

# A Comparison of the Employment of Public Sector Teachers in EU and TURKEY\*

Hilal BÜYÜKGÖZE<sup>a</sup>

Hacettepe Üniversitesi

## Abstract

This paper presents and elaborates on a comparative picture of entry to the profession, employment status and conditions of service, replacement measures, and salaries, complementary payments and retirement of teachers working in public sector of education at ISCED 1, 2 and 3 levels in European Union countries and in Turkey. The study mainly figures out that teachers working in European state schools are employed generally in 3 different ways: (1) contractual status, (2) civil servant status, and (3) career civil servant status. In addition to these, 'substitute' or 'replacement' teachers are employed beginning from 1 day to several months or a full school year in place of absent teachers. Further, the requirements for such temporary employments vary. Concerning the conditions of service for teachers of the EU countries, they range from agreeing on a co-mutual and collective bargaining process based on relevant legislation to being recruited based on totally centralized arrangements. As for the retirement entitlement to a full pension, the common legal upper age limit in most of the EU countries is 65 years. As an overall conclusion, it may be stated that in the large majority of EU countries, teachers begin their professional career with short-term contracts, then based on their experience and qualifications gained during their professional teaching career they are employed for longer terms and eventually this status is mainly replaced that of civil servant status.

## Anahtar Kelimeler:

EU Member Countries; Employment Status; Teachers; Public Sector; Turkey

European Union is a political body which aims to set and maintain not only economic development and cooperation but also political and social solidarity among its member countries and the European Region (Ministry for EU Affairs- Turkey). In this respect, one of its main objectives is to support all of the Union citizens to have the highest level of life and quality standards, and to contribute to the improvement of employment and social security optimization (EU, 2012). As to education, it is the key factor to enable the Union to achieve all of its aforementioned continent wide goals. The basic approach adopted in the Union concerning education is to converge on the national policies of the member countries, and to arrange and propel their own educational systems providing that they do not conflict with the common objectives and indicators determined (Gültekin & Anagün, 2006). Within this context,

teachers are considered as the most significant and strategic component of the European-wide educational systems and policies to be implemented (Hightower, Delgado, Lloyd, Wittenstein, Sellers, & Swanson, 2011; King Rice, 2003; Rand Education, 2012).

Accordingly, the educational policies carried out crosswise European countries have been noteworthy for raising the quality of education, particularly through employing highly qualified teachers over the past 10 to 15 years (Adams, 2014; Barnett, 2004; Bracey & Molnar, 2003; Cooper & Alvarado, 2006; Darling-Hammond & Post, 2000; Olson, 2003). However, the mediocrity of recent standardized tests' results (e.g. PISA, TIMSS, PIRLS) both in national and international levels has also led to discussion about the need for new responsibilities, roles and employment status for teachers working both in state and in private schools

<sup>a</sup> Hilal BÜYÜKGÖZE, Arş. Gör., Hacettepe Üniversitesi, Eğitim Yönetimi, hilal.buyukgoze@gmail.com

\* This paper was presented at International Symposium on New Issues on Teacher Education- ISNITE held by Hacettepe University in 9-11 May, 2013.

(Baird, Isaacs, Johnson, Stobart, Yu, Sprague, & Daugherty, 2011; Best, Knight, Lietz, Lockwood, Nugroho, & Tobin, 2013; Bieber & Martens, 2011; Breakpear, 2012; Froese-Germain, 2010).

Parallel to these trends and discussions in education, academic and scientific studies on different aspects and impacts of teacher quality in educational processes and organizations have increased in number recently (Lingard & Stellar, 2013). For instance, several researches have shown that increased teacher quality promotes student achievement and economic growth in many and various ways (Alvarez, 2008; Ballard & Bates, 2008; Clotfelter, Ladd, & Vigdor, 2007; Darling-Hammond, Chung Wei, & Andree, 2010; Hanushek, 2009, 2011 & 2012; Hanushek & Rivkin, 2006, 2010 & 2012; Hanushek & Woessman, 2012a & 2012b; Harris & Sass, 2007; Kunter, Klusmann, Baumert, Richter, Voss, & Hachfeld, 2013; National Council on Teacher Education, 2012; Wiseman & Al-bakr, 2013; Yetkiner Özel & Özel, 2013). In addition, working hours of teachers have been found to have a mediating role on student achievement (Eurydice, 2012; Eurydice, 2013b; Jacob & Rockoff, 2011). Further, teacher characteristics, qualifications, roles and responsibilities in the school settings are also reported to have a positive influence on improving and supporting students' overall learning and achievement (AAPT, 2009; ASSET, 2010; CETT, 2011; Loeb, Miller, & Strunk, 2009; McCutchen, Abbott, & Green, 2002; Ranjan & Rahman, 2010; Sharratt & Sharratt, 2007; Tschamen-Moran, Hoy, & Hoy, 1998; Urbanski, 1988; Yoon, Duncan, Lee, Scarloss, & Shapley, 2007). Regarding the evidences from both quantitative and qualitative studies on the relationship between these constructs, the EU has begun to shape its educational policies based on these and similar findings and on new educational trends.

## **TURKEY and the EU**

Turkey, as a candidate country since 1997, also follows the recent developments and changes in education systems both in its European neighbor countries and in the rest of the world. On the road to the EU membership, it can easily be seen that Turkey has to understand, act, and speed up according to the latest convenient and constructive educational tendencies

and reforms adopted in the member countries to keep in with the Union as close as possible. Turkey, whose candidacy application was made 27 years ago, is planning to fully benefit from the dissimilar form of the EU owing to its social, cultural, economic, and institutional construction. In line with these shared objectives, the Republic of Turkey has made and undertaken several rules, regulations, strategies, legislation enacted by the EU commission to be able to get accepted in the enlargement process of the Union by the launch of accession negotiations in 2005.

The EU *acquis* has a negotiation chapter heading entitled 'education and culture (chapter 26)' among its 35 chapters. The status of this chapter for Turkey is stated as 'Turkey has presented its negotiation position document to the commission' on the Ministry of EU Affairs' website currently ([www.abgs.gov.tr](http://www.abgs.gov.tr)). Within education and culture chapter, the EU plans to improve and support cooperation in line with the common objectives and policies aiming at 'developing the European dimension in education, encouraging of students and teachers, promoting cooperation between educational establishments, encouraging the participation of young people in democratic life in Europe, encouraging the development of distance education, developing the European dimension in sport by promoting fairness and openness in competitions, facilitating adaptation to industrial changes through vocational training, improving initial and vocational training, stimulating cooperation on training between educational or training firms, developing exchanges of information and experience, and promoting improvement of the knowledge and dissemination of the culture and history of the European peoples' (Treaty on the Functioning of the EU, Article 165-167).

As regards to chapter 26, Turkey has undertaken several considerable progressions towards common policy objectives and reforms to achieve educational quality, equality in education, and productivity in vocational training and retraining. Article 42, right and duty of education, in the Turkish Constitution already defines and regulates, and guarantees the right of education for all citizens of both sexes (Constitution of the Republic of Turkey, 1980). In keeping with the standards and obligations of the Union to strengthen

and speed up the integration, Turkey has established Turkish National Agency in 2002. Since then, Turkey has been participating in the Union Programs such as 'Lifelong Learning' and 'Youth in Action', which has been replaced by 'Erasmus for all/ Erasmus +' program recently. As to higher education, Turkey has been involved in Bologna Process which aims at creating a common European higher education area, in 2001. The Bologna Process promotes educational quality, mobility, employability, and coherence among European higher education systems. Regarding culture, Turkey has participated in the Culture Program which is conducted by the Ministry of Culture and Tourism, in 2006. The Union aims at 'contributing to the flowering of the cultures of the member states, respecting national and regional diversity, and bringing the common cultural heritage to the fore' (Article, 167). Within this framework, Istanbul selected for 2010 European Capital of Culture, and 2012 European Capital of Sport. The project 'Digital Inventory of the Cultural Heritage and Culture Economy in Istanbul' also carried out and finished in 2011. Concerning the integration in culture area, a number of historical buildings have been restored, and several activities have been organized as well.

Being in the integration process of the Union, this paper presents and elaborates on a comparative picture of entry to the profession, employment status, conditions of service, replacement measures, salaries and retirement of teachers working in public sector of education on ISCED (International Standard Classification of Education) 1, 2, and 3 levels in European Union countries and in Turkey accordingly. Similarly, the present paper aims (1) to investigate the policies and implementations about employment of teachers in EU making use of the international and national reports, research books, policy reports, academic journal articles, official websites of the EU and its member countries on education, educational databases, doctoral dissertations and master degree theses, (2) to present the findings in a descriptive way (Fraenkel & Wallen, 2006), and (3) to contribute to the improvement of policies in Turkey on these issues to get more efficient and economical results for the current educational system.

## **Conceptual Framework**

### **Entry to the Teaching Profession**

In the majority of the European countries, entry to the teaching profession requires candidates to apply teacher vacant posts advertised in local, regional or central newspapers as well as in the specialized newspapers for teachers (e.g. 'Education and Culture' in Latvia), professional journals, or announced by labor offices and relevant professional/ teacher recruitment websites and/or by the institutions themselves. This type of teacher recruitment is so-called 'open recruitment' in which recruitment is decentralized. Holland, Bulgaria, Estonia, Denmark, Poland, Hungary, Ireland, Latvia, Sweden, Slovenia, Finland, Czech Republic, Germany and England operate a kind of open recruitment in public sector only.

In some member states, teacher candidates have to pass a national competitive examination and a merit-based selection. France, Malta, Turkey, Spain, Portugal, Romania and Greece make use of this method in teacher recruitment for public posts. In Greece, candidates are assessed based on their results in the Supreme Council for Civil Personnel Selection Examination and bachelor's degree GPA (Grade Point Average), acquisition of a postgraduate degree, acquisition of a Ph.D degree, and prior teaching experience. In Spain, to be appointed to a public teaching post, teacher candidates must pass a nationwide competitive examination, then the merit based selection phase, and a traineeship period. The examination intends to evaluate specific knowledge of the teaching speciality, pedagogic aptitude, and mastery of the relevant techniques for teaching. In merit-based selection phase, candidates are assessed taking their previous academic education (acquisition of bachelor's and/ or a postgraduate degree, a relevant certificate in teaching etc.) and previous teaching service into account. Finally, in the traineeship period, candidates are monitored for their aptitude in teaching from minimum 3 months to maximum 10 months long. Portugal also recruits teachers by conducting a nationwide public recruitment contest announced by government gazette or on the Directorate General's website.

In recruiting teachers for public sector, a number of member countries make use of 'candidate lists' in which applicants' names and qualifications are submitted to a local-level or top-level education authority. In Cyprus, this is the only method used for public recruitment of teachers. And, Italy selects half of the teachers by taking advantage of the candidate lists, and the other half by administering a national competitive examination.

### **Employment Status and Conditions of Service for Teachers**

Teachers working in state schools of member states are employed generally in 3 different ways: (1) contractual status, (2) civil servant status, and (3) career civil servant status (Eurydice, 2013a:50). In the vast majority of the Union members, teachers work on the basis of an employment contract. Bulgaria, Estonia, Poland, Portugal, Ireland, Latvia, Sweden, Romania, England, Slovakia, Lithuania, Italy, and the Czech Republic utilize labor contracts in employing teachers in state schools.

The practices for such contractual status of teachers may vary among the Union. In Poland, for example, only 'trainee teachers' and 'contract teachers' are employed on the basis of an employment contract. The teachers in Latvia are contracted on a permanent basis whereas in Ireland teachers have to be at least 3 years experienced in public teaching to be able to be recruited on a permanent contract. In England, Bulgaria, Italy, Romania, and Lithuania there are two types of employment contracts: 'fixed-term contracts (individual labor contract in Romania)' which are temporary and last maximum a school year, and 'open-ended' or 'permanent contracts (collective labor contract in Romania)' that are only terminated in case of serious illness, death, retirement, or any other vital reason. This kind of employment is subject to the Labor Code and work rules or employment law of every relevant country.

The latter common way of employment among the Union is career civil servant status in which teachers have an indefinite period of time contractual relationship with the central or regional education authority as the top level educational authority. Teachers in Holland, Germany, Spain, France, Greece,

Cyprus, Malta, and Poland have the status of career civil servant. In Poland, only 'appointed teachers' and 'charter teachers' are employed on the basis of career civil servant appointment. Further, in Cyprus teachers become career civil servants after completion of two years of traineeship.

The least preferred employment type for teachers in the EU is civil servant status in which teachers are given a full public employee status with a full security of tenure. In Turkey, Belgium, Austria, Slovenia, and Hungary, teachers in public schools are civil servants according to the Civil Servants Act of every relevant state.

It is hereby obvious that in many EU countries, teachers working in primary and secondary education institutions are recruited on contractual basis than civil servant status. Different to the majority of the Union, teachers in Turkey are recruited as civil servants. Concerning the conditions of service for teachers of the EU countries, they range from agreeing on a co-mutual and collective bargaining process based on relevant legislation to being recruited based on totally centralized arrangements and local or regional practices.

### **Replacement Measures**

There are some regulations for substitution of teachers in the event of absenteeism. These regulations may vary according to the duration of the absenteeism. In case of short term absence of a qualified teacher lasting from one school hour to a whole academic week, usually school heads are responsible of ensuring the replacement of absent teachers. In most cases, they rely on preferably teachers of the same subject or use existing teaching staff within the schools by paying extra working hours. In Estonia, Ireland, Latvia, Sweden, Slovenia, Malta, Finland, Germany, and England, distribution of the lessons of the absent teacher among other teachers at the same school is the common way of solution for such teacher absenteeism. In Portugal, for instance, substitution classes are given by teachers with fewer workloads whereas Slovakian teachers are obliged to replace absent teacher on head teacher's command and take on the teaching workload over his existing educational activity. Another way of

covering short term absences is merging classes of the same grade as in the Czech Republic. However, Finland prefers to release students if the absent hour(s) are the last hours of the school day.

In the event of long term absences that last a week to a school year, so-called 'substitute', 'supply' or 'replacement' teachers are employed in place of absent teachers in Bulgaria, Denmark, Ireland, Romania, Finland, Greece, Spain, Luxembourg, Holland, Malta, the Czech Republic, Italy, France, Cyprus, and England. Further, the requirements and conditions for such temporary employment vary among member states. Only fully and appropriately qualified teachers (possessing specific teaching qualifications for certain subjects and grades) are employed in a number of European countries as replacement teachers. Denmark, Finland, Spain, the Czech Republic, Cyprus, and England require substitute teachers to have the same qualifications that of the regular teachers in public schools. Denmark employs non-certified teachers only for sudden and daily absences. In Malta, on the other hand, schools recruit supply teachers occasionally from unemployed graduates or university students in teaching programs for replacement purposes. In Spain, teacher absences are substituted by temporary civil servants who have been successful in the national competitive examination and merit based assessment phase but have not been appointed as a career civil servant teacher whereas Romania prefers replacing absenteeism by teachers of the respective educational institutions.

The ways of sources in reaching substitute teachers also vary. Finland, Greece, Italy, Cyprus, and England make use of the 'registered teachers' lists drawn up by local or regional or national educational authority units. In Finland, municipalities keep these lists whereas in Greece registered teachers' list is kept by the Central Services of the Ministry of Education, Lifelong Learning and Religious Affairs. Cyprus recruits replacement teachers waiting to be appointed, who are on the lists prepared by the Education Service Commission. Similarly, Luxembourg has a nationwide reservoir of substitute teachers to be able to draw out when necessary. Unlike the rest of the Union, Holland has a national fund made up of public schools' monetary

contributions, entitled 'Staff Replacement Fund' to operate especially in primary schools in case of teacher absenteeism. Supply teachers may also found within private employment agencies which assist schools with these kinds of substitution demands. School head's or head teacher's own contacts are also resorted to in the process of replacement measures. Lastly, vacant positions for substitute teachers are either advertised in regional or national newspapers, professional journals as in Finland or announced on teacher recruitment websites.

### Salaries, Complementary Payments and Retirement of Teachers

The amount of annual total minimum salaries (starting salaries) of teachers working in public sector in European Union varies on the basis of the member states' national economies. Following there is a graphic figuring out the annual total minimum salaries of teachers in EU:

Graph 1. Annual total minimum salaries of teachers in the EU



Graph 1 shows that the lowest amount of annual salary of full time qualified teachers working in public schools at ISCED 1, 2, and 3 levels belongs to Bulgarian teachers with a 2,761 Euros minimum annual income. Luxembourg recruits an average full time qualified teacher with a 75,997 Euros salary for a school year which makes it the highest annual salary offering EU member state.

As for additional payments, in almost all member states teachers are either paid salary allowances or receive some complementary payments. A wide range of teachers in the EU receive complementary payments for their teaching performance or student satisfaction/success, working extra hours, acquisition of formally accepted teaching qualifications, participating further continuing professional development activities,

acquisition of graduate degrees, helping and teaching students with special education needs, teaching in geographically disadvantaged counties (Eurydice, 2013a: 87). In Turkey, teachers are also paid some allowances such as extra working hours, spouse and child allowance, seniority indemnity, payments on acquisition of graduate degrees (Master's Degree and Ph.D), and foreign language knowledge payment providing certified by the Foreign Language Examination held biannually (abbreviated as YDS in Turkish).

Concerning the retirement entitlement to a full pension, the most common legal upper age limit in majority of the EU states is 65 years. 15 countries out of 27 prefer 65 years as the official upper age for teachers working in public education sector. 7 countries of the Union have different age limits for female and male teachers. Teachers in the Czech Republic retire the earliest according to the rest of the Union. Female teachers have to get retired by 57 years, and the males have to get retired by 63 years. Accordingly, in Turkey, similar to the common practice in the Union, the official upper age limit for retirement with full pension is 65 years as well.

## Results and Discussion

The current study aimed at presenting and amplifying a comparative picture of the entry to the profession, employment status and conditions of service, replacement measures, and salaries, additional allowances, complementary payments and retirement of teachers working in public sector of education at primary education, secondary education and high school levels in the European Union countries and in Turkey. First, this paper reveals that most EU countries select teacher candidates by open recruitment method in the process of entry to the teaching profession. Different than the common practice in the EU, in Turkey teachers are ranked and employed according to their Civil Servant Selection Examination (abbreviated as KPSS in Turkey) scores. KPSS is a nationwide multiple choice examination, which intends to assess the pedagogical knowledge, speciality/ field knowledge and general knowledge of culture of applicant teachers, held by the Student Selection and Placement Center (abbreviated as OSYM in Turkish) annually. Turkish

government annually announces the number of vacant positions and the lowest KPSS score limit for each of the teaching speciality/ field for candidate teachers. Applicants may make up to 20 school choices to get appointed. Then, applicant teachers are appointed on the basis of their KPSS scores and school choices.

Concerning the employment status of the teachers among the Union, it can be concluded that in many EU countries, teachers working in primary and secondary education are recruited on contractual basis than civil servant status. Further, it may also be stated that in the large majority of EU countries, teachers begin their professional career with short-term contracts, then based on their experience and qualifications gained in professional teaching career, they are employed for longer terms and eventually this status is mainly replaced that of career civil servant status. Different to the majority of the Union, teachers in Turkey are recruited as full time civil servants. After appointed to a public school based on the KPSS score, a starting teacher has a one year of probation period. By the successful completion of that period, the entrant teacher's civil servant status is certified by the Ministry of National Education (MEB in Turkey). Turkish teachers, in addition, are subject to the Civil Servant Law numbered 657. Teachers in public sector are given a public employee status which may be only terminated in case of permanent absenteeism, death, committing a serious discipline action, or retirement. Teachers in Turkey have full security of tenure from the beginning of their career to the retirement in public education. Compared to the colleagues in the EU, Turkish teachers are considered to have better fundamental rights and freedoms in terms of social security and professional tenure.

Regarding the replacement measures, regulations vary according to the duration of the absenteeism. For short term substitution, school heads mostly rely on preferably teachers of the same subject or use existing teaching staff within the schools. Merging classes of the same grade is another way of dealing with temporary teacher absenteeism. In the event of long term absences, schools recruit 'substitute' or 'supply' teachers who are either certified or non-certified according to the relevant countries. In Turkey, substitute teachers are mostly

university graduates with a teaching diploma who have not been able to get appointed as a full time civil servant. It may, then, be stated that Turkey covers teacher absences with certified teachers.

As to the salaries of teachers among the members, they were relatively higher in 2013 compared to 2012 across many countries of the Union. However, worldwide economic crisis which have been influential over the recent years, may have been affected the overall purchasing power of teachers in contrast to the increase in salaries (Eurydice, 2013d). As shown in Graph 1, the least annual salary of full time teachers working in primary and secondary education belongs to Bulgaria and Romania (€2,761) whereas the best paid teachers among the member states is in Luxembourg and Denmark (€75,997) (Eurydice, 2012: 30-54). And Turkey pays nearly €11,225 annually for teachers working in public sector (Eurydice, 2012: 90). This annual amount is respectively low according to some of the member states. It may be recommended that Turkish teachers' salaries should be revised and swift financial regulations should be made to improve the life quality standards. About the retirement entitlement of teachers, the common official upper age limit in most of the EU countries is 65 years (Eurydice, 2013a: 92). It is the same in Turkey. For full pension entitlement, the number of years of service ranges from 20 years to 41 years across the Union.

To sum up, Turkey, on the road to the European Union membership, is supposed to design and update its educational system on the basis of shared objectives, education policies and planned reforms of the Union to speed up and strengthen the accession negotiations. Turkey, so far, has already undertaken some of the regulations, strategies, and legislation executed by the Union's relevant commissions. Having a national characteristic, Turkish education system is considered to achieve policy harmonization and international values adopted among the member states without loss of essential values of the current system (Sağlam, Özüdoğru, & Çıray, 2011).

In line with these, this study presents and outlines the common practices in the EU, concerning the employment and conditions of service of teachers, replacement measures in the event of teacher

absenteeism, salaries, supplementary payments available for teachers, and retirement age of teachers in public schools, to educational researchers, educational leaders, stakeholders, policy makers and decision makers. This paper may also contribute to select and recruit teachers to be worked at ISCED I, II, and III levels in a more appropriate, less costly, and more efficient way, and to shape educational policies about these issues. We can overall conclude that, as a candidate country, Turkey can benefit from the experiences and knowledge of the EU to develop and carry out action plans focusing on initial teacher education and teacher employment decisively which seems to matter or observed much more significant in the present system, similarly the Union may utilize the relevant unique features of Turkish national education, as well.

## References

- Adams, R. (2014, April 10). Rise in number of unqualified teachers at state-funded schools in England. *The Guardian*. Retrieved from <http://www.theguardian.com/education/2014/apr/10/rise-number-unqualified-teachers-state-funded-schools-england>
- Alvarez, R. (2008). The relationship of teacher quality and student achievement in elementary schools from the New York City (Doctoral dissertation). Retrieved from ERIC.
- Avrupa Birliği Bakanlığı. (2013). Bir bakışta AB. Retrieved from <http://www.abgs.gov.tr/index.php?p=3>
- Baird J., Isaacs, T., Johnson, S., Stobart, G., Yu, G., Sprague, T., & Daugherty, R. (2011). Policy effects of PISA. Retrieved from Oxford University Centre for Educational Assessment website: <http://oucea.education.ox.ac.uk/wordpress/wp-content/uploads/2011/10/Policy-Effects-of-PISA-OUCEA.pdf>
- Ballard, K., & Bates, A. (2008). Making a connection between student achievement, teacher accountability, and quality classroom instruction. *The Qualitative Report*, 13(4), 560-580.
- Best M., Knight, P., Lietz, P., Lockwood, C., Nugroho, D., & Tobin, M. (2013). The impact of national and international assessment programmes on education policy, particularly policies regarding resource allocation and teaching and learning practices in developing countries. Retrieved from the Australian Agency for International Development (AusAID) website: <http://eppi.ioe.ac.uk/cms/LinkClick.aspx?fileticket=KKB8wH9tvm>
- Bieber, T., & Martens, K. (2011). The OECD PISA study as a soft power in education? Lessons from Switzerland and the US. *European Journal of Education*, 46(1), 101-116.
- Bracey, G. W., & Molnar, A. (2003). Recruiting, preparing and retaining high quality teachers: An empirical synthesis (Research Report No: EPSL-0302-102-EPRU). Retrieved from <http://nepc.colorado.edu/files/EPSL-0302-102-EPRU.pdf>

- Breakspear, S. (2012). The policy impact of PISA: An exploration of the normative effects of international benchmarking in school system performance, OECD Education Working Papers (No. 71), OECD Publishing, [http://www.oecd-ilibrary.org/education/the-policy-impact-of-pisa\\_5k9fdqfrr28-en](http://www.oecd-ilibrary.org/education/the-policy-impact-of-pisa_5k9fdqfrr28-en)
- Commission on Effective Teachers and Teaching-CETT. (2011). Transforming teaching: Connecting professional responsibility with student learning. Retrieved from <http://www.nea.org/assets/docs/Transformingteaching2012.pdf>
- Constitution of the Republic of Turkey. part II. Chapt III. art 42.
- Cooper, J. M., & Alvarado, A. (2006). Preparation, recruitment, and retention of teachers (Education Policy Series No: 5) Retrieved from International Institute for Educational Planning website: <http://www.unesco.org/iiep/PDF/Edpol5.pdf>
- Darling-Hammond, L., Chung Wei, R., & Andree, A. (2010, August). How high-achieving countries develop great teachers. (Research Brief No: 9). Stanford, CA.
- Darling-Hammond, L., & Post, L. (2000). Inequality in teaching and schooling: Supporting high quality teaching and leadership in low income schools. In R. D. Kahlenberg (Ed.), *A notion at risk: Preserving public education as an engine for social mobility* (pp. 127-167). The Twentieth Century Fund Inc.
- EACEA/Eurydice. (2012). Key Data on Education in Europe, 2012. Eurydice Report. Luxembourg: Publications Office of the EU.
- Eurydice. (2012). Teachers' and School Heads' Salaries and Allowances in Europe, 2011/2012. Eurydice Report. Luxembourg: Publications of the EU.
- European Union. (2012). Consolidated version of the treaty of the EU and the treaty on the functioning of the EU. Official Journal of the European Union, 55, 120. doi: 10.3000/1977091X.C\_2012.326.eng.
- European Commission- Eurydice. (2013a). Key Data on Teachers and School Leaders in Europe. 2013 Edition. Eurydice Report. Luxembourg: Publications Office of the European Union.
- European Commission- Eurydice. (2013b). Organization of school time in Europe, Primary and General Secondary Education 2012/2013 school year. Eurydice- Facts and Figures. Luxembourg: Publications Office of the European Union.
- Eurydice. (2013c). Recommended Annual Taught Time in Full-time Compulsory Education in Europe 2012/2013. Eurydice-Facts and Figures. Luxembourg: Publications Office of the European Union.
- EACEA/Eurydice. (2013d). Funding of Education in Europe 2000-2012: The Impact of the Economic Crisis. Eurydice Report. Luxembourg: Publications Office of the European Union.
- Fraenkel, J. R., & Wallen, N. E. (2006). How to design and evaluate research in education (6th ed.). New York: McGraw-Hill Higher Education Publishing.
- Froese-Germain, B. (2010). The OECD, PISA and the impacts on educational policy. Retrieved from Virtual Research Centre (VRC) website: <http://files.eric.ed.gov/fulltext/ED532562.pdf>
- Gültekin, M., & Anagün, Ş. S. (2006). Avrupa Birliği'nin eğitimde kaliteyi belirleyici alan ve göstergeleri açısından Türk eğitim sisteminin durumu. *Sosyal Bilimler Dergisi*, 2, 145-170.
- Hanushek, E. A. (2009). The economic value of education and cognitive skills. In Gary Sykes, Barbara Schneider and David N. Plank (Eds.), *Handbook of Education Policy Research*, (pp.39-56). New York: Routledge.
- Hanushek, E. A. (2011). The economic value of higher teacher quality. *Economics of Education*, 30(3), 466-479.
- Hanushek, E. A. (2012). Education quality and economic growth. In Brendan Miniter (Ed.), *The 4 percent solution: Unleashing the economic growth America needs* (pp. 227-239). New York: Crown Business.
- Hanushek, E. A., & Rivkin, S. G. (2006). Teacher quality. In E. A. Hanushek and F. Welch (Eds.), *Handbook of Economics of Education* (pp.1051-1078). doi: 10.1016/B978-0-444-53444-6.00025-0.
- 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., & Rivkin, S. G. (2012). The distribution of teacher quality and implications for policy. *Annual Review of Economics*, 4, 131-157.
- Hanushek, E. A., & Woessmann, L. (2012). The role of international assessments of cognitive skills in the analysis of growth and development. In Matthias von Davier, Eugenio Gonzalez, Irwin Kirsch, and Kentaro Yamamoto (Eds.), *The role of international large-scale assessments: Perspectives from technology, economy, and educational research* (pp. 47-65). Dordrecht, Netherlands: Springer.
- Hanushek, E. A., & Woessmann, L. (2012). The economic benefit of educational reform in the European Union. *CESinfo Economic Studies*, 58(1), 73-109.
- Harris, D. N., & Sass, T. R. (2007). Teacher training, teacher quality, and student achievement (Working Paper No: 3). Retrieved from National Center for Analysis of Longitudinal Data in Education Research: CALDER Publishing.
- 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. Retrieved from Editorial Projects in Education website: [http://www.edweek.org/media/eperc\\_qualityteaching\\_12.11.pdf](http://www.edweek.org/media/eperc_qualityteaching_12.11.pdf)
- Jacob, B. A., & Rockoff, J. E. (2011). Organizing schools to improve student achievement: Start times, grade configurations, and teacher assignments. The Hamilton Project, Washington DC: Brookings.
- King Rice, J. (2003). Teacher quality: Understanding the teacher attributes. Retrieved from <http://www.epi.org/publication/books>
- Kunter, M., Klusmann, U., Baumert, J., Richter, D., Voss, T., & Hachfeld, A. (2013). Professional competence of teachers: Effects on instructional quality and student development. *Journal of Educational Psychology*, 105(3), 805-820. doi: 10.1037/a0032583.

Lingard, B., & Stellar, S. (2013). Policy learning or policy ammunition: Three national responses to Shanghai's performance on PISA 2009. *Professional Educator*, 12(2), 8-14.

Loeb, S., Miller, L. C., & Strunk, K. O. (2009). The state role in teacher professional development and education throughout teachers' careers. *American Education Finance Association Policy Brief*, 212-228.

McCutchen, D., Abbott, R. D., & Green, L. B. (2002). Beginning literacy: Links among teacher knowledge, teacher practice, and student learning. *Journal of Learning Disabilities*, 35, 69-86.

National Council on Teacher Education. (2012). *Teacher quality roadmap: Improving policies and practices in the Miami-Dade County public schools*. Washington: Bill and Melinda Gates Foundation.

National Institute for Early Education Research (2004, December). *Better teachers, better preschools: Student achievement linked to teacher qualifications (Issue Brief No: 2)* New Brunswick, NJ: W. Steven Barnett.

Olson, L. (2003, January). The great divide. *Education Week American Education's Newspaper of Record*, 22(17), 9-16.

Rand Education, (2012). *Teachers matter: Understanding teachers' impact on student achievement*. Retrieved from [http://www.rand.org/content/dam/rand/pubs/corporate\\_pubs](http://www.rand.org/content/dam/rand/pubs/corporate_pubs)

Ranjan, N., & Rahman, N. (2010). Role of teacher in enhancing learning achievement in child: Emphasis on teacher skill development, knowledge building and ICT. Retrieved from Government of Kerala Higher Education Portal website: [http://www.dhsekerala.gov.in/downloads/role\\_tech.pdf](http://www.dhsekerala.gov.in/downloads/role_tech.pdf)

Sağlam, M., Özudoğru, F., & Çıray, F. (2011). Avrupa Birliği eğitim politikaları ve Türk eğitim sistemine etkileri. *Van Yüzüncü Yıl Üniversitesi Eğitim Fakültesi Dergisi*, 7(1), 87-109.

Sharratt, L., & Sharratt, M. (2007). The impact of teachers' learning on students' literacy achievement. Paper presented at the Fifth Annual Hawaii International Conference on Education, Hawaii. Retrieved from <http://www.lynsharratt.com/pdf/impactofteacherlearningonstudentsliteracyachievement.pdf>

The American Association of Physics Teachers-AAPT. (2009). *The role, education, qualifications, and professional development of secondary school physics teachers*. Retrieved from [http://www.aapt.org/resources/upload/secondary-school-physics-teacher-role\\_booklet.pdf](http://www.aapt.org/resources/upload/secondary-school-physics-teacher-role_booklet.pdf)

Tschamen-Moran, M., Hoy, A. W., & Hoy, W. K. (1998). Teacher efficacy: Its meaning and measure. *Review of Educational Research*, 68(2), 202-248.

Urbanski, A. (1988). Teacher professionalism and teacher accountability: Towards a more genuine teaching profession. *Educational Policy*, 12(4), 449-457.

Yetkiner Özel, Z. E., & Özel, S. (2013). Mathematics teacher quality: Its distribution and relationship with student achievement in Turkey. *Asia Pacific Education Review*, 14(2), 231-242. doi: 10.1007/s12564-013-9242-4.

Yoon, K. S., Duncan, S. W., Lee, B., Scarloss, B., & Shapley, K. L. (2007). *Reviewing the evidence on how teacher professional development affects student achievement (Report No: 033)*. Washington D.C.: US. Department of Education, Institute of Educational Sciences, National Center for Education Evaluation and Regional Assistance.

