Exploring the Turkish Teachers' Professional Development Experiences and Their Needs for Professional Development

Soner Mehmet Ozdemir*

Kırıkkale University, Faculty of Education, Kırıkkale, TURKEY

The purpose of this study was to examine the activities of professional development that Turkish elementary and secondary teachers experienced individually in the previous two years. Survey method was used and data were collected through an instrument developed by researcher. Sample consisted of 507 elementary and secondary teachers employed in 12 elementary and 11 secondary schools in Kırıkkale. Results of the study indicated that the most common activities, teachers participated in, were "to search on the internet to follow the latest developments (new methods, techniques or activities etc.) related to their fields or education and use these in their lessons" , "to participate in forums on the Internet related to education or teachers to share opinions, documents or activities for professional development" ", "to visit another school (in or outside city) with the aim of professional development. Besides, four-fifths of the teachers needed professional development. The most required professional development areas were "new instructional approaches/techniques/methods, subject field, the use of instructional technologies, teaching students with special needs, recognition of the student psychology and measurement and assessment".

Introduction

Teachers are the key asset of schools. They need to be well trained at the beginning of their careers and provided with high quality professional development in subsequent years in their profession (Hargreaves, 1998:38) and, it is evident to assume that a teacher will, in one respect, need continuing professional support to become a master teacher (Orlich, Harder, Callahan & Gibson, 1998:389). Professional development is a process or processes by which competent teachers achieve high levels of professional competence and expand their understanding of self, role, context, and career (Duke & Stiggins, 1990:99). Indeed, the need for professional development for all teachers is indisputable (Ingvarson, Meiers & Beavis, 2005) with the vitality of the teaching profession dependent upon continuous professional learning which should be planned, systematic, regular and relevant (Committee for the Review of Teaching and Teacher Education, 2003, cited in Yates, 2007:214).

Professional Development of Teachers: Definition, Aim and Importance

Professional development, in a broad sense, refers to the development of a person in his or her personal role and the sum of formal and informal learning experiences throughout one's career from initial preparation phase (pre-service and in-service teacher education) to

* *Correspondence: sonerozdem@yahoo.com, Phone:+ 90- 318 3572486-1379*

retirement (Craft, 1996 ; Fullan, 2001). Many definitions of professional development have been found in the literature. For example, while Bolam (2000:272) see professional development as a process by which teachers and head teachers learn, enhance and use appropriate knowledge, skills and values, for Glatthorn (1995), it is the professional growth a teacher achieves as a result of gaining increased experience and examining his or her teaching systematically. Elliott (1991, cited in Kervin & Rodwell, 2007) underlines that professional development is more than just experiences teachers have- "professional development is the individualistic and possessive process of acquiring techniques".

Day (1999:4), on the other hand, defines professional development in a broader perspective. According to Day,

> *"Professional development consists of all natural learning experiences and those conscious and planned activities which are intended to be of direct or indirect benefit to the individual, group or school and which contribute, through these, to the quality of education in the classroom. It is the process by which, alone, and with others, teachers review, renew and extend their commitment as change agents to the moral purposes of teaching; and by which they acquire and develop critically the knowledge, skills and emotional intelligence essential to good professional thinking, planning and practice with children, young people and colleagues through each phase of their teaching lives."*

Relevant literature indicates that professional development is indispensable element in terms of teacher competence and quality, student learning and outcomes, school improvement and effectiveness and educational reform. Primarily, professional development plays an important role to improve teacher's professional and personal development and increase their career by helping them changing and reviewing their skills, knowledge, attitudes and understanding (Blandford, 2000; Bolam, 2000; Borko, 2004; Craft, 1996; Day, 1999; Desimone, 2009; Glatthorn, 1995; Guskey, 2002a; Hien, 2008; Hill, 2009; Villegas-Reimers, 2003). The research have confirmed that engaging teachers in high quality professional learning is the most successful way to improve teacher effectiveness (Elmore & Burney 1997; Greenwald, Hedges & Laine 1995; Guskey & Huberman 1995; Hawley & Valli 1999; Elmore 2002, cited in Fraser, 2005).

Several opinions and findings exist that professional development of teachers is effective on students' learning and outcomes directly or indirectly in the literature (Blandford, 2000; Bell & Gilbert, 1996; Diaz-Maggioli, 2004; Garet et al., 2001; Guskey, 2002a; Hill, 2009; McDonald, 2009; Villegas-Reimers, 2003). Findings from the relevant literature all over the world proved an encouraging relationship between the improvement of teachers' education and the levels of students' accomplishment (Borko & Putnam; 1995; Meiers & Ingvarson: 2005, cited in Hien, 2008). There are even research findings about students of teachers who participated in long-term teacher education achieved higher matriculation scores than their counterparts (Cohen & Hill, 2001; Viadero, 2005, cited in Klieger & Bar Yossef, 2011). In short, the professional growth of teachers and other staff in the school is a key component of developing children's learning (Bubb & Earley, 2007:13) as well as change and development in their teaching skills, knowledge, attitudes and values.

Professional development is also related to school improvement and effectiveness and educational reform (Bolam, 2000; Bubb & Earley, 2007; Day, 1999; Desimone, 2009; Fullan & Hargreaves, 1992; Guskey, 2000; Hien, 2008; Vandenberghe, 2002; Villegas-Reimers, 2003). As noted by Day (1999:2), successful school improvement is in one respect dependent upon successful teacher development. In other words, investment in professional development is essential both to the growth and revitalization of the individual and organization, and is the most significant investment a school can make (Cardno, 1996). Thus, it becomes evident that

teachers' professional development is a key factor to ensure the success of educational reform at every level, which will impact educational reform and school effectiveness positively. For this reason, it is significant to explore the reality of teachers' professional development (Zhu, 2010:379).

In brief, as a professional, a teacher is expected to evaluate his/her competences, practices and teaching approaches to benefit from continuing professional development opportunities. Inquiring own practices, collaboration with colleagues for improvement of teaching and learning environments, exchange of views about compliance with educational and didactic choices, learning by sharing success or failures are underlined on the basis of the development process (TED, 2009:5).

Types of Professional Development

Teachers experience a vast range of activities and interactions that may increase their knowledge and skills and improve their teaching practice, as well as contribute to their personal, social, and emotional growth. These experiences can range from formal, structured topic-specific seminars given on in-service days, to everyday, informal "hallway" discussions with other teachers on instruction techniques, embedded in teachers' everyday work lives (Desimone, 2009:182).

In addition to this, there are many types of professional development activities can be classified as traditional and alternative or new in the literature. These types of activities are: "local and national conferences, seminars, short courses, workshops, faculty courses, special institutions, qualification programmes, reading professional publications, mentoring, coaching, peer observation, action research, visits to other schools, sharing views and good practices with colleagues, examining student work, study groups, individual and collective research, case discussions, lesson study, social networking (Boyle, While, & Boyle, 2004; Diaz-Maggioli, 2004; Ganser, 2000; Guskey, 2000; Garet et al., 2001; General Teaching Council for Wales, 2002; Hustler et al., 2003; Villegas-Reimers, 2003; Struthers, 2007). These activities cover all forms of teachers' professional learning, whether formal or informal within school or out of school, self-directed or externally prescribed (Conlon, 2004:116).

Perhaps, the most traditional form of professional development is the typical "in-service staff training" that includes the use of workshops, short seminars and courses. Although traditional forms of professional development are quite common, they are widely criticized as being ineffective in providing teachers with sufficient time, activities, and content necessary for increasing teacher's knowledge and fostering meaningful changes in their classroom practice because of one-shot experiences, completely unrelated to the needs of teachers and providing no follow-up (Loucks-Horsley, Hewson, Love & Stiles, 1998, cited in Garet et al., 2001:920; Villegas-Reimers, 2003:93). Therefore, Guskey (2002b) argued that professional development does not consist of event-driven activities such as workshops and seminars, but forget the wide range of less formal, ongoing, job-embedded professional development activities-study groups, action research, collaborative planning, curriculum development, structured observations, peer coaching, mentoring, and so on.

Professional Development for Teachers in Turkey

There has been a variety of activities and programs organized by central and local education authorities for the quality and continuous professional development of teachers in Turkey. These activities and programs are planned and organized at central level mostly by The Ministry of National Education and Provincial Directorate for National Education and at

the local level rarely by the schools. Most of the professional development activities for teachers are in the form of in-service training seminars covering specific subjects of education, courses, workshops and conferences. These professional development activities are not effective due to various reasons such as; ignoring needs and expectations of the teachers, problems with timing and duration, lack of opportunities to put learnings into practice, insufficient physical settings and resources, inappropriate instructional methods and materials, lack of motivation and outdated content (Kanlı and Yağbasan, 2002; Uçar and İpek, 2006; Yalın, 2001). For the reasons above mentioned, these activities turn out to be inefficient traditional routine activities. In this context, The Turkish Ministry of National Education introduced "The Teacher Career Ladder System" (TCLS) to encourage continuous professional development for teachers in 2005.

Teaching profession within the frame of TCLS is divided in to three career steps as teacher level, master teacher level and head teacher level. Career in this system is defined as advancing to master teacher from teacher and advancing to head teacher from master teacher by gaining necessary competencies (MEB Mevzuat Bankası, 2006). Teachers' advancement in their careers depends on their seniority, examinations for "TCLS" centrally conducted by the Ministry of National Education and their participation to various professional development activities. Besides, teachers studying for a master and PhD degrees are exempt from these exams. By this way teachers are encouraged to participate in qualification programmes. In the career system, especially participating professional development activities is considered to be important for promoting teachers' professional skills and motivations, improving students learning and providing development of schools. For each professional development activity, a point is determined in the system. Of these activities, as well as traditional professional development activities such as; workshops, conferences, participating in qualification programmes, writing an article in national and international peer-reviewed journals, writing a book, participating in symposium/congress or participating in scientific activities such as designing projects and/or participating projects, organizing concerts, conferences, panels, competitions inside and outside of schools etc., are also available. TCLS was only applied in 2005 and revoked by the Constitutional Court as a result of the case filed by education unions for several reasons. Currently, Turkish Ministry of Education is working on a new regulation for professional development and career to meet the needs and requests of all interested parties. It can be said that such a regulation is important for not only teachers' own professional development and progression and development of schools but also having effective learning for students.

In this context, the aim of this study is to examine the professional development activities that teachers experienced and their needs for professional development. Teachers' professional development is one of the important factors in both increasing the qualifications of teachers and educational institutes and improving students learning. Thus, the findings of this study are considered to provide some information to the decision-making authorities related to education and to educational institutes and to shed a light on which subjects teachers should improve themselves and which subjects opportunities for professional development should be given to teachers by education authorities and educational institutes.

Method

This study was designed based on survey model to determine the activities elementary and secondary school teachers participated in professional development and their needs for professional development.

Participants

The present study was carried out on teachers in elementary and secondary schools in Kırıkkale located in 80 km east of Ankara the capital of Turkey. In the center of Kırıkkale 53 public and 3 private elementary schools and 19 public and 1 private secondary school are located in 2010-2011 academic year. 1.395 teachers in elementary schools and 918 secondary teachers are working in the city centre (Kırıkkale İl Milli Eğitim Müdürlüğü, 2010). Of these schools 12 elementary schools, nine of these schools are public and three of them are private and 11 high schools, 10 of them are public and one of them is private were selected randomly. The types of these selected schools are general high school, science high school, teacher high school, Anatolian high school, technical and vocational high school, fine arts high school and imam hatip high school (Religious Vocational High School). To the teachers in these selected 12 elementary and 11 high schools, a questionnaire developed by researcher was sent and 520 volunteer teachers responded this questionnaire. Since 13 of these questionnaires were filled incompletely, these questionnaires were eliminated and were not included in the study. Accordingly, 507 teachers consisted of the participants of this study.

As examined demographic information of teachers, about 53% of teachers (n=269) work in elementary schools and 47% of them (n=238) in secondary schools. The study sample included 303 (59.8%) male and 204 (40.2%) female teachers. Besides, 18.7% of teachers have 1-3 years of teaching experience, 19.3% of them 6-10 years of experience, 21.3% of teachers 11-15 years, 16.8% of them 16-20 years, 12% of them 21-25 years and 11.4 % of them 26 years or over. The participants were (27%) primary school teachers, (38.3%) social science teachers (social studies, history, geography, Turkish literature etc), (20%) science education teachers (physics, chemistry, mathematics, biology, and science), (7.3%) vocational school teachers and (6.5%) fine arts and physical education teachers.

Data Collection Tool and Its Implementation

The data were gathered through a questionnaire developed by the researcher from elementary and secondary education teachers in spring semester 2011. In development of the questionnaire, international and national literature were examined first. Instruments used in the studies related to the research subject were examined and correspondingly draft items were formed which would be used as measurement tools for this study. In the formation of draft items, professional development activities in *"Teaching and Learning International Survey (TALIS) Study"* conducted by OECD in 2009 and activities in 'Teaching Career Ladder System' introduced by Ministry of Education in Turkey in 2005 as well as items in instruments used in some studies related to the subject in literature were utilized. A variety of professional development activities realized by teachers individually took place in the draft measurement tool. For the content validity of the scale, a group of teachers' opinions working in elementary and secondary schools in Kırıkkale and academicians' expert opinions working in Faculty of Education in Kırıkkale University were gathered. In expert opinion, it was intended to determine whether the items with professional development in the scale were convenient and related to the subject. As a result of expert opinions, it was decided to remove some items and to correct some of them and finally to add some more items (activities) to the scale. In line with expert opinions, the scale's internal validity was provided by determining whether the items in data collection tool served for the purpose of the study and sub-problems of the study and whether it was related to desired area or not. In addition, for the reliability of the measurement tool, the questionnaire applied to a group of teachers and it was seen that majority of the items were understood and answered easily. Open-ended questions were existed related to reasons why the teachers did not participate in professional development

activities. Tallies of the answers given by the participants to the open-ended questions were kept and it was used for the interpretation of the findings in conclusion part.

Data Analysis

Part of the data analysis and interpretation of the data, values of arithmetic mean and standard deviation as well as percentage and frequency were computed. Teachers' participation in professional development activities were presented in the tables of percentage and frequency, while the findings on the frequency of their use of the library in the table of arithmetic mean and standard deviation. SPSS software was utilized to analyze data.

Findings

Table 1. Professional development activities teachers attended in the previous two years

Professional development activities	Yes		No		Total
	f	%	f	%	n
Have you attended a seminar/course/workshop at a public or private institution on your own will in the previous two years?	154	30.4	343	67.7	497
Have you attended a conference/panel on your own will in the previous two years?	249	49.1	252	49.7	501
Have you attended a congress/symposium on your own will in the previous two years?	137	27.0	362	71.4	499
Have you written a book or a book chapter in your field or on an education-related topic?	51	10.1	453	89.3	504
Have you published an article in national refereed scientific journals?	12	2.4	493	97.2	505
Have you published an article in international refereed scientific journals?	8	1.6	496	97.8	504
Have you published an article/paper in non-refereed scientific or education journals?	40	7.9	464	91.5	504
Have you written for the local / national press (printed or online)?	59	11.6	444	87.6	503
Have you participated in provincial or national scientific/educational research projects in your field or the field of education?	77	15.2	427	84.2	504
Have you been involved in an educational project funded by the EU (i.e. Comenius, Leonardo da Vinci) as coordinator, researcher or visitor?	83	16.4	420	82.8	503
Have you got a patented scientific / educational invention?	2	0.4	500	98.6	502
Have you got original instructional materials that you have developed for your courses?	177	34.9	327	64.5	504
Have you got a subscription to a scientific journal or one in your field, or education?	151	29.8	352	68.4	503
Have you visited a colleague's class *with the aim of development* in the previous two years?	154	30.4	349	68.8	503
Have you visited another school (in or outside your city) *with the aim of professional development*?	257	50.7	247	48.7	504
Do you participate in forums on the Internet related to education or teachers to share opinions, documents or activities for professional development?	376	74.2	129	25.4	505
Do you search on the Internet to follow the latest developments in your field or in the field of education (new methods, techniques or activities, etc.) and use these in your classes?	421	83.0	82	16.2	503

As can be seen from Table 1, teacher responses to questions about professional development activities showed that approximately one-third (30.4%) willingly attended a seminar/course/workshop in a public or private institution in the previous two years,

approximately half (49.1%) attended a conference/panel, and more than one-fourth (27.0%) attended a symposium/congress.

The table also shows that in their professional lives, one-tenth of teachers (10.1%) wrote a book or book chapter in their field or the field of education, a very small number (2.4% and 1.6%) published articles in national and international journals, 7.9% published in non-refereed scientific or educational journals, a little more than one tenth (11.6%) wrote for the local/national press (printed or on the internet), 15.2% participated in provincial or national scientific/educational research projects in their field or the field of education, and 16.4% were involved in a project funded by the European Union Education Programs (Comenius, Leonardo da Vinci) as a coordinator, researcher or visitor.

While only 0.4% of the teachers had a patented invention in their field or education, a little more than one-third (34.9%) reported to have developed original course materials to use in their courses. Another finding of the study was that, approximately one-third (29.8%) of the teachers subscribed to an educational or scientific journal in their field.

Slightly more than two-thirds of the teachers (34.9%) stated that they visited a colleague's class in the previous two years with the aim of *self development*, while half (50.7%) expressed they visited another school (in or outside their cities) for *professional development*. In addition, three-fourths of the participants (74.2%) responded that they participated in forums on the Internet related to education or teachers to share opinions, documents, and activities for professional development, while more than four-fifths of the participants (83%) reported searching on the Internet to follow the latest developments (new methods, techniques or activities, etc.) in their fields or on education, and using them in their classes.

Table 2. Teacher participation in qualification programs

Teacher participation in qualification programs	Yes f	%	No f	%	Total
	77	15.2	430	84.8	507

Of the teachers who participated in the study, 15.2% (n=77) had attended qualification programs such as masters and doctoral programs. Of these teachers, 5 (1%) either held a doctoral degree or was enrolled in a doctoral program.

Table 3. The frequency of teachers' reading book related their field or education per month

The frequency of teachers' reading book	f	%
Never	81	16.0
1-2	344	67.9
3-5	77	15.2
Total	502	100.0

As shown in Table 3, more than two-thirds (67.9%) of the teachers read 1 or 2 books in their field, related to education or scientific topics monthly, 15.2% read between 3-5 books, and as high as 16% never read.

Table 4. The amount of money teachers spend for professional development per month (books, journal subscriptions or symposium, conference, panel participation, etc.)

The amount of money spent for professional development by teachers	f	%
Never	128	25.2
Less than 50 TL	275	54.2
51-100 TL	77	15.2
101 TL and more	23	4.5
Total	503	100.0

The participants reported that more than half (54.2%) spent 50 TL (Turkish Liras) or less monthly on professional development, 15.2% spent between 51-100 TL and only 4.5% spent 101 TL and more. On the other hand, one-fourth of the teachers (25.2%) did not spend any money on professional development.

Table 5. The frequency of teachers' use the city or university libraries for professional development

The frequency of teachers' use of the library	Never		Rarely		Sometimes		Often		Always		Total		$\overline{X}$	S
	f	%	f	%	f	%	f	%	f	%	f	%	1.78	.96
	253	49.9	140	27.6	83	16.4	14	2.8	10	2.0	500	100		

Arithmetic means show that, overall, teachers do not use libraries much for professional development ($\overline{X}$ =1.78). Half of the participants (49.9%) stated that they never used the library for professional development. Slightly more than one-fourth (27.6%) stated that they used it rarely, 16.4% used it often and only 2.0% used it all the time.

Table 6. Teachers' need for continuing professional development

Need for continuous professional development of teachers	f	%
Yes	395	78.2
No	110	21.8
Total	505	100.0

Approximately four-fifths (78.2%) of the teachers responded that they needed more professional development than they already experienced, slightly more than one-fifth (21.8%) noted that they did not need any professional development. It could thus be stated that most of the teachers needed their professional development and growth.

Table 7. Areas teachers need for professional development

Areas teachers need for professional development	f	%
New instructional approaches/ methods / techniques	272	53.6
Subject field	209	41.2
The use of instructional technologies	197	38.8
Teaching students with special needs	174	34.3
Recognition of the student psychology	166	32.7
Measurement and assessment	143	28.2
General knowledge	98	19.3
Classroom management	92	18.1

As shown in Table 7, the area in which teachers needed professional development the most was "new instructional approaches, methods, techniques" (53.6%). This was followed by

"subject field" (41.2%), "the use of instructional technologies" (38.8%), "teaching students with special needs" (34.3%), "recognition of the student psychology" (32.7%) and "measurement and assessment" (28.2%). Meanwhile, the areas, teachers feel the least need for professional development are "general knowledge" (19.3%) and "classroom management" (18.1%).

Discussion and Results

Professional development for teachers has become one of the most crucial focus of discussion in the field of education in recent years. Teacher development throughout careers, from the preservice stage to retirement, is an indispensible component of personal and professional development, student success and high quality schools and educational system. According to Glatthorn (1995), professional development covers informal experiences such as following professional publications and watching TV documentaries as much as formal participating in seminars, workshops and other professional meetings. In addition to the quality of the teaching profession, teacher participation in informal experiences for professional development also affects student learning and school improvement positively. As noted by Day (1999), professional development of teachers should be an intrinsically motivated process of personal development. Thus, this study explores the professional development experiences of Turkish elementary and secondary teachers, their needs for professional development and the areas in which they need it.

The findings of this study showed that the most voluntarily participated professional development activities by teachers : "using the internet to follow the latest developments in their own field or in topics related to education (new methods, techniques or activities, etc.) and to use these in their classes" (83%), "participating in forums on the Internet related to education or teachers to share opinions, documents or activities for professional development" (74.2%). It may thus be stated that, for professional development, teachers preferred to use the internet which is one of the most common technological tools of our day. There are other studies in the international literature which have studied similar topics. Wermke (2010) compared the professional development activities of German and Swedish teachers and found that both groups of teachers used the internet frequently for their professional development. Contrary to the findings of the current study, Seezink & Poell (2011) concluded that only 7% of the teachers they studied used the internet for professional development. Bolam and McMohan (2004) argued that technological tools such as e-learning, learning through TV, networks (virtual and real) and the internet are among the new professional development methods and approaches for teachers. In this context, as cited by Desimone (2009:182), formal and informal learning communities may play a significant role as strong mechanisms for teacher growth and development.

One of the most common professional development activities that teachers attended was "*visiting another school (in or outside their cities) for professional development*" (50.7%) in the present study. In the study of "Teaching and Learning International Survey (TALIS)" conducted by OECD, almost 28% of teachers from different countries reported to visit other schools (OECD, 2009). Of the Turkish teachers who participated in TALIS study, 21% visited other schools. Furthermore, in a study based on the TALIS Dataset by The Turkish Ministry of National Education about 27% of teachers undertook this activity (Büyüköztürk, Altun & Yıldırım, 2010). Sato, Wei and Darling-Hammond (2008) cited that these opportunities to work with colleagues allowed teachers to share ideas and practices, make everyday curriculum decisions, and participated productively in school reform initiatives. In fact, sharing their knowledge and practice with colleagues indicates the distributed nature of

learning (Vandenberghe, 2002).

According to the findings, almost half of the participant teachers (49.1%) attended a conference/panel in the last 2 years, and 30.4% attended a seminar/course/workshop at a public or private institution. In Boyle, While and Boyle's (2004) study, 77% of the teachers attended conferences and workshops given by local educational authorities while 43% attended the conferences and workshops organized in their schools. Ekşi (2010) also found that "attending courses, workshops or seminars" (X=2.89) was among the professional development activities attended commonly by teachers. Additionally, OECD TALIS Report indicated that 67.8% of Turkish teachers undertook educational conferences and seminars in the previous 18 months. Mean score of participation in educational conferences and seminars by teachers from all countries in the TALIS study was about 49% (OECD, 2009). In Turkey National Report of TALIS 71.8% of teachers participated in these activities (Büyüköztürk, Altun & Yıldırım, 2010). Perhaps the most traditional forms of professional development are the workshops, short seminars and courses typically offered in in-service training schemes. They are often criticized for being one-off activities, being irrelevant to teacher needs, and not having continuity (Villegas-Reimers, 2003:93). However, professional development is not only limited to event-driven activities such as workshops and seminars. The new trends in professional development include less formal, ongoing and job-embedded activities- study groups, action research, collaborative planning, curriculum development, structured observations, peer coaching, mentoring, and so on (Guskey, 2002b). Thus, conference and seminar plans should not only contribute to the advancement of the school or profession, but also help teachers make more meaning of conferences and seminars (Diaz-Maggioli, 2004).

One-third of the teachers in the study (34.9%) reported "having prepared original instructional materials to use in their courses". This finding means that two-thirds of the participants did not design any instructional materials to use in their courses. While Seezink & Poell (2011) found that 53% of their participants developed instructional materials for professional development, Kwakman (2003) concluded that teachers frequently (X=2.59) developed course materials. These findings from the international literature suggest that teachers are not really active in developing instructional materials, which is an important professional development activity.

This study also showed that approximately one-third of the participants (30.4%) "visited a colleague's class for development purposes in the previous two years". A similar finding was obtained in the TALIS. It showed that nearly 35% of all teachers and 32% of Turkish teachers participated in "mentorship and peer observation" activities (OECD, 2009). Also, according to the findings of Turkey National Report of TALIS 34.3% of the participants experienced this activity (Büyüköztürk, Altun & Yıldırım, 2010). On the other hand, Kwakman (2003) and Ekşi (2010) found that teachers rarely undertook "observation of other teachers". Observing a colleague, being observed, and receiving feedback is a key component of active learning. Sharing knowledge and practices with other colleagues shows the extensive nature of learning (Vandenberghe, 2002: 5) and observing and being observed is considered a useful process as well as an important professional development opportunity (Da Costa, 1993; Joyce & Showers, 2002, cited in; Desimone, 2009:182; Garet et al., 2001:925).

Of the teachers in this study, 15.2% participated in qualification programs such as MA or doctoral programs. The TALIS Study found that about 25% of all teachers and 19% of Turkish teachers participated in qualification programs (OECD, 2009). Similarly, findings of Turkey National Report of TALIS indicated that 18.5% of teachers undertook this activity (Büyüköztürk, Altun & Yıldırım, 2010). When compared with the findings of the TALIS, the

teachers who took part in the current study seem to participate less in qualification programs. Teachers responses to open-ended questions revealed that they did not participate in professional development programs due to their work load at school, familial responsibilities, lack of time, economic problems, and lack of administrator support.

The findings of this study indicated that 16% of teachers did not read any books in their field, related to education or scientific topics, 67.9% read 1-2 books monthly, and 15.2% read between 3-5 books. The national and international literature also includes similar findings. For instance, Kwakman (2003) found that teachers rarely follow professional publications related to their field/branch (X=2.11), and Ekşi (2010) found that teachers partially follow them (X=3.15). In addition, the findings of the study of "Teacher Competencies" conducted by Turkish Education Association (TED) (2009) showed that 16.4% of teachers did not read any books related to their professional development. On the other hand, Wermke (2010) reached the conclusion that both German and Swedish teachers frequently read scientific books and articles, and the former read more. Reading professional books and journals on teachers' own subject matter or on educational or scientific topics is important for offering students quality learning opportunities as well as their professional development. As emphasized by Ornstein and Lasley (2000), a teacher needs to follow the latest developments in the field and in instructional approaches for effective teaching. A teacher who cannot continuously improve/renew himself ends up with obsolete knowledge and instructional skills. However, both the findings of this study and others in the international literature, show that teachers do not adequately follow professional publications.

According to the findings of this research more than half of the participant teachers (54.2%) spent 50 TL or less monthly for their professional development, while one-fourth (25.2%) did not spend any money on it. This means that teachers spent little or no money on their own professional development. As shown by the open-ended questions, the main reason for this is economic problems. Most teachers stated that they could not attend conferences, symposiums and seminars in other cities, subscribe to journals, or buy professional and scientific books due to economic problems. This may also be due to personal reasons such as not needing professional development or professional isolation in addition to economic issues. Similar findings were found in the study of TED (2009). While 12% of the teachers who participated in this study did not spend any money to increase the quality of their educational activities, 55.5% of them spent 50 TL, 23.5% 50-100 TL, and 6.8% 100 TL and over. The study also showed that teachers generally did not make much use of the library for their professional development (X=1.78). Half of the participants (49.9%) were found to make no use of libraries for this purpose. This suggests that teachers do not visit libraries to read professional books or journals, or to do research.

The findings indicated that a big majority of teachers (78.2%) noted a need for more professional development than they had already undergone. Even though the teachers in this study did not attend enough activities for professional development, in general they were found to need professional development and improvement. The areas in which teachers needed professional development most were "new instructional approaches, methods, techniques", "subject field", "use of instructional technologies", "teaching students with special needs", "recognition of the student psychology" and "measurement and assessment". On the other hand, they reported the least need for professional development in "general knowledge" and "classroom management".

The findings of the OECD TALIS Study showed that 54.8% of teachers felt the need for professional development (OECD, 2009). The same study also showed that 48% of Turkish

teachers needed professional development. The areas in which teachers had the highest need for professional development in the TALIS Report were: "Teaching students with special needs (32%)", "ICT teaching skills (25%)", "student discipline and behavior problems (21%)". Besides, Turkey National Report of TALIS pointed out 45% of the teachers needed for professional development and the areas with the highest development need were "teaching students with special needs", "ICT teaching skills" and "teaching in a multicultural setting (Büyüköztürk, Altun & Yıldırım, 2010). Ekşi (2010) concluded that ELT teachers seemed to need professional development the most in new theories and practices in ELT, technology use in ELT and integrated skills instruction, while the area in which professional development was needed the least was classroom management.

In sum, teachers need to participate in professional development activities not just for their own professional and personal development, but to also increase student learning, school improvement and the quality of the education system. Day (1999) argues that professional development for teachers should be a process of intrinsically motivated personal development. To achieve this, it is essential that teachers personally feel the need for professional development or gain awareness regarding this issue. As suggested by Villegas-Reimers (2003:141-142), the kinds of professional development programmes or activities designed by and for teachers must respond to their professional needs, their personal and professional interests, the stage of professional development attained at particular time, and the stage of the education system in force in their place of work. Also, school administrations and national and local education authorities should provide administrative and economic support for teachers to actively engage in professional development programs and activities.

References

Bell, B. & Gilbert, J. (1996) *Teacher development: a model from science education.* Washington D.C.: Falmer Press.

Blandford, S. (2000). *Managing professional development in schools.* London: Routledge.

Bolam, R. (2000). Emerging policy trends: some implications for continuing professional development. *Journal of In-Service Education, 26*(2), 267-280.

Bolam, R. & McMahon, A. (2004). Recent developments in CPD. In Day, C. and Sachs, J. (Eds.) *International handbook of the continuing professional development of teachers,* (pp. 23–46). Maidenhead: Open University Press.

Borko, H. (2004). Professional development and teacher learning: mapping the terrain. *Educational Researcher, 33*(8), 3-15.

Boyle, B., While, D. & Boyle, T. (2004). A longitudinal study of teacher change: what makes professional development effective? *The Curriculum Journal, 15*(1), 45-68.

Bubb, S. & Earley, P. (2007). *Leading and managing CPD: developing people, developing schools.* London: Paul Chapman Publishing.

Büyüköztürk, Ş., Akbaba Altun, S., & Yıldırım, K. (2010). *Uluslararası öğretme ve öğrenme araştırması Türkiye ulusal raporu [Turkey's national report of teaching and learning international survey-TALIS).* Ankara: Milli Eğitim Bakanlığı, Dış İlişkiler Genel Müdürlüğü.

Cardno, C. (1996). Professional development: an holistic approach. *New Zealand Journal of Educational Administration, 11,* 25-28.

Craft, A. (1996) *Continuing professional development: a practical guide for teachers and schools.* London : Routledge.

Conlon, T. (2004). A failure of delivery: The United Kingdom's New Opportunities Fund programme of teacher training in information and communications technology. *Journal of In-Service Education, (30)*1, 115-139.

Day, C. (1999) *Developing Teachers: the challenges of lifelong learning*. London: Falmer Press.

Desimone, L.M. (2009). Improving impact studies of teachers' professional development: toward better conceptualizations and measures. *Educational Researcher, 38*(3), 181-199.

Diaz-Maggioli, G. (2004). *A passion for learning: teacher-centered professional development*. Alexandria, VA: Association for Supervision and Curriculum Development.

Duke, D.L., & Stiggins, R.J. (1990). Beyond minimum competence: evaluation for professional development. In J.Millman & L.Darling-Hammond (Eds.), *Handbook for the evaluation of elementary and secondary teachers*. Newbury Park, CA: Sage.

Ekşi, G. (2010). *An assessment of the professional development needs of english language instructors working at a state university*. Unpublished thesis of the master of science. The Graduate School of Social Sciences, Middle East Technical University, Ankara.

Fraser, D. (2005). *Professional learning in effective schools: the seven principles of highly effective professional learning*. Melbourne: Department of Education & Training. Retrieved April 2011 from https://www.eduweb.vic.gov.au/edulibrary/public/teachlearn/teacher/ProfLearningInEffective Schools.pdf

Fullan, M. (2001). *The New meaning of educational change*. New York: Teachers College Press.

Fullan, M., & Hargreaves, A., (Eds.). (1992). *Teacher development and educational change*. London: Falmer Press.

Ganser, T. (2000). *An ambitious vision of professional development for teachers. NASSP Bulletin*, *84*(618), 6-12. Retrieved December 2010 from http://bul.sagepub.com/content/84/618/6.full.pdf

Garet, M.S., Porter, A.C., Desimone, L., Birman, B.F., & Yoon, K.S. (2001). What makes professional development effective? Results from a national sample of teachers. *American Educational Research Journal, 38*(4), 815-945.

General Teaching Council for Wales. (2002). *Continuing professional development: an entitlement for all*. Retrieved May 2010 from http://arrts.gtcni.org.uk/gtcni/bitstream/2428/8029/1/CPD%20-%20An%20Entitlement%20for%20all.pdf

Glatthorn, A. (1995). Teacher development. In L.W. Anderson (Ed.). *International Encyclopedia of Teaching and Teacher Education*. (2nd Edition). London: Pergamon Press.

Guskey, T. R. (2000). *Evaluating professional development*. California: Corwin Press.

Guskey, T.R. (2002a). Professional development and teacher change. *Teachers and Teaching: Theory and Practice, 8(3/4),* 381-391.

Guskey, T.R. (2002b). Does it make a difference? Evaluating professional development. *Educational Leadership, 59*(6), 45-51. Retrieved December 2010 from www.ascd.org/publications/educational-leadership/mar02/vol59/num06/Does-It-Make-a-Difference%C2%A2-Evaluating-Professional-Development.aspx

Greenwald, R., Hedges, L.V., & Laine, R.D. (1996). The effect of school resources on student achievement. *Review of Educational Research, 66*(3), 361-396.

Hargreaves, D. (1998). *Creative professionalism: the role of teachers in the knowledge society*. London: Demos.

Hien, T. (2008). *Towards an effective teachers professional development in DFLSP–CFL-VNU*. Retrieved December 11, 2010 from http://cnx.org/content/m28730/latest/

Hill, H. (2009). Fixing teacher professional development. *Phi Delta Kappan, 90*(7), 470-476. Retrieved June 2011, from http://www.pdkmembers.org/members_online/publications/Archive/pdf/k0903hil.pdf

Hustler, D., McNamara, O., Jarvis, J., Londra, M., & Campbell, A. (2003). *Teachers' perceptions of continuing professional development*. DfES Research Report Number 429. London: Department for Education and Skills. Retrieved May 2011 from https://www.education.gov.uk/publications/eOrderingDownload/RB429.doc

Kanlı, U., & Yağbasan, R. (2002). 2000 yılında Ankara'da fizik öğretmenleri için düzenlenen hizmet içi eğitim yaz kursunun etkinliği [The effectiveness of in-service training courses organized for physics teachers in Ankara in 2000]. *Milli Eğitim Dergisi, 153-154*, 37-47.

Kervin, L., & Rodwell, M. (2007). In-school professional development: supporting teachers with the inclusion of critical literacy in their classrooms. *Paper presented at English Literacy Conference. Retrieved May 2011 from http://www.englishliteracyconference.com.au/index.php?id=1&year=07*

Kırıkkale İl Milli Eğitim Müdürlüğü (Province National Education Directorate of Kırıkkale). (2010). *İlköğretim ve ortaöğretim kurum istatistikleri [Elementary and secondary education statistics]*. Retrieved December 2010 from http://kirikkale.meb.gov.tr/tumhaberler/istatistik/2010-2011/io/ilkogretim_kurumlari.pdf

Klieger, A., & Bar Yossef, N. (2011). Professional development of science teachers as a reflection of large-scale assessment. *International Journal of Science and Mathematics Education, 9*(4), 771-791.

Kwakman, K. (2003). Factors affecting teachers' participation in professional learning activities. *Teaching and teacher education, 19*, 149-170.

McDonald, L. (2009). Teacher change: a dynamic interactive approach. *The International Journal of Learning, 16*(10), 623-636.

MEB Mevzuat Bankası (Regulations Bank of Ministry of National Education). (2006). *Öğretmenlik kariyer basamaklarında yükselme yönetmeliği [The regulation of teacher career ladder system]*. Retrieved November 2010 from http://mevzuat.meb.gov.tr/html/25905_0.html

OECD. (2009). *Creating effective teaching and learning environments: First Results from TALIS*. OECD, Paris.

Orlich, D.C., Harder, R.J., Callahan, R.C., & Gibson, H.W. (1998). *Teaching strategies: a guide to better instruction* (5th ed). Boston: Houghton Mifflin Company.

Ornstein, A.C., & Lasley, T.J. (2000). *Strategies for effective teaching* (3rd ed). New York: McGraw Hill.

Seezink, A., & Poell, R. (2011). The role of schools' perceived human resource policies in teachers' professional development activities: a comparative study of innovations toward competence-based education. *Asia Pacific Education Review, 12*, 149-160.

Struthers, D. (2007). Personal development for teachers. Retrieved December 2010 from http://www.merechats.co.uk/assets/1%20-%20Personal%20Development%20for%20Teachers.pdf

TED (2009). *Öğretmen yeterlikleri [Teacher competencies]*. Ankara: Okan Matbaacılık.

Uçar, R., & İpek, C. (2006). İlköğretim okullarında görev yapan yönetici ve öğretmenlerin MEB hizmet içi eğitim uygulamalarına ilişkin görüşleri [The opinions of teachers and administrators working in primary schools on in-service traning applications of MEB]. *Yüzüncü Yıl Üniversitesi, Eğitim Fakültesi Dergisi, 3*, 34-53.

Vandenberghe, R. (2002). Teachers' professional development as the core of school improvement. *International Journal of Educational Research, 37*(8), 653-659.

Villegas-Reimers, E. (2003). *Teacher professional development: an international review of the literature*. Paris: UNESCO, International Institute for Educational Planning.

Wermke, W. (2010). Continuing professional development in context: teachers' continuing professional development culture in Germany and Sweden. *Professional Development in Education, 37*(5), 665-683.

Yalın, H.İ. (2001). Hizmet içi eğitim programlarının değerlendirilmesi [Investigation of in-service training programs]. *Milli Eğitim Dergisi, 150*, 58-68.

Yates, S. M. (2007). Teachers' perceptions of their professional learning activities. *International Education Journal, 8*(2), 213-221.

Zhu, H. (2010). Curriculum reform and professional development: a case study on Chinese teacher educators. *Professional Development in Education, 36*(1), 373-391.