama:
14. Hizmet içi eğitimler planlanırken sizin görüşlerinizin alınması gerekir mi? Neden?
15. Hizmet içi eğitimler tasarlanırken sizin ihtiyaçlarınızın dikkate alındığını düşünüyor musunuz? Neden?
16. Hizmet içi eğitimler ihtiyaçlarınızı karşılıyor mu?

17. Öğretmenler için siz bir hizmet içi eğitim tasarlıyor olsaydınız mutlaka dikkat edeceğiniz hususlar neler olurdu?

C. Öğretmenin/İdarecinin Katıldığı Hizmetiçi Eğitimlerle İlgili Sorular

18. Katıldığınız hizmet içi eğitimler öğrenciye karşı yaklaşımınızda bir değişiklik yarattı mı? Açıklar mısınız?
19. Katıldığınız hizmet içi eğitimler genel kültür açısından ve sosyal gelişiminize katkıda bulundu mu? Açıklar mısınız?
20. Katıldığınız hizmet içi eğitimler ders içi uygulamalarınızda ve öğretim yöntemlerinizde bir değişiklik yarattı mı? Örneklendirebilir misiniz?
21. Katıldığınız hizmet içi eğitimlerin mesleki alan bilginize katkı sağladığını düşünüyor musunuz? Açıklar mısınız?
22. Eğitim teknolojisi üzerine hizmet içi eğitimler hakkında neler düşünüyorsunuz?
23. Katıldığınız hizmet içi eğitimler gelişen teknolojik koşullara uyum sağlayabilmenize yardımcı oldu mu? Açıklar mısınız?
24. Sınıf içerisinde yeni teknolojileri kullanımız açısından katıldığınız hizmet içi eğitimlerin katkısı oldu mu? Örneklendirebilir misiniz?
25. Özetleyecek olursak bu eğitimler size hangi alanlarda en çok katkı sağladı?
26. Bu sonuçta eğitimi sunan personelin etkisi sizce nedir?

D. MEB Hizmetiçi Eğitimlerine Karşı Yaklaşımlarla İlgili Sorular
27. Hizmet içi eğitime katılmakla görevlendirildiğiniz zaman neler hissediyorsunuz?
28. Hizmet içi eğitime okul yönetiminin bakışı nasıldır?
29. Hizmet içi eğitimlere meslektaşlarınızın yaklaşımı nasıldır?

Appendix B

Semi-Structured Interview Form of Teachers'/Administrators' Evaluation of In-service Training

A) Questions Related to Teachers/Administrators:
1. How long have been in the teaching profession?
2. What is your area of service at your school? (Teacher / Administrator)
3. What is the faculty and department you graduated?
4. Which in-service training activities have you participated in the last five years?
5. What is the number of in-service training activities you participated in 2008-2009?
6. Have you attended any optional in-service training activities in the last five years?
7. What are your reasons to attend optional in-service training activities (what can they be if you have not attended any)?

B) Questions Related to In-service Training Activities in the Ministry of national Education

General Condition:
8. What kind of in-service training activities are organized by the MNE in or out of your school?
9. Are any in-service training activities other than those provided by the MNE organized in your school? Can you give examples?

Place and Time:
10. Is there a substantive place to implement in-service training activities in your school?
11. Has the place been suitable for training in the in-service activities you participated?
12. What do you think about the timing of the in-service training activities?

Trainers
13. Have the trainers who were assigned to give training been sufficient in terms of their numbers and quality? (What kind of problems did you notice regarding the trainers?)

Planning:
14. Do you think you should be asked about your ideas while in-service training programs are designed? Why?
15. Do you think your needs are considered while in-service training programs are designed? Why?
16. Do the in-service training programs meet your needs?

17. What would you certainly take into account if you were to design an in-service training program for teachers?

C. Questions Related to In-service Trainings Teachers/Administrators Participated

18. Have the in-service training activities you attended resulted in a change in your attitude toward students? Can you explain how?

19. Have the in-service training activities you attended contributed to your cultural or social development? Can you explain how?

20. Have the in-service training activities you attended resulted in a change in your in-class practices and teaching methods? Can you give an example?

21. Do you think the in-service training activities you attended have contributed to your knowledge in your area of teaching? Can you explain how?

22. What do you think about in-service training programs on technology in education?

23. Have the in-service training activities you attended helped you catch up with technological developments? Can you explain how?

24. Have the in-service training activities you attended contributed to your use of technology in the classroom? Can you give an example?

25. If we summarize, in what areas have these in-service training activities contributed you most?

26. What is the effect of the trainer in this result?

D. Questions Related to the Attitudes toward In-service Training in the Ministry of National Education

27. How do you feel when you are assigned to participate in an in-service training activitiy?

28. How do the school administrators view in-service trainings?

29. How do your teacher colleagues approach in-service trainings?

Appendix C

Table 3: Code Themes, Definitions and Frequencies				
Themes	Code	Freq. (Teac.) (n=15)	Freq. (Admin.) (n=4)	Code definitions
Teachers / Administrators	In10-5	3	0	O-5 years of experience
	In15+	12	4	5+ years of experience
	In2ö	15	0	Teachers
	In2y	0	4	Administrators
	In3am	13	4	Graduated from a relevant faculty
	In3amd	2	0	Graduated from a different faculty
	In4hiead	15	4	Names of in-service training in the last five years
	In4hietür	10	4	Types of in-service training in the last five years
	In5hiead	13	2	Names of in-service training in 2008-2009
	In5hies	15	4	Number of in-service training in 2008-2009
	In6hieibs	15	4	Number of in-service training participated on-demand
	In6hieibtür	2	1	Types of in-service training participated on-demand
	In7hiekn	15	4	Reasons for participating in-service training on-demand
In-service Training Provided by MNE	General Condition			
	In8eç	15	4	Training types organized by MNE
	In9ç	14	4	Types of in-service training activities organized by other institutions
	In9e	13	4	Yes. In-service training activities are organized by other institutions.
	In9h	2	0	No. In-service training activities are not organized by other institutions.
	Place and Time			
	Int10e	14	4	Yes. There is a place to organize in-service training.
	Int10h	1	0	No. There is not a place to organize in-service training.
	Int11oeu	10	1	The place was suitable for training.
	Int11oeud	7	3	The place was not suitable for training.
	Int12zu	0	0	The time was suitable.
	Int12zud	15	4	The time was not suitable.
	IST Trainers			
	Int13tee	9	1	Problems noticed regarding trainers
	Int13y	6	3	Trainers were qualified enough.
	Int13yd	9	2	Trainers were not qualified enough.
	Planning			
	Int14en	15	4	Yes. I need to be asked while trainings are planned.
	Int14hn	0	0	No. I need not be asked while trainings are planned.
	Int15en	4	2	Yes. My needs are considered.
	Int15hn	11	2	No. My needs are not considered.
	Int16e	3	1	Yes. Trainings meet my needs.
	Int16h	5	2	No. Trainings do not meet my needs.
	Int16k	7	1	Trainings partially meet my needs.
	Int17hiehde	14	4	Important points to consider while designing in-service training
	Int18dk	3	0	Training resulted in a partial change in my attitude towards students.

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IST Teacher / Administrator Participated	Int18dv	10	3	Yes. Training resulted in a change in my attitude towards students.
	Int18dy	2	1	No. Training resulted in no change in my attitude towards students.
	Int19kk	3	1	Training resulted in a partial change in my cultural or social development.
	Int19kv	12	2	Yes. Training resulted in a change in my cultural or social development.
	Int19ky	0	1	No. Training resulted in no change in my cultural or social development.
	Int20de	13	4	Yes. Training resulted in a change in my in-class methods and techniques.
	Int20dh	2	0	No. Training resulted in no change in my in-class methods and techniques.
	Int21mbke	11	3	Yes. Training resulted in a change in my knowledge about my field.
	Int21mbkh	4	1	No. Training resulted in no change in my knowledge about my field.
	Int22og	11	4	Positive remarks on trainings related to technology in education.
	Int22oog	6	0	Negative remarks on trainings related to technology in education.
	Int23gtuye	5	4	Yes. Training has helped me catch up with new technology.
	Int23gtuyh	6	0	No. Training has not helped me catch up with new technology.
	Int23kh	4	0	I have never taken training on technology in education.
	Int24ytkke	6	3	Yes. Training has helped me use new technology in the classroom.
	Int24ytkkh	7	1	No. Training has not helped me use new technology in the classroom.
	Int25eçks	13	4	The areas in-service training contributed most.
	Int25hks	3	0	In-service training has no contribution.
	Int26peog	8	2	Positive remarks on the role of the trainer.
	Int26peoog	6	1	Negative remarks on the role of the trainer.
Teacher's / Administrators' Approach toward IST	Int27gohg	2	3	Positive attitudes toward the assignment to attend any in-service training.
	Int27goohg	15	1	Negative attitudes toward the assignment to attend any in-service training.
	Int28oybog	8	3	Positive remarks on school administrators' approach toward in-service training.
	Int28oyboog	8	1	Negative remarks on school administrators' approach toward in-service training.
	Int29myog	6	1	Positive remarks on teachers' approach toward in-service training.
	Int29myoog	11	3	Negative remarks on teachers' approach toward in-service training.

Coding Comparison for Inter-coder Reliability including Kappa Coefficient

Node	Source	Source Size	Kappa Coefficient	Agreement (%)	Disagreement (%)	R and Not C (%)	C and Not R (%)
In4hiead	k 4	5661 chars	0,981	99,96	0,04	0,02	0,02
In4hiead	k 9	12001 chars	0,7265	98,83	1,17	0,37	0,8
In4hiead	k13	5676 chars	1	100	0	0	0
In4hiead	k18	4512 chars	0,6297	98,14	1,86	0	1,86
In4hiead	ky19	5055 chars	1	100	0	0	0
In4hietür	k 4	5661 chars	1	100	0	0	0
In4hietür	k 9	12001 chars	0,508	98,43	1,57	0	1,57
In4hietür	k13	5676 chars	0,865	99,59	0,41	0	0,41
In4hietür	k18	4512 chars	0,6297	98,14	1,86	0	1,86
In4hietür	ky19	5055 chars	1	100	0	0	0
In5hiead	k 4	5661 chars	0,8272	99,91	0,09	0	0,09
In5hiead	k 9	12001 chars	1	100	0	0	0
In5hiead	k13	5676 chars	0,9923	99,96	0,04	0	0,04
In5hiead	k18	4512 chars	0,6845	99,53	0,47	0	0,47
In5hiead	ky19	5055 chars	0,6646	99,55	0,45	0	0,45
In5hies	k 4	5661 chars	0,521	99,81	0,19	0	0,19
In5hies	k 9	12001 chars	0,9274	99,77	0,23	0,22	0,02
In5hies	k13	5676 chars	0,9923	99,96	0,04	0	0,04
In5hies	k18	4512 chars	0,7999	99,98	0,02	0	0,02
In5hies	ky19	5055 chars	1	100	0	0	0
In6hieibs	k 4	5661 chars	0,7997	99,95	0,05	0,02	0,04
In6hieibs	k 9	12001 chars	0,6152	98,75	1,25	1,02	0,22
In6hieibs	k13	5676 chars	0,5376	99,79	0,21	0,21	0
In6hieibs	k18	4512 chars	1	100	0	0	0
In6hieibs	ky19	5055 chars	1	100	0	0	0
In6hieibtür	k 4	5661 chars	1	100	0	0	0
In6hieibtür	k 9	12001 chars	1	100	0	0	0
In6hieibtür	k13	5676 chars	1	100	0	0	0
In6hieibtür	k18	4512 chars	1	100	0	0	0
In6hieibtür	ky19	5055 chars	1	100	0	0	0
In7hiekn	k 4	5661 chars	0,76	98,66	1,34	0,46	0,88
In7hiekn	k 9	12001 chars	0,999	99,99	0,01	0,01	0
In7hiekn	k13	5676 chars	0,991	99,91	0,09	0	0,09
In7hiekn	k18	4512 chars	0,616	97,85	2,15	2,15	0
In7hiekn	ky19	5055 chars	0,5894	98,97	1,03	1,03	0
In8eç	k 4	5661 chars	0,9873	99,98	0,02	0,02	0
In8eç	k 9	12001 chars	0,9122	99,89	0,11	0,01	0,1
In8eç	k13	5676 chars	0,9771	99,88	0,12	0,11	0,02
In8eç	k18	4512 chars	1	100	0	0	0
In8eç	ky19	5055 chars	0,7535	98,56	1,44	1,27	0,18
In9ç	k 4	5661 chars	0,8286	98,96	1,04	1,04	0
In9ç	k 9	12001 chars	0,6205	98,6	1,4	1,4	0
In9ç	k13	5676 chars	1	100	0	0	0
In9ç	k18	4512 chars	0,6808	99	1	0	1
In9ç	ky19	5055 chars	0,9798	99,88	0,12	0	0,12
In9e	k 4	5661 chars	0,8286	98,96	1,04	1,04	0
In9e	k 9	12001 chars	0,6205	98,6	1,4	1,4	0
In9e	k13	5676 chars	0,9907	99,98	0,02	0,02	0
In9e	k18	4512 chars	0,9945	99,98	0,02	0	0,02
In9e	ky19	5055 chars	0,7998	99,96	0,04	0	0,04
In9h	k 4	5661 chars	1	100	0	0	0
In9h	k 9	12001 chars	1	100	0	0	0

In9h	k13	5676 chars	1	100	0	0	0
In9h	k18	4512 chars	1	100	0	0	0
In9h	ky19	5055 chars	1	100	0	0	0
Int10e	k 4	5661 chars	0,9202	99,91	0,09	0,09	0
Int10e	k 9	12001 chars	0,9623	99,94	0,06	0,04	0,02
Int10e	k13	5676 chars	0,97	99,95	0,05	0,05	0
Int10e	k18	4512 chars	0,7379	99,73	0,27	0,27	0
Int10e	ky19	5055 chars	0,9869	99,98	0,02	0,02	0
Int10h	k 4	5661 chars	1	100	0	0	0
Int10h	k 9	12001 chars	1	100	0	0	0
Int10h	k13	5676 chars	1	100	0	0	0
Int10h	k18	4512 chars	1	100	0	0	0
Int10h	ky19	5055 chars	1	100	0	0	0
Int11oeu	k 4	5661 chars	1	100	0	0	0
Int11oeu	k 9	12001 chars	0,7181	98,71	1,29	0,83	0,46
Int11oeu	k13	5676 chars	1	100	0	0	0
Int11oeu	k18	4512 chars	1	100	0	0	0
Int11oeu	ky19	5055 chars	1	100	0	0	0
Int11oeud	k 4	5661 chars	1	100	0	0	0
Int11oeud	k 9	12001 chars	1	100	0	0	0
Int11oeud	k13	5676 chars	0,8938	99,3	0,7	0,7	0
Int11oeud	k18	4512 chars	1	100	0	0	0
Int11oeud	ky19	5055 chars	0,9894	99,98	0,02	0,02	0
Int12zu	k 4	5661 chars	1	100	0	0	0
Int12zu	k 9	12001 chars	1	100	0	0	0
Int12zu	k13	5676 chars	1	100	0	0	0
Int12zu	k18	4512 chars	1	100	0	0	0
Int12zu	ky19	5055 chars	1	100	0	0	0
Int12zud	k 4	5661 chars	0,6046	99,05	0,95	0	0,95
Int12zud	k 9	12001 chars	0,8175	99	1	1	0
Int12zud	k13	5676 chars	0,8205	98,73	1,27	1,27	0
Int12zud	k18	4512 chars	1	100	0	0	0
Int12zud	ky19	5055 chars	0,728	98,65	1,35	0	1,35
Int13tee	k 4	5661 chars	1	100	0	0	0
Int13tee	k 9	12001 chars	1	100	0	0	0
Int13tee	k13	5676 chars	0,9902	99,91	0,09	0,09	0
Int13tee	k18	4512 chars	1	100	0	0	0
Int13tee	ky19	5055 chars	0,8009	98,73	1,27	0	1,27
Int13y	k 4	5661 chars	1	100	0	0	0
Int13y	k 9	12001 chars	0,7203	99,18	0,82	0,04	0,78
Int13y	k13	5676 chars	1	100	0	0	0
Int13y	k18	4512 chars	1	100	0	0	0
Int13y	ky19	5055 chars	1	100	0	0	0
Int13yd	k 4	5661 chars	1	100	0	0	0
Int13yd	k 9	12001 chars	1	100	0	0	0
Int13yd	k13	5676 chars	0,9902	99,91	0,09	0,09	0
Int13yd	k18	4512 chars	1	100	0	0	0
Int13yd	ky19	5055 chars	1	100	0	0	0
Int14en	k 4	5661 chars	0,8764	99,24	0,76	0,76	0
Int14en	k 9	12001 chars	0,983	99,98	0,02	0,02	0
Int14en	k13	5676 chars	0,9036	99,47	0,53	0,53	0
Int14en	k18	4512 chars	1	100	0	0	0
Int14en	ky19	5055 chars	0,5774	95,34	4,66	4,66	0
Int14hn	k 4	5661 chars	1	100	0	0	0
Int14hn	k 9	12001 chars	1	100	0	0	0
Int14hn	k13	5676 chars	1	100	0	0	0
Int14hn	k18	4512 chars	1	100	0	0	0
Int14hn	ky19	5055 chars	1	100	0	0	0
Int15en	k 4	5661 chars	0,9863	99,95	0,05	0,02	0,04

Int15en	k 9	12001 chars	1	100	0	0	0
Int15en	k13	5676 chars	1	100	0	0	0
Int15en	k18	4512 chars	0,9969	99,98	0,02	0,02	0
Int15en	ky19	5055 chars	1	100	0	0	0
Int15hn	k 4	5661 chars	1	100	0	0	0
Int15hn	k 9	12001 chars	0,8299	99,82	0,18	0,18	0
Int15hn	k13	5676 chars	1	100	0	0	0
Int15hn	k18	4512 chars	1	100	0	0	0
Int15hn	ky19	5055 chars	1	100	0	0	0
Int16e	k 4	5661 chars	0,9965	99,96	0,04	0,04	0
Int16e	k 9	12001 chars	1	100	0	0	0
Int16e	k13	5676 chars	0,992	99,98	0,02	0,02	0
Int16e	k18	4512 chars	1	100	0	0	0
Int16e	ky19	5055 chars	1	100	0	0	0
Int16h	k 4	5661 chars	1	100	0	0	0
Int16h	k 9	12001 chars	0,6605	99,56	0,44	0,44	0
Int16h	k13	5676 chars	1	100	0	0	0
Int16h	k18	4512 chars	0,5208	99,76	0,24	0,24	0
Int16h	ky19	5055 chars	1	100	0	0	0
Int16k	k 4	5661 chars	1	100	0	0	0
Int16k	k 9	12001 chars	1	100	0	0	0
Int16k	k13	5676 chars	1	100	0	0	0
Int16k	k18	4512 chars	1	100	0	0	0
Int16k	ky19	5055 chars	1	100	0	0	0
Int17hiehde	k 4	5661 chars	1	100	0	0	0
Int17hiehde	k 9	12001 chars	0,7697	97,88	2,12	2,12	0
Int17hiehde	k13	5676 chars	0,8485	99,15	0,85	0,85	0
Int17hiehde	k18	4512 chars	0,8564	98,14	1,86	0,04	1,82
Int17hiehde	ky19	5055 chars	0,9658	99,74	0,26	0,24	0,02
Int18dk	k 4	5661 chars	1	100	0	0	0
Int18dk	k 9	12001 chars	0,5377	99,29	0,71	0	0,71
Int18dk	k13	5676 chars	1	100	0	0	0
Int18dk	k18	4512 chars	1	100	0	0	0
Int18dk	ky19	5055 chars	1	100	0	0	0
Int18dv	k 4	5661 chars	1	100	0	0	0
Int18dv	k 9	12001 chars	1	100	0	0	0
Int18dv	k13	5676 chars	0,9944	99,96	0,04	0	0,04
Int18dv	k18	4512 chars	0,9978	99,96	0,04	0,04	0
Int18dv	ky19	5055 chars	0,689	98,5	1,5	0	1,5
Int18dy	k 4	5661 chars	1	100	0	0	0
Int18dy	k 9	12001 chars	1	100	0	0	0
Int18dy	k13	5676 chars	1	100	0	0	0
Int18dy	k18	4512 chars	1	100	0	0	0
Int18dy	ky19	5055 chars	1	100	0	0	0
Int19kk	k 4	5661 chars	1	100	0	0	0
Int19kk	k 9	12001 chars	1	100	0	0	0
Int19kk	k13	5676 chars	1	100	0	0	0
Int19kk	k18	4512 chars	1	100	0	0	0
Int19kk	ky19	5055 chars	1	100	0	0	0
Int19kv	k 4	5661 chars	0,6256	99,31	0,69	0,69	0
Int19kv	k 9	12001 chars	0,686	95,69	4,31	4,31	0
Int19kv	k13	5676 chars	0,7525	99,54	0,46	0,46	0
Int19kv	k18	4512 chars	1	100	0	0	0
Int19kv	ky19	5055 chars	1	100	0	0	0
Int19ky	k 4	5661 chars	1	100	0	0	0
Int19ky	k 9	12001 chars	1	100	0	0	0
Int19ky	k13	5676 chars	1	100	0	0	0
Int19ky	k18	4512 chars	1	100	0	0	0
Int19ky	ky19	5055 chars	1	100	0	0	0

Int20de	k 4	5661 chars	1	100	0	0	0
Int20de	k 9	12001 chars	0,8359	99,81	0,19	0,19	0
Int20de	k13	5676 chars	0,5929	96,93	3,07	3,07	0
Int20de	k18	4512 chars	0,9977	99,96	0,04	0	0,04
Int20de	ky19	5055 chars	0,9901	99,96	0,04	0	0,04
Int20dh	k 4	5661 chars	0,7635	98,5	1,5	1,5	0
Int20dh	k 9	12001 chars	1	100	0	0	0
Int20dh	k13	5676 chars	1	100	0	0	0
Int20dh	k18	4512 chars	1	100	0	0	0
Int20dh	ky19	5055 chars	1	100	0	0	0
Int21mbke	k 4	5661 chars	0,9354	99,84	0,16	0,16	0
Int21mbke	k 9	12001 chars	0,8613	99,58	0,42	0,02	0,39
Int21mbke	k13	5676 chars	0,921	99,82	0,18	0,18	0
Int21mbke	k18	4512 chars	0,7267	99,87	0,13	0,13	0
Int21mbke	ky19	5055 chars	1	100	0	0	0
Int21mbkh	k 4	5661 chars	1	100	0	0	0
Int21mbkh	k 9	12001 chars	1	100	0	0	0
Int21mbkh	k13	5676 chars	1	100	0	0	0
Int21mbkh	k18	4512 chars	1	100	0	0	0
Int21mbkh	ky19	5055 chars	1	100	0	0	0
Int22og	k 4	5661 chars	1	100	0	0	0
Int22og	k 9	12001 chars	0,979	99,88	0,12	0,12	0
Int22og	k13	5676 chars	0,6074	97,37	2,63	0	2,63
Int22og	k18	4512 chars	0,984	99,98	0,02	0,02	0
Int22og	ky19	5055 chars	0,8066	98,89	1,11	0	1,11
Int22oog	k 4	5661 chars	1	100	0	0	0
Int22oog	k 9	12001 chars	1	100	0	0	0
Int22oog	k13	5676 chars	1	100	0	0	0
Int22oog	k18	4512 chars	1	100	0	0	0
Int22oog	ky19	5055 chars	1	100	0	0	0
Int23gtuye	k 4	5661 chars	1	100	0	0	0
Int23gtuye	k 9	12001 chars	1	100	0	0	0
Int23gtuye	k13	5676 chars	1	100	0	0	0
Int23gtuye	k18	4512 chars	1	100	0	0	0
Int23gtuye	ky19	5055 chars	1	100	0	0	0
Int23gtuyh	k 4	5661 chars	0,6435	99,61	0,39	0,39	0
Int23gtuyh	k 9	12001 chars	1	100	0	0	0
Int23gtuyh	k13	5676 chars	1	100	0	0	0
Int23gtuyh	k18	4512 chars	1	100	0	0	0
Int23gtuyh	ky19	5055 chars	1	100	0	0	0
Int23kh	k 4	5661 chars	1	100	0	0	0
Int23kh	k 9	12001 chars	0,9913	99,99	0,01	0	0,01
Int23kh	k13	5676 chars	1	100	0	0	0
Int23kh	k18	4512 chars	0,7882	99,62	0,38	0,24	0,13
Int23kh	ky19	5055 chars	1	100	0	0	0
Int24ytkke	k 4	5661 chars	1	100	0	0	0
Int24ytkke	k 9	12001 chars	1	100	0	0	0
Int24ytkke	k13	5676 chars	1	100	0	0	0
Int24ytkke	k18	4512 chars	1	100	0	0	0
Int24ytkke	ky19	5055 chars	1	100	0	0	0
Int24ytkkh	k 4	5661 chars	0,9366	99,56	0,44	0,44	0
Int24ytkkh	k 9	12001 chars	1	100	0	0	0
Int24ytkkh	k13	5676 chars	0,9302	99,52	0,48	0,48	0
Int24ytkkh	k18	4512 chars	1	100	0	0	0
Int24ytkkh	ky19	5055 chars	1	100	0	0	0
Int25eçks	k 4	5661 chars	0,5829	95,74	4,26	4,26	0
Int25eçks	k 9	12001 chars	0,7472	98,98	1,02	1,02	0
Int25eçks	k13	5676 chars	0,9983	99,98	0,02	0	0,02
Int25eçks	k18	4512 chars	1	100	0	0	0

Int25eçks	ky19	5055 chars	1	100	0	0	0
Int25hks	k 4	5661 chars	1	100	0	0	0
Int25hks	k 9	12001 chars	0,7946	99,27	0,73	0,73	0
Int25hks	k13	5676 chars	1	100	0	0	0
Int25hks	k18	4512 chars	1	100	0	0	0
Int25hks	ky19	5055 chars	1	100	0	0	0
Int26peog	k 4	5661 chars	1	100	0	0	0
Int26peog	k 9	12001 chars	0,9876	99,93	0,07	0,07	0
Int26peog	k13	5676 chars	0,9973	99,98	0,02	0,02	0
Int26peog	k18	4512 chars	1	100	0	0	0
Int26peog	ky19	5055 chars	0,8174	99,84	0,16	0,02	0,14
Int26peoog	k 4	5661 chars	0,6883	95,74	4,26	4,22	0,04
Int26peoog	k 9	12001 chars	1	100	0	0	0
Int26peoog	k13	5676 chars	1	100	0	0	0
Int26peoog	k18	4512 chars	1	100	0	0	0
Int26peoog	ky19	5055 chars	1	100	0	0	0
Int27gohg	k 4	5661 chars	1	100	0	0	0
Int27gohg	k 9	12001 chars	1	100	0	0	0
Int27gohg	k13	5676 chars	1	100	0	0	0
Int27gohg	k18	4512 chars	1	100	0	0	0
Int27gohg	ky19	5055 chars	1	100	0	0	0
Int27goohg	k 4	5661 chars	0,9969	99,96	0,04	0	0,04
Int27goohg	k 9	12001 chars	0,5017	96,91	3,09	3,09	0
Int27goohg	k13	5676 chars	0,5839	98,56	1,44	0	1,44
Int27goohg	k18	4512 chars	1	100	0	0	0
Int27goohg	ky19	5055 chars	1	100	0	0	0
Int28oybog	k 4	5661 chars	1	100	0	0	0
Int28oybog	k 9	12001 chars	1	100	0	0	0
Int28oybog	k13	5676 chars	0,6233	97,45	2,55	2,55	0
Int28oybog	k18	4512 chars	0,763	99,65	0,35	0,35	0
Int28oybog	ky19	5055 chars	0,9886	99,96	0,04	0	0,04
Int28oyboog	k 4	5661 chars	0,7646	99,05	0,95	0,95	0
Int28oyboog	k 9	12001 chars	0,8797	99,2	0,8	0,8	0
Int28oyboog	k13	5676 chars	1	100	0	0	0
Int28oyboog	k18	4512 chars	1	100	0	0	0
Int28oyboog	ky19	5055 chars	1	100	0	0	0
Int29myog	k 4	5661 chars	1	100	0	0	0
Int29myog	k 9	12001 chars	1	100	0	0	0
Int29myog	k13	5676 chars	0,5519	98,52	1,48	1,48	0
Int29myog	k18	4512 chars	1	100	0	0	0
Int29myog	ky19	5055 chars	1	100	0	0	0
Int29myoog	k 4	5661 chars	0,612	96,43	3,57	2,69	0,88
Int29myoog	k 9	12001 chars	0,531	96,23	3,77	3,77	0
Int29myoog	k13	5676 chars	1	100	0	0	0
Int29myoog	k18	4512 chars	0,9949	99,93	0,07	0,07	0
Int29myoog	ky19	5055 chars	1	100	0	0	0