



Büyükgöze, H., & Kavak, Y. (2015). An investigation of support measures for beginning teachers in EU countries and Turkey. *International Online Journal of Education and Teaching (IOJET)*, 2(4). 223-237. <http://iojet.org/index.php/IOJET/article/view/103/116>

AN INVESTIGATION OF SUPPORT MEASURES FOR BEGINNING TEACHERS IN EU COUNTRIES AND TURKEY*

Hilal BÜYÜKGÖZE

Hacettepe University

hilal.buyukgoze@gmail.com

Yüksel KAVAK

Hacettepe University

kavak.yuksel@gmail.com

Biodata

Hilal Büyükgoze is a research assistant at Hacettepe University, Faculty of Education, Department of Educational Sciences. She earned her master's degree in Educational Administration in 2014. She studies organizational behavior, teacher training programs, and educational planning.

Yüksel Kavak is a professor doctor at Hacettepe University, Faculty of Education, Department of Educational Sciences. His studies mainly focus on teacher training, educational planning, economics of education, and higher education.

Copyright by Informascope. Material published and so copyrighted may not be published elsewhere without the written permission of IOJET.

*This paper was presented at 4th WCLTA held in University of Barcelona in 27-29 October, 2013.

AN INVESTIGATION OF SUPPORT MEASURES FOR BEGINNING TEACHERS IN EU COUNTRIES AND TURKEY

Hilal Büyükgöze

hilal.buyukgoze@gmail.com

Yüksel Kavak

kavak.yuksel@gmail.com

Abstract

This paper investigates the support measures for beginning teachers, and elaborates on mentoring practices in European primary and secondary education institutions, and finally discusses induction practices in Turkey comparatively. The main findings of the research as follows: the common qualification for entry to teaching profession across Europe is a bachelor's degree which generally last between four and five years, however initial teacher education is usually not sufficient for new teachers as they may experience and encounter problems about teaching, assessing and managing the students. Therefore, in almost more than the half of the European countries a structured induction program is carried out or other support measures are provided for new teachers. Few countries do not organize these programs at national level but at the local level or in schools. The structured induction programs are considered as a compulsory phase ending with a kind of overall assessment in most countries, whereas in some of them it is optional. These induction programs last from several months to 2 years, but the widespread length is about one year. The types of support measures for beginning teachers have been found to be differed across Europe, and mentoring is the most common form among these measures. The implications for educational organizations and teaching is discussed further.

Keywords: teachers, support measures, mentoring, EU countries, teaching profession

1. Introduction

Recently, the need to deliver high quality teaching has become much more significant for most countries by a reason of the international tests carried out biennially and/or triennially such as PISA (Programme for International Student Assessment), TIMSS (Trends in International Mathematics and Science Study), PIRLS (Progress in International Reading Literacy Study), and of the international surveys which are conducted by OECD, IEA (International Association for the Evaluation of Educational Achievement), World Bank, UNESCO, and UNDP (Eurydice, 2013).

However, countries that are not satisfied with the results of the aforementioned international student achievement tests have begun to examine and figure out the probable underlying reasons for the low or unexpected test scores or performance, as student success has been documented to associate with economic growth and social progress (Barro, 1999; Campante & Glaeser, 2009; Glaeser, Ponzetto, & Shleifer, 2007; Hanushek & Woessmann, 2007; Pritchett & Viarengo, 2009). After detailed investigations and research, as one of the basic reasons of the current unfavorable view of the educational programs and systems in European Union member states and almost all over the world has been attributed to low teacher quality at global scale essentially (Buddin & Zamarro, 2008; Carey, 2004; Florida State University, 2010; Futernick, 2010; Hanushek, 2007, 2009; Hanushek & Rivkin, 2010; Hanushek, 2011, 2012; Hanushek, Kain, & Rivkin, 2004; Haycock, & Crawford, 2008;

Hightower, Delgado, Lloyd, Wittenstein, Sellers, & Swanson, 2011; Jacob & Ludwig, 2009; Kennedy, 1992; Leigh & Mead, 2005; Long, 2011; Murnane & Phillips, 1991; Nye, Konstantopoulos, & Hedges, 2004; Peske & Haycock, 2006; Simon & Johnson, 2013).

A large body of research have pointed to the fact that highly qualified teachers have direct or indirect positive impacts on student achievement and learning (Aaronson, Barrow, & Sander, 2007; Buddin & Zamarro, 2008, p.1; Chetty, Friedman, & Rockoff, 2011; Ehrenberg & Brewer, 1995; Ferguson & Ladd, 1996; Kane & Staiger, 2008; Rivkin, Hanushek, & Kain, 2005; Rockoff, 2004; Sanders & Rivers, 1996). Indeed, the principal aim of the USA's highly well-known project entitled "*No Child Left Behind*" was also to support every classroom with high quality teachers. Similarly, it has been widely reported that less effective teachers may lead children not to reach their optimal potential during their education owing to the lack of sufficient efficient teaching and instruction (Taylor, Roehrig, Hensler, Connor, & Schatschneider, 2010).

In the same sense, research have documented that teachers with more years of experience and/or possession of better training expose to less discipline problems as they have higher levels of self-efficacy and confidence in themselves (Clotfelter, Ladd, & Vigdor, 2006; Feng, 2005). Likewise, studies have demonstrated that there is a positive and significant interaction between teachers' undergraduate education institution's reputation and effectiveness of them (Clotfelter, Ladd, & Vigdor, 2007). However, some research findings have shown no or little association of undergraduate education institution attended with student achievement (Clotfelter et al., 2007; Kane, Rockoff, & Staiger, 2006).

Correspondingly, Kane, Rockoff and Staiger (2006) investigated the possible relationship of teachers' undergraduate GPA (Grade Point Average) and their teaching performance, but no statistically significant interaction has been reported between these two variables. Some research have focused on the probable relationship between teachers' possession of a graduate degree (master's degree or doctoral degree) and student achievement, and a positive association has been reported between possessing a master's degree and students' mathematical performance (Betts, Zau, & Rice, 2003; Dee, 2004; Nye, Konstantopoulos, & Hedges, 2004).

Angrist and Lavy (2001) have examined the impacts of professional development of teachers on their productivity and effectiveness in Israeli context, and documented little relationship between those variables, however Jacob and Lefrigen (2004) reported no significant relationship in relation to the impact of in service training on teacher effectiveness in the United States context. Picking up on that, Aaronson et al. (2007), and Betts et al. (2003) have found no significant interaction between teacher experience and student performance, however Clotfelter, Ladd and Vigdor (2007)'s findings have shown a high positive correlation between years of experience a teacher have and student achievement. Yet, in some other studies, teachers' more years of experience and/or possession of certifications and diplomas have reported to have little impact on teachers' productivity (Goldhaber, 2002; Kane, Rockoff, & Staiger, 2006; Rivkin, Hanushek, & Kain, 2005).

Further, early childhood education teachers have been found to have significant long term impacts on children (Chetty, Friedman, & Rockoff, 2011). Accordingly, the merit-based programs implemented in low and middle income countries have been reported to generate positive impacts on student performance (Duflo, Hanna, & Ryan, 2008; Glewwe, Ilias, & Kremer, 2010; Rau & Contreras, 2009).

This broadening empirical knowledge on teacher quality, productivity, and effectiveness has attracted professionals' attention, and gained importance leading them to emphasize on

the potential of analyzing diverse teacher training practices to better understand and then assess relevant dimensions of teaching profession (Eurydice, 2013, p.11; Rotherham, 2011). Likewise, this paper also intends to portray the contemporary practices in some aspects of European teacher education and its supplementary measures to succeed in training high quality teachers concerning the higher standards of today's systems.

1.1. Aim of the study

The current paper originally provides a framework for analyzing and then assessing teacher training programs and policies practiced in education systems of the European Union member states and in Turkey in order to figure out the conceptual view of their recent practices. The paper has the main objective of providing a lens through which educational researchers, stake-holders, educational administrators, teachers, and the other relevant partners may have the chance of diagnosing the problematic and contradictory issues in teacher training and follow-up practices in Turkish system in comparison with the EU members' case.

Similarly, the essential aim of the present paper is providing a conceptual framework of the initial teacher education for primary and secondary education level, induction programs for new entrant teachers, the status and the length of these programs, types of support measures for novice teachers (if any), and mentoring implementations in the EU and Turkey comparatively.

2. Method

In line with the aim and the intended framework of the research, this study has adopted a qualitative approach holistically (Balci, 2005). Accordingly, document analysis was utilized in the current paper as a qualitative research method (Bowen, 2009). Documents can also function as data sources in qualitative research (Bowen, 2009, p. 27). In this form of qualitative research, documents are illustrated by the analyst to express and make sense of a particular assessment topic.

Document analysis is generally known as a method which commonly used by historians, anthropologists, and linguists. However, sociologists and psychologists have already made use of it by contributing to the improvement of critical theories in these domains. Therefore, documents are significant data sources which are to be utilized efficiently in qualitative studies. In such studies, researchers can obtain the necessary information without feeling any needs of making observations or interviews (Yıldırım & Şimşek, 2003). In this respect, document analysis may provide favor to the researcher in terms of time, energy and money saving.

The three prominent types of documents as Merriam (1998, p. 112) stated are: (1) public records, (2) personal documents, and (3) physical evidence. *Public records* generally cover official and ongoing records of an institute's activities (e.g., mission statements, annual reports, policy manuals, strategic plan). *Personal documents* include "first-person accounts that describe an individual's actions, experiences, and beliefs" (e.g., emails, social media posts, blogs, incident reports, reflections). *Physical evidence* consist of "physical objects found within the study setting" (e.g., flyers, agendas, posters, Paisley & Reeves, 2001, p. 493).

In accordance with these, "public records" of various organizations, concerning the main aim of the study, have been investigated in scope of this study. The documents included were annual reports, thematic reports, international organizations' websites (e.g., OECD, World Bank, UNESCO, YÖK, MoNE, and Eurydice), policy statements of European governments, and the websites of the Ministry of Education. The records and reports examined in the

current study obtained from international organizations' official websites were chosen intendedly, as "creating interconnected societies, intercultural dialogue and collective ability to understand and assess changes through education, scientific research and sharing of knowledge (UNESCO)" occupies a broad room in their agenda. Accordingly, these organizations conduct worldwide studies to gather knowledge and statistical information on both teaching and learning to compare and improve the current educational implementations and systems all over the world. The results obtained after the detailed examination of those reports and scientific publications are presented under the main titles of "initial teacher education", "induction programs", "other types of support measures" and "mentoring", sequentially.

3. Initial Teacher Education

The European Union as a political body has 28 member countries currently, and Turkey is a candidate country for the Union. In this section, initial teacher education practices carried out both at primary and secondary education levels will be presented for those 28 countries, and Turkey.

3.1. Pre-Primary and Primary Education Level

The most common and minimum qualification sought in entry to the teaching profession across Europe, especially at pre-primary level, is a bachelor's degree which generally lasts between three to five years. However, while pre-primary teachers of France, Italy and Portugal are required to have master's degree at ISCED 0 level (pre-primary education), teachers working at pre-primary level in Austria, Malta, Slovakia, Czech Republic and Germany are not required to possess an undergraduate degree, a post-secondary education diploma is sufficient for these countries in relation to pre-primary teaching. At primary level, in countries like Czech Republic, Germany, France, Italy, Portugal, Slovenia, Estonia, Slovakia, Finland, and Sweden, teachers usually have master's level degrees.

At early childhood education and primary levels across Europe, the concurrent model of initial teacher education program is mostly implemented. In concurrent models, prospective teachers receive the general and the professional component of their program from the very beginning of their education. In Turkey, the only available model of teacher education for primary level is the concurrent model.

3.2. Secondary Education Level

At lower and upper secondary levels, teachers usually have a bachelor's or a master's level degree. In many of the EU countries, upper secondary teachers generally possess a master's degree. Though Ireland, Cyprus, Latvia, Lithuania, Malta, and the United Kingdom do not need teachers to have master's degree, and teachers spend more time on professional training in their initial education than the other countries of the union (Eurydice, 2012; 2013, p. 38).

The newly designed and revised teacher education programs of many member countries combine professional training and the other aspects of the program to acquire a closely linked and integrated degree offering the professional component of the program after completion of the general component (Eurydice, 2013, p. 25) which is called a "consecutive model". While the concurrent model is the only available model implemented at secondary education level

in Belgium, Germany, Slovakia, Denmark and Turkey, the consecutive model is available for Estonia, Cyprus, Hungary, France, Spain, Portugal, Italy and Luxembourg. Whereas, some countries adopt both models in teacher training.

However, initial teacher education is usually not sufficient for new teachers as they may experience and encounter problems about teaching, assessing and managing the students. Concerning these, induction programs organized and offered for new entrants will be investigated in the following section.

4. Induction Programs

Induction program is defined as ‘a structured phase of support given to beginning teachers after finishing the formal program of initial teacher education at the start of their first contract as a teacher in school’ (Eurydice, 2013, p. 40). Across the union, particular induction programs are held at local or school levels and/or national level. This section elaborates on these programs and their structures.

4.1. National/ Local or School Level

In almost more than the half of the European Union countries, a fixed induction program is implemented or diverse support measures are supported for new entrants of teaching profession. These programs are generally carried out at different levels or with various organizational designs and plans.

Germany, France, Estonia, Slovenia, Croatia, Ireland, Italy, Cyprus, Luxembourg, Malta, Austria, Portugal, Romania, Slovakia, Sweden and the United Kingdom have national induction programs for new teachers at ISCED (International Standard Classification of Education) 0, 1, 2, and 3 levels. However, Belgium, Bulgaria, Czech Republic, Denmark, Greece, Spain, Latvia, Lithuania, Hungary, the Netherlands, Poland, and Finland do not implement any induction programs at national level for beginning teachers (Eurydice, 2013, p. 42). Few countries do not organize these programs at national level but at the local level or in schools (e.g. Belgium).

4.2. Status and Length of the Induction Programs

The structured induction programs are considered as a compulsory phase ending with a kind of overall assessment in most countries. Ireland, France, Italy, Cyprus, Luxembourg, Malta, Austria, Portugal, Romania, Slovakia, Sweden and the United Kingdom apply compulsory induction phase for their new teachers in the education system (Europedia official website). Accordingly, in a number of states in order to obtain a permanent contract, beginning teachers have to complete an induction program as a probationary period which lasts minimum 2 months and maximum 24 months. For instance, that probation period lasts at least 2 months in Spain, 8 months in Poland, 12 months in Portugal, 12 months in Austria, and 24 months in Denmark. Whereas these kind of programs are in optional status for beginning teachers in Greece, Slovenia and Scotland (the United Kingdom).

The length of the programs applied across the EU differs. Slovenia offers a program that lasts between 6 to 10 months, whereas Cyprus applies an 8-month-program for new entrants of teaching profession. Most of the member countries of the union such as Denmark, Greece, France, Italy, Austria, Portugal, Slovakia, Sweden and the United Kingdom, offer one-year-

program as an induction period. However, Lithuania and Malta implement the longest program which lasts 2 years (European Commission, 2010).

Accordingly, though the completion of a probation period does not guarantee a permanent position, it has a fixed period of implementation in several countries. While Denmark applies a 3-month-of-probation; Malta, Italy and Sweden apply a 12-month-of-probation; Greece, Cyprus, and Luxembourg apply a 24-month-of-probation, and lastly Hungary implements a 36 months of probation period for new entrants of teaching profession as fixed programs (Eurydice, 2012; 2013, p. 40).

4.3. Induction in Turkey

In Turkey, a national structured induction program that consists of basic training, preparatory training, and probationary period, is conducted concerning the regulation of MoNE on training of candidate civil servants (1995). The main objective of the “basic training” period of the induction program has been documented as “giving information to the candidate civil servants on the basic characteristics of the civil servants” (1995, item no 10). The basic training section of the program consists of “the knowledge of the Republic of Turkey’s Constitution, the structure of the state, civil servants law, corresponding rules and filing methods, preservation of the property of the state and austerity measures, public relations, privacy and the significance of privacy, revolution history, national security knowledge and Turkish grammar rules” (MEB, 1995, item no 11).

The essential aim of the preparatory training has been stated as “to be able to provide necessary information and skills which are needed to convey the duties of their assigned position, and support them orienting their position” (MEB, 1995, item no 13). The preparatory training section of the induction program consists of “the introduction of the structure of the ministry, the duties of the ministry, the relevant legislations in relation to the ministry, and the relations of the ministry with other institutions; issues about the duties of the candidate civil servant and the other issues to be favored by the Central Administrative Board on Education” (MEB, 1995, item no 14).

The major aim of the probationary period has been publicized as “to get candidate civil servants experienced by practicing the theoretical knowledge that has been taught during the preparatory training phase, the other information about their position and duties, and the skills gained during the aforementioned phase” (MEB, 1995, item no 24). The probationary period of the induction program consists of “the correspondence and filing rules, the maintenance of the tools and the vehicles that have been given under the responsibility of the candidate civil servant, the knowledge of the relevant legislation concerning his/her domain and applying to them, internal relations, environmental relations, superior-subordinate relationships, human relations, privacy degrees, the preservation of the secret or private documents, observations, research and investigations related to his/her duties, the security and protection measures, transparency in practice, effective usage of time and sources, and the other relevant issues” (MEB, 1995, item no 25).

This probationary period is carried out in company with a mentor teacher under the responsibility of the superintendent of the candidate civil servant’s unit. In case of the failure of the candidate, the particular phase which the candidate has failed is repeated for once, and the candidates are not allowed to pass an upper phase without being successful in a certain phase. After all these phases completed, the candidacy process of a novice teacher cannot last

less than a year or more than 2 years. In consequence of the assessment of the novice teacher's probationary phase's result, a successful novice teacher is recommended to be promoted as a civil servant to the relevant unit in the Provincial Directorate of National Education.

However, a change has been made in 2014 in the Basic Law of National Education numbered 6528. It has been stated that the novice teachers will be able to have the right to enter both the written and the verbal examinations if they work at least one year actively, and then be successful in the performance evaluation. The ones who have not been qualified to enter to the written and verbal exams, and the ones who have been unsuccessful in those exams will be discharged from civil servant status permanently.

The related literature on the current induction program has pointed to the fact that the support measures provided for novice teachers are quiet limited, and the personal and organizational socialization of them is one of the aspects neglected in the present programs (Garip, 2009; Korkmaz, 1999; Okumuş & Biber, 2011; Özkan, 2004; Öztürk, 2008). Similarly, Özönay (2004) has reported that the available induction programs do not meet the necessities of the novice teachers; the usage of proper instruction methods and techniques, and the usage of suitable tools and equipment are not enough, novice teachers cannot attend the classes of their mentor teachers regularly, and the educational inspectors cannot provide sufficient guidance for those new entrants.

Accordingly, Ayvaz-Düzyol (2012) and Ekiz (2006) have stated that the needs of the novice teachers and the curriculum's objectives are contradictory, the methods applied and the equipment available are rather limited, and the reliability and the validity of the examinations are not sufficient. Likewise, Çimen (2010) has found that the educational inspectors working at primary level are not qualified enough to implement the induction programs for the beginning teachers, and the school heads have lack of information on the contribution of the induction program to the teacher qualifications.

In accordance with these findings, Yıldırım (2010), and Balkar and Şahin (2015) have documented that the education programs of the novice teachers are insufficient in relation to its aims, content and the methods and the techniques implemented within the program, and the assessment and the evaluation of the program have been found to be subjective. Further, the current induction program applied to the new entrants of the teaching profession has been claimed not to have the required flexibility to meet the potential or spontaneous needs or demands of the novice teachers.

In order to provide substantial contribution to the preparation period of the novice teachers, the Ministry of National Education (MoNE) in Turkey first studied on, then published a supplementary book for the new entrant teachers in 2010 which was entitled as 'Hosgeldin Öğretmenim [Welcome, my teacher]' to help them get prepared for the formal evaluation after having finished the program (MEB, 2010). However, it thus appears that the current induction program needs a comprehensive and system-wide revision based on empirical research findings and the opinions of the practitioners of the program.

5. Types of Support Measures for Novice Teachers

Some other support measures are provided for fresh teaching professionals with the intent of "(1) improving teaching performance, (2) increasing the retention of promising beginning

teachers, (3) promoting the personal and professional well-being of beginning teachers, (4) satisfying mandated requirements for induction and/or licensure, and (5) transmitting the culture of the system to new entrants” (Huling-Austin, 1990, cited in Stansbury & Zimmerman, 2000, p. 3). However, the types of support measures provided in the first year of new teachers vary across Europe. Eurydice (2012 & 2013, p. 41) classifies these measures as below:

- Regular meetings for the discussion of progress or problems,
- Assistance with the planning and assessment of lessons,
- Mentoring,
- Participation in other teachers’ class activities and/or classroom observation,
- Special compulsory training,
- Visits to other schools/resource centers,
- Decided at school level,
- Induction program in place.

Based on this classification, the most widespread form of support measures appear to be (1) mentoring, (2) assistance in lesson planning to the novice teacher, and (3) regular meetings, sequentially. Mentoring seems to be preferred especially at ISCED 2 and 3 levels compared to ISCED 1 level all around the Europe.

Further, Stansbury and Zimmerman (2000, p. 4-5) specify types of support as follows:

- Personal and emotional support,
- Task or problem focused support,
- Critical reflection on teaching practice.

They also go into detail and itemize specific support strategies entitled as “low-intensity support strategies” and “high-intensity support strategies”. Low-intensity supports are commonly low-cost, less frequent, and short-term strategies which include “orienting new teachers, matching beginning and veteran teachers, adjusting working conditions, and promoting collegial collaboration”. Whereas, high-intensity supports are relatively costlier, more frequent, and long-term strategies such as “selecting and training effective support providers, providing release time, mini-courses addressing common challenges, and examining the evidence of their teaching practice” (Stansbury & Zimmerman, 2000, p. 6-10). It is clear that countries can create and shape their programs equipped with valuable and efficient strategies, based on their beginning teachers’ needs, and the challenges they may encounter in the first year of their professional career.

6. Mentoring

Due to the fact that beginning teachers are new to the profession, they may encounter problems and often need extra support in various aspects of their teaching experience. Although most of the EU countries offer national or local level induction programs, many of them provide individualized support measures to help novice teachers succeed in dealing with difficulties that they may face in the early years of their professional career.

Mentoring seems to be the most common support form among these measures. It is generally defined as ‘an experienced teacher with a significant period of service is appointed

to take responsibility for newly qualified teachers' in Eurydice (2013). Greece, Spain, Latvia, Hungary, Austria, Poland, and Slovenia are among the countries that support mentoring for new entrants both at primary and secondary levels (Europedia; Eurydice, 2013, p. 41). However, Denmark only provides this measure at secondary level, while Belgium offers it only at primary level of education.

Moreover, the French and Flemish communities in Belgium, Finland, the Netherlands, and Lithuania lead the new entrants to several activities according to the needs of the new teacher. The activities that the beginning teacher is to participate in is decided at school level. Picking up to that, a number of member states (e.g. Estonia, Ireland, France, Cyprus, Italy, Romania, and Hungary) prefer to train their novice teachers on-the-job, namely instructing and practicing at the school of the candidate teacher.

7. Discussion

Overall, it is clear that most of the EU countries concentrate on improving the quality of their teachers and prospective teachers through some legal regulations and particular strategies in line with their governmental policies. Correspondingly, they have begun to focus on specific aspects of their teacher training process such as initial education of teachers, induction programs and its efficiency, and other types of support measures provided to new entrants (Rotherham, 2011).

Turkey employs a concurrent model in teacher education for years. A majority of European countries carry out consecutive model in initial teacher training. In consecutive model, as mentioned above, the professional component of the program is delivered after completion of the general component (Musset, 2010; Yusuf, 2010). Indeed, during the restructuring attempts in higher education, the consecutive model has become valid since 1997 reforms in Secondary Mathematics and Science Education Departments only (Kavak & Atanur Baskan, 2009). The graduates, faculty staff, and the views' of the relevant parties of the consecutive model should be assessed and then analyzed in terms of its advantages and disadvantages (Creemers, 2005).

Turkey also provides a compulsory induction program to the new entrants at national level for one year (MEB 1995, item no 16). However, specific or extra support measures are not provided within the current system yet. Therefore, some strategies carried out abroad successfully can be adapted to Turkish induction phase (Burgaz & Büyükgöze, 2015). For example, in New Zealand, teacher centers serving at regional level gather new teachers to workshops once or twice so as to meet with new ones and orient themselves, voice their views on problematic issues, and receive valuable advice from experienced experts. In the same sense, as in Japan, teachers may be requested to prepare and perform "the best possible lesson" to their class while being assessed by their colleagues (Padilla, Riley, & Bryan, 1999). In this way, beginning teachers may receive valuable critics on their teaching from their experienced colleagues, and learn to control their excitement. Therefore, it can be recommended that the types and quantity of the activities presented to novice teachers should be increased and developed in relation to the needs of the teachers and the schools in Turkey at all levels of education.

8. Conclusion

The empirical research findings on education shows that education may enable an increase in the quality of education in general, and in student achievement in a more narrow sense, and teacher quality, productivity and the strategies, methods and techniques applied may make a difference in maintaining the sustainability of the high performance. A broad body of research point out that the inequalities in teacher quality may generate significant and permanent differences on student performance.

It appears that the primary factor and the focal point in designing an educational environment to be effective on students' academic development and achievement, is teachers and teacher quality (Kavak et al., 2009, p. 367). Therefore, to obtain data-based-on-empirical-research has been gaining importance in order to determine the teacher qualification from which the differences among students regarding their academic performance originates, and to decide on the strategies, methods, and techniques to enable teachers gain these particular qualifications. However, the improvement of the quality of the current teachers in the system and the prospective teachers in the education faculties cannot be a short-term policy and come up with intended results easily (Lewin, 2004). A focused coordination and collaboration among relevant parties are needed to succeed in the process. What is more, support measures to be taken so as to improve teacher quality should be accompanied with the measures to improve school conditions, curriculums, technological equipment, physical infrastructure, and the quantity of the support staff serving in schools. Such an extensive project would also cultivate the process of evidence based educational policy making.

9. References

- Aaronson, D., Barrow, L., & Sander, W. (2007). Teachers and student achievement in Chicago public high schools. *Journal of Labor Economics*, 24(1), 95-135.
- Angrist, J. D., & Lavy, V. (2001). Does teacher training affect pupil learning? Evidence from matched pairings in Jerusalem public schools. *Journal of Labor Economics*, 19(2), 343-369.
- Ayvaz Düzyol, M. (2012). The effectiveness of induction program for candidate teachers [Aday öğretmenlere uygulanan aday öğretmen yetiştirme programının etkililiğinin değerlendirilmesi] (Unpublished master's thesis). Middle East Technical University, Ankara.
- Balcı, A. (2005). *Sosyal Bilimlerde Araştırma [Research in Social Sciences]*. Ankara: Pegem Yayıncılık.
- Balkar, B., & Şahin, S. (2015). Yeni bir öğretmen yetiştirme yaklaşımı olarak göreve başlatma programı [Induction program as a new teacher training approach]. *Mersin Üniversitesi Eğitim Fakültesi Dergisi*, 11(1).
- Barro, R. J. (1999). Determinants of democracy. *The Journal of Political Economy*, 107(56), 158-183.
- Betts, J. R., Zau, A. C., & Rice, L. A. (2003). *Determinants of student achievement: New evidence from San Diego*. San Diego: Public Policy Institute of California.
- Bowen, G. A. (2009). Document analysis as a qualitative research method. *Qualitative Research Journal*, 9(2), 27-40.
- Buddin, R., & Zamarro, G. (2008). *Teacher quality, teacher licensure tests, and student achievement*. Rand Education Working Paper WR-555-IES.
- Burgaz, B., & Büyükgöze, B. (2015). *A model suggestion based on prospective teachers' opinions on teacher training systems*. International Conference on New Horizons in Education. 10-12 June, 2015. Hotel FrontAir Congress: Barcelona, Spain.
- Campante, F., & Glaeser, E. L. (2009). *Yet another tale of two cities: Buenos Aires and Chicago*. NBER (National Bureau of Economic Research) Working Paper 15104.
- Carey, K. (2004). The real value of teachers: Using new information about teacher effectiveness to close the achievement gap. *Thinking K-16*, 8(1), 3-32.
- Chetty, R., Friedman, J. N., & Rockoff, J. E. (2011). *The long-term impacts of teachers: Teacher value-added and student outcomes in adulthood*. NBER Working Paper 17699.
- Clotfelter, C. T., Ladd, H. F., & Vigdor, J. L. (2006). Teacher-student matching and the assessment of teacher effectiveness. *Journal of Human Resources*, 41(4), 778- 820.
- Clotfelter, C. T., Ladd, H. F., & Vigdor, J. L. (2007). *How and why do teacher credentials matter for student achievement?* CALDER Working Paper 02.
- Creeemers, B. P. M. (2005). *Combining different ways of learning and teaching in a dynamic model of educational effectiveness*. Lecture for the Lee Hysan Lecture Series, 30 September 2005, Hong Kong.
- Dee, T. S. (2004). Teachers, race and student achievement in a randomized experiment. *Review of Economics and Statistics*, 86(1), 195-210.

- Duflo, E., Hanna, R., & Ryan, S. P. (2008). *Incentives work: Getting teachers to come to school*. Cambridge, MA.: Abdul Latif Jameel Poverty Action Lab.
- Ehrenberg, R., & Brewer, D. (1995). Did teachers' verbal ability and race matter in the 1960's? Coleman revisited. *Economics of Education Review*, 14(1), 1-21.
- Ekiz, D. (2006). Mentoring primary school student teachers in Turkey: Seeing it from the perspectives of student teachers and mentors. *International Education Journal*, 7(7), 924-934.
- European Commission/EACEA/Eurydice, (2013). *Key Data on Teachers and School Leaders in Europe. 2013 Edition. Eurydice Report*. Luxembourg: Publications Office of the European Union.
- European Commission/EACEA/Eurydice, (2012). *Key Data on Education in Europe. 2012 Edition. Eurydice Report*. Brussels: Eurydice. doi: 10.2797/77414.
- European Commission. (2010). *Developing coherent and system-wide induction programmes for beginning teachers: a handbook for policy makers*. Brussels: European Commission Directorate-General for Education and Culture.
- European Union Official Website: Retrieved from October 29, 2012 from http://europa.eu/index_en.htm
- Europedia- European Encyclopedia on National Education Systems Website: Retrieved from October 29, 2012 from <https://webgate.ec.europa.eu/fpfis/mwikis/eurydice/index.php?title=Home>
- Eurostat- Key to European Statistics Website: Retrieved in October 28, 2012 from <http://epp.eurostat.ec.europa.eu/portal/page/portal/eurostat/home/>
- Feng, L. (2005). Hire today, gone tomorrow: The determinants of attrition among public school teachers (Unpublished doctoral dissertation). Tallahassee: Florida State University.
- Ferguson, R., & Ladd, H. (1996). How and why money matters: An analysis of Alabama schools, In H.Ladd (Ed.), *Holding schools accountable: Performance-based reform in education*, 265-298. Washington, DC: Brookings Institute.
- Florida State University. (2010, April 26). Poor quality teachers may prevent children from reaching reading potential, study finds. *Science Daily*. Retrieved in July 19, 2015 from <http://www.sciencedaily.com/releases/2010/04/100422153804.htm>
- Futernick, K. (2010). Incompetent teachers or dysfunctional systems? *Kappan Magazine*, 92(2), 59-64.
- Garip, N. E. (2009). Okul yöneticilerinin göreve yeni başlayan öğretmenlerin örgütsel sosyalleşme sürecinde sosyalleştirme stratejilerini kullanma düzeylerinin incelenmesi: Tekirdağ ili örneği [*Studying of level of using socialization strategies of school managers and teachers, who beginning their jobs recently, on the process of organizational socialization: Sample of Tekirdağ*] (Unpublished master's thesis). Trakya University, Edirne.
- Glaeser, E. L., Ponzetto, G. A. M., & Shleifer, A. (2007). Does democracy need education? *Journal of Economic Growth*, 12, 77-99.
- Glewwe, P., Ilias, N., & Kremer, M. (2010). Teacher incentives. *American Economic Journal: Applied Economics*, 2(3), 205-227.

- Goldhaber, D. (2002). The mystery of good teaching: Surveying the evidence on student achievement and teachers' characteristics. *Education Next*, 2(1), 50-55.
- Hanushek, E. A. (2007). The Economic Benefits of Improved Teacher Quality. *Governance and Performance of Education Systems*, in Nils C. Soquel and Pierre Jaccard (ed.). Netherlands: Springer, 107-135.
- Hanushek, E. A. (2009). Teacher deselection. In *Creating a New Teaching Profession*, Dan Goldhaber and Jane Hannaway (eds.), p. 163-180. Washington, D.C.: Urban Institute Press.
- Hanushek, E. A. (2011). The Economic Value of Higher Teacher Quality. *Economics of Education Review*, 30(3), 466-479.
- Hanushek, E. A. (2012). Education Quality and Economic Growth. *The 4 Percent Solution: Unleashing the Economic Growth America Needs*, in Brendan Miniter (ed.). New York: Crown Business, 227-229.
- Hanushek, E. A., Kain, J. F., & Rivkin, S. G. (2004). Why public schools lose teachers. *Journal of Human Resources*, 39(2), 326-354.
- Hanushek, E. A., & Rivkin, S. G. (2010). Generalizations about Using Value-Added Measures of Teacher Quality. *American Economic Review*, 100(2), 267-271.
- Hanushek, E. A., & Woessmann, R. (2007). *Education quality and economic growth*. Washington, D.C.: The World Bank.
- Haycock, K., & Crawford, C. (2008). Closing the teacher quality gap. *Poverty and Learning*, 65(7), 14-19.
- Hightower, A. M., Delgado, R. C., Lloyd, S. C., Wittenstein, R., Sellers, K., & Swanson, C. B. (2011). Improving student learning by supporting quality teaching: Key issues, effective strategies. *Editorial Projects in Education*. Bethesda, MD: EPE Research Center.
- Jacob, B. A., & Lefrger, L. (2004). The impact of teacher training on student achievement: Quasi-experimental evidence from school reform efforts in Chicago. *Journal of Human Resources*, 39(1), 50-79.
- Jacob, B. A., & Ludwig, J. (2009). Improving educational outcomes for poor children. *Focus*, 26(2), 56-61.
- Kane, T. J., Rockoff, J. E., & Staiger, D. O. (2006). *What does certification tell us about teacher effectiveness? Evidence from New York City*. NBER Working Paper 12155.
- Kane, T. J., & Staiger, D. O. (2008). Estimating teacher impacts on student achievement: An experimental evaluation. NBER Working Paper No. 14607.
- Kavak, Y., & Atanur Baskan, G. (2009). Restructuring studies of teacher education in recent years in Turkey. *Procedia Social and Behavioral Sciences*, 1, 364-367.
- Kennedy, M. (1992). The problem of improving teacher quality while balancing supply and demand. In D. Guildford and E. Boe (eds). *Teacher Supply, Demand, and Quality*. (p. 65-108). Washington, D.C.: National Academy of Sciences.
- Korkmaz, S. (1999). Göreve yeni başlayan öğretmenlerin mesleğe uyum sorunları [Orientation problems of novice teachers to the profession] (Unpublished master's thesis). Kocaeli Üniversitesi, Kocaeli.
- Leigh, A., & Mead, S. (2005). Lifting teacher performance. *Policy Report*, 4, 1-18.

- Lewin, K. M. (2004). *The pre-service training of teachers- Does it meet its objectives and how can it be improved?* Background paper prepared for the EFA Global Monitoring Report 2005, The Quality Imperative. Retrieved in 2 September 2015 from <http://webcache.googleusercontent.com/search?q=cache:3iY-gG5n5KAJ:unesdoc.unesco.org/images/0014/001466/146658e.pdf+&cd=1&hl=tr&ct=clnk&gl=tr>
- Long, C. (2011, May 24). How do we increase teacher quality in low income schools? [Online newspaper article]. Retrieved in October 29, 2012 from <http://neatoday.org/2011/05/24/how-do-we-increase-teacher-quality-at-low-income-schools/>
- MEB-Ministry of Education, (2010). *Hosgeldin Öğretmenim- Aday Öğretmen Kitabı [Welcome my teacher- Candidate teacher book]*. ISBN: 978-975-11-3491-2.
- Merriam, S. B. (1998). *Qualitative research and case study applications in education*. San Francisco: Jossey-Bass Inc.
- Murnane, R. J., & Phillips, B. R. (1991). What do effective teachers of inner-city children have in common? *Social Science Research*, 10, 83-100.
- Musset, P. (2010). *Initial teacher education and continuing training policies in a comparative perspective: Current practices in OECD countries and a literature review on potential effects*. OECD Education Working Papers No.48 doi: 10.1787/19939019
- Nye, B., Konstantopoulos, S., & Hedges, L. V. (2004). How large are teacher effects? *Educational Evaluation and Policy Analysis*, 26(3), 237-257.
- Okumuş, S., & Biber, B. (2011). A review of novice teachers' relationships among their colleagues, peers and administrators studies: Aims, methodologies, general knowledge claims and suggestions. *Western Anatolia Journal of Educational Sciences, special issue*, 9-22.
- Özkan, Y. (2004). Göreve yeni başlayan öğretmenlerin örgütsel sosyalleşme sürecinde okul yöneticilerinin görevlerine ilişkin algıları: Ordu ili örneği [*The perceptions of novice teachers in relation to school heads' responsibilities in the process of organizational socialization: Sample of Ordu*] (Unpublished master's thesis). Gazi University, Ankara.
- Öztürk, M. (2008). Induction into teaching: Adaptation challenges of novice teachers (Unpublished master's thesis). Middle East Technical University, Ankara.
- Paisley, P. O., & Reeves, P. M. (2001). Qualitative research in counselling. In D. C. Locke, J. E. Myers, and E. L. Herr (Ed.), *The handbook of counselling* (p. 481-498). California: Sage Publications.
- Peske, H. G., & Haycock, K. (2006). Teaching inequality: How poor and minority students are shortchanged on teacher quality. *The Education Trust*, 6, 1-20.
- Pritchett, L., & Viarengo, M. (2009). *Producing superstars for the economic mundial: The Mexican predicament with quality of education*. PEPG (Program on Education Policy and Governance) Working Paper 09-01.
- Rau, T., & Contreras, D. (2009). *Tournaments, gift exchanges, and the effect of monetary incentives for teachers: The case of Chile*. Department of Economics Working Paper 305.
- Republic of Turkey, Ministry for European Union Affairs, Official Website: Retrieved in October 21, 2012 from <http://www.abgs.gov.tr/?p=1&l=2>

- Rivkin, S. G., Hanushek, E. A., & Kain, J. F. (2005). Teachers, schools and academic achievement. *Econometrica*, 73, 417-458.
- Rockoff, J. E. (2004). The impact of individual teachers on student achievement: Evidence from panel data. *American Economic Review*, 94, 247-252.
- Rotherham, A. J. (2011, October 20). Blame game: Let's talk honestly about bad teachers [Online newspaper article]. Retrieved in October 29, 2012 from <http://ideas.time.com/2011/10/20/blame-game-lets-talk-honestly-about-bad-teachers/>
- Sanders, W. L., & Rivers, J. C. (1996). *Cumulative and residual effects of teachers on future student academic achievement*. University of Tennessee Value-Added Research and Assessment Center Research Progress Report.
- Simon, N. S., & Johnson, S. M. (2013). *Teacher turnover in high-poverty schools: What we know and can do*. The Ford Foundation Working Paper.
- Taylor, J., Roehrig, A. D., Hensler, B. S., Connor, C. M., & Schatschneider, C. (2010). Teacher quality moderates the genetic effects on early reading. *Science*, 328(5977). doi: 10.1126/science.1186149
- Yıldırım, A., & Şimşek, H. (2003). *Sosyal Bilimlerde Nitel Araştırma Yöntemleri [Qualitative Research Methods in Social Sciences]*. Ankara: Seçkin Yayıncılık.
- Yusuf, H. T. (2010). An evaluation of concurrent and consecutive university-based teacher education curricula in Kwara, Oyo and Osun States, Nigeria (Unpublished doctoral dissertation). University of Ilorin, Ilorin.