

A COMPARATIVE ANALYSIS OF THE MODELS OF TEACHER EDUCATION IN TERMS OF TEACHING PRACTICES IN THE USA, ENGLAND, AND TURKEY

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The most significant objective of pre service teacher education is to educate qualified teachers. How this quality can be attained seems possible by designing teacher education programs which enable students to acquire skills such as reaching knowledge and solving problems. It is thought that student teachers begin to understand the profession through the practices of teaching. In this way they will be able to improve themselves and reinforce their professional knowledge and skills effectively, and learn how to act accordingly. This is an important factor of achieving success in the field if necessary steps can be taken in terms of teacher education. When everything considered, it seems crucial to examine the recent changes in the developed countries carefully in teacher education and to scrutinize their effects on the teacher education system in Turkey. The objective here is to compare the models of teacher education in the USA, England, and Turkey as a majority of post-graduate students sent abroad from Turkey to the mentioned countries above. Qualitative data have been collected through analyzing the literature in the field. The results concerning the models of teacher education in the aforementioned countries have been presented here comparatively.

The developed countries are trying to restructure their education systems continuously to meet the needs. In such a time of restructuring, a country is regarded as successful if it can solve problems that arise in teacher education, one of the important components of education. Luke, Luke & Mayer (2000) stated that what really matters in an education system is to educate qualified teachers, which is closely related to all kinds of problems in the field. One should always keep in mind that they are the teachers who put into practice the approaches no matter how good they are. In a report carried out by Conley & Bacharach (1987), it is emphasized that *we need to educate qualified teachers if*

we wish to enhance how students are doing. Quality can be attained through programs making it possible for teachers to be educated in an atmosphere where they are oriented towards learner-centered systems enabling students to acquire such skills as reaching knowledge and solving problems. Therefore, teacher education will definitely play an important role in achieving success if enough attention is paid. We find it necessary to keep up-to-date with what has been done for the last two decades in other countries and act accordingly in Turkey. In light of the literature in the field we can see that there are two fundamental approaches through which student teachers are educated: i) Teaching theories before prac-

ticing, ii) Teaching theories while practicing (Çepni, 1993).

In the first approach, student teachers go through an education process based on theories during which they acquire knowledge of the field as well as how to teach the field. Then, they are ready to practice all the knowledge and the skills they have learnt in practice schools for several weeks. In the 1980s, a series of books on teacher education came out in England in an attempt to scrutinize this approach in an affirmative way. This reflected the philosophy prevalent in England at the time and contributed greatly to the preparation of programs in which theoretical knowledge is taught initially. Such changes emphasize the philosophy of teacher education based on theoretical knowledge to be learnt at the undergraduate level. Theoretically oriented teacher education provides student teachers with needed knowledge and skills in attaining objectives (Evertson, Hawley & Zlotnik, 1985). A study shows that student teachers would be faced with practicing problems they are not able to overcome if they were not equipped with theoretical knowledge (Griffin, 1989). However, there are, of course, other studies against this because such an approach wouldn't make any contributions to their learning processes (Loughran, Brown & Doecke, 2001; Russell, 1988). In addition, this approach receives criticism since practice schools fail to fulfill their responsibilities effectively or mentor teachers feel that counseling instructors are fully responsible for student teachers (Çepni & Azar, 1996). Student teachers are given little chance to put theoretical knowledge into practice in a systematic and controlled

way. As a result, student teachers experience such difficulties as classroom management, evaluating papers and activities, and understanding diversity in class (Brickhouse & Bodner, 1992; Veenman, 1984).

The approach of teaching theories while practicing is based on statements like *Real learning comes with practice, Experience will guide you, and Practice makes learning perfect* (Feiman-Nemser & Buchman, 1985). In this approach, student teachers are encouraged to acquire professional knowledge and skills by making personal efforts. This will require them to spend most of their time practicing in schools, and to understand what the job is really like (Yost et al., 2000). In other words, student teachers must try to learn professional knowledge, skills, and business etiquette that they feel in need of, and to learn by living in real-life situations. In a study carried out in the USA, more emphasis is placed on teaching theories while practicing rather than teaching theories before practicing (Brickhouse & Bodner, 1992). It is also stated that teacher education should give student teachers an opportunity of using the professional knowledge and skills in a real teaching atmosphere. There are some opposing points of view. Fair (1992), for instance, claims that learning is regarded as a mentor teacher-aided teacher education model in putting theories into practice, and that practice as part of this approach is not attainable practically. Other studies show that in-class experience only wouldn't be enough to help student teachers to develop teaching skills (Newman, 1996; Gilroy, 1992). Some of the disadvantages are that acquir-

ing knowledge and skills through practices in class will take too much time by trial and error, and some uncorrected and uncontrolled habits and knowledge will persist to exist all their working life.

There are, of course, some advantages and disadvantages to these two approaches when compared. You may seem to be content with the disadvantages if you have chosen one of them. You may experience some difficulties while practicing as more responsibilities fall to the faculty in the first approach or to the practice schools in the second approach. There is also another model in which the two approaches are used together, and responsibilities are shared by the two parties. This is called *The Model of Faculty-Practice School Collaboration* (CHE/World Bank, 1998).

Methodology

The methodology of this study as Merriam (2001) referred is a qualitative research. This approach enables researchers to understand the phenomenon. Specifically, the method of document analysis and review of extant literature are used in this study.

Findings

The findings are presented in tabular and text forms under the related subtitles and obtained data are discussed as required. Having looked at some various programs of teacher education in different countries, one will see that they consist of 8-12 semesters.

Table 1. Teacher Education Programs in Turkey and Other Countries

<i>Country</i>	<i>Teacher Education Programs</i>	<i>Duration (year)</i>	<i>Duration of Teaching Practice (week)</i>
The USA	Undergraduate	4	12
	Postgraduate(ProTeach)	5 / 4+1	12 / 12
England	Undergraduate	4	12
	Postgraduate(PGCE)	4+1	16-20
Turkey	Undergraduate	4	14
	Postgraduate(No thesis)	5 / 4+1,5	14 / 14

Teacher Education in the USA

It was enough to graduate from a two-year undergraduate program to be a teacher as of the early 1980s in the USA. From then on, teacher education began to be implemented at the undergraduate/postgraduate level. This is so because teachers need to keep up-to-date with the latest changes in the field, to incorporate them in harmony with what they have learnt before, and to reflect them in real-life practices in class. In undergraduate programs, student teachers are required to complete the pre-requisite courses of teaching departments in other faculties in 2 years before graduation. Then they can continue 2 years of teaching programs in the undergraduate study by taking into account their academic history and the interviews. In postgraduate programs, graduate students can enter one-year master's program if they have graduated from a program of 5 years at the teaching department or from the faculty of letters by completing a minor program in teaching if they wish to attend the proteach program. In accordance with the courses they have done, student teachers can become a teacher of physics at the secondary school or a teacher of science at the primary school. They complete the teaching process in the program in at least two full days of practice a week (Demirel, 2000; Landsberger, Carlson & Campbell, 1998).

These practices are implemented by the Office of Professional Practice at the faculty of education. The main objective of this office is to arrange schools where student teachers have the opportunity of practicing knowledge and skills that they have acquired, to bring together the par-

ties involved in these teaching practices, and to monitor how well student teachers are doing. It also organizes about 15 hours of pre-teaching process concerning the tasks of counseling instructors who take part in the practices, and are believed to have a great effect on student teachers. These sessions give them an opportunity of setting what kind of responsibilities to take, and what documents to prepare. Counseling instructors are oriented towards how to monitor the activities of student teachers in practice schools, how to form assessments and evaluations, and if they have a good command of the field. An effective collaboration is thus promoted between the two parties thinking that this will help counseling instructors to better understand what they are expected to do, and the situations they will need to take care of during the practice process (Swain, 2000).

Doing research on teacher education in the USA, experts place an emphasis on the necessity of consolidating theories and practice through experiences in practice schools with the help of Faculty-Practice School Collaboration. In order to help student teachers to gain expertise in the field, professional knowledge and skills in pre-service education must be learnt through practice, which will facilitate them to observe the needs and responsibilities in the field (Lock & Churukian, 1996).

The objectives of the teacher education in the USA are not nation-wide in scale as in other countries like Japan, China, England, France, and Germany. Each state sets its objectives to meet its specific needs (Cobb, 1999). All institutions must meet the necessary requirements of National

Science Education Standards developed by the National Board for Professional Teaching Standards if they wish to offer teaching certificate programs (AAAS, 1993; NRC, 1996; Karamustafao€lu, Cerrah and Sevim, 2003). The National Council for Accreditation of Teacher Education (NCATE) supervises work done in order to adapt the programs of teacher education in all institutions. 40% of these institutions educate about 70% of student teachers across the country. In 1996, they were supervised and advised to make some amendments in the programs that they offered (NCTAF, 1996).

The teacher education at the University of Georgia is completed in four years on a basis of 2+2 in accordance with the model of the teacher education in the country. Student teacher admitted into the faculty must complete 90 hours of course credits in 2 years and select one of the teaching programs at the start of the 5th semester. After that, they must attend courses in the programs that they have selected, and practices in schools, which will become more intensive in every following semester. They must spend all of the last semester practicing in schools. As part of these practices, counseling instructors appointed by the faculty pay regular visits to these schools, supervise student teachers, and keep in touch with mentors responsible for one of the student teachers about their activities (Gary, 1998). Florida University can be given as an example of ProTeach Model (Professional Teacher, 2007).

For the purposes of the teacher education in this country, the practices by student teachers were observed and studied in many various researches. It became clear

that student teachers had difficulty doing activities suitable for the subject effectively, setting strategies for teaching some concepts of science, and doing easy experiments with simple aids. Researches also showed that they couldn't communicate well with counseling instructors and mentors, and receive needed support. The results indicated that mentors and the programs had a great influence on student teachers in reflecting professional knowledge (Woullard & Coats, 2004; Shen, 2002; U.S. Department of Education, 2002).

Teacher Education in England

Teacher education programs in England are implemented by Teacher Training Agency (TTA) under the Ministry of Education. To be a teacher at a primary/secondary education in England, a person is required to earn a certificate called *Qualified Teacher Status*. All institutions giving participants teaching certificates must prepare and implement teaching programs under the criteria of TTA (Horton, 1999). Student teachers are educated through two different programs. One is a 4-year Under-graduate Program organized for high school graduates in cooperation with universities and the colleges thereof, and the other is a one-year Post-graduate Certificate Program in Education implemented by the faculty of education for graduates of such departments as Physics and Chemistry (Demirel, 2000). At the under-graduate-level programs, field courses continue for three years while courses on teaching the field continue from the fresh year till graduation in an increasing man-

ner. Teaching practices in schools are scheduled on a basis of 22 hours a week as below:

- 2 weeks during the 1st year,
- 4 weeks during the 2nd year,
- 16 weeks during the 3rd year, and
- 12 weeks during the 4th year

Student teachers admitted into the post-graduate certificate program must complete a total of 36 hours during the 3 academic semesters. They spend 2 of the program practicing in schools apart from pedagogical courses (Sands & Bishop, 1993). At the start of the first semester of the PGCE (Postgraduate Certificate in Education) program, student teachers are given information about the education in schools by way of various seminars. They go through a 2-week observation period in schools, scrutinize theoretical knowledge with their mentors in Special Teaching Methods courses in order to better understand activities in class for a period of 3 weeks, and gain expertise and experience by observing mentors in class so that they can improve skills and abilities for the following several weeks. During the last week of this period, they get in touch with their mentors to prepare plans and programs suitable for the lesson they will teach. Student teachers have an average workload of 22 hours a week in 12 weeks. They need to arrange themselves a school to work actively for a period of 4-8 weeks to develop themselves in terms of professional knowledge, skills and abilities. The purpose is to enable student teachers to improve professional skills by participating in activities in other schools – in a better/worse condition – different from the school that have practiced. Such

practices help them display professional knowledge and skills they have acquired in theoretical courses, and are implemented in under/post graduate programs for a period of 12 weeks.

Teacher education is completed in four years at University of Leeds, which can set a good example of the undergraduate model of this in England. Student teachers admitted into the faculty take courses on the field for 3 years, and courses on teaching the field from the first year on in an increasing manner. They attend all meetings and activities during these teaching practices. Every student teacher is asked to implement teaching hours not less than half the hours given in the program. They must consider students of all ages and skills in the lessons they will teach. A teacher acts as a counselor to supplement all the work and activities of the student teacher who is expected to display such skills as implementing activities concerning the choice of topics in line with learner levels, classroom management, planning, testing and measuring, and the use of technology and some teaching aids. The results are evaluated by counseling instructors and mentors together (Bishop, 1998). The University of York is also good example of the PGCE model (PGCE Course, 2008). Keele University implements programs in which student teachers can earn Advanced Conversion Certificates for any of the fields like science, technology, and maths in the second year. This two-year program is called *PGCE Conversion Course* (PGCE Conversion Course, 2008).

Knowledge and skills that student teachers acquired through PGCE programs were not in entire accordance with curric-

ula in schools. Therefore, they had difficulty demonstrating their professional knowledge and adjusting the level of teaching, according to some research on teaching practices in England. In addition, student teachers performed poor communication with counseling instructors and had difficulty comprehending feed-back from them (Orion & Thompson, 1996). On the other hand, they were regarded as proficient in preparing discussion activities in class (Wray et al., 2000)

Teacher Education in Turkey

Until 1982 teachers used to receive teaching certificates through 3 institutions under the Ministry of National Education: 1-Primary Schools, 2-Village Institutes, and 3-Educational Institutes. It was unfortunate that political issues had had a negative effect on teaching policies until then. Too many changes were made in teacher education in terms of the objectives and programs, thus making it difficult for qualified teachers to appear. There was a constant increase in the number of students over the years; there was a shortage of teachers which had to be bridged in various ways. New criteria were added to the already-existing multi-score teacher education ones. The Council of Higher Education is responsible for teacher education in accordance with the decree having the force of law no: 41 published in the Official Gazette, issue no: 17760 dated July 20, 1982 (CHE, 1998). Teacher education was restructured into an undergraduate study. The aim was to do academic research in teacher education, and to make teaching a more preferable job. One of the ways of meeting the need

for more teachers was the graduate students of science-letters. They were allowed to earn a teaching certificate by attending courses at either their own faculty or the faculty of education. After completing the program, they were entitled to be appointed to a secondary or high school (CHE, 1998). Teaching practices were carried out in a period of a month without serious guidance for student teachers from 1982 until the end of 1996. Most mentors didn't care much about what the faculty of education really required them to. This resulted from the belief that student teachers couldn't develop themselves enough to gain professional expertise, and that they would be able to learn how to teach through the working life. Therefore, they had to complete teaching practices without acquiring necessary professional knowledge, skills and abilities.

Carrying out some academic researches at Karadeniz Technical University, a team of experts submitted to the faculty to the Council of Higher Education a report entitled *Restructuring* in 1996. It was the goal of this report to spot and sort out the problems in the existing system (Baki et al., 1996). After the regulations put forward in the report had been discussed and justified, a model was suggested in order to restructure the teacher education in Turkey in a more effective and more modern way. This was preceded by a thorough analysis of the model of teacher education in England. The report showed that although the teacher education rested with the faculty of education at university, it couldn't fulfill its responsibilities, and that there was a lack of counseling instructors who could help those doing research in the fields of

physics, chemistry, and science besides educational sciences. In addition, the post-graduate programs at the faculty of science-letters were not different from the undergraduate programs at the faculty of education in content. Therefore, the post-graduate students did a few courses in education, and then chose to do a thesis based on their previous field. Consequently, a science expert of physics education or someone with a doctorate in science was looked upon as one who had an education in the field. It was pointed out that research was not done on teaching the field, and that academicians were not educated to do so. On the other hand, student teachers were educated at an adequate level of knowledge of the field through the teaching programs at the faculty of education, but pedagogical knowledge constituted only 2-3% of the program, which wouldn't suffice student teachers to go on in the working life. So, they had difficulty relating their knowledge of the field to the programs of secondary education. The model of teacher education suggested in the report boils down to three categories: 1-field knowledge, 2-humanities, and 3-pedagogical knowledge. Student teachers who have done courses on field knowledge, and humanities can take courses on pedagogical knowledge of at least four semesters. Pedagogical knowledge program is divided into 3 parts: 1-general, 2-field, and 3-teaching practices. An emphasis is placed on the preparation of post-graduate thesis which must be based on field education (Baki et al., 1996).

Under the project called *The Council of Higher Education/World Bank Project of*

National Education Development, the model in the report has been in effect as of 1998-1999 academic year after being studied by such institutions as the Council of Higher Education, the Ministry of National Education, a committee of rectors, and the Board of Universities in the Council of Higher Education (CHE, 1997). This model aims to establish the type and the qualities of teachers of the future (CHE/World Bank, 1998). One of the most important reasons of restructuring in teacher education is that the regulations and programs for student teachers in practice schools are not defined, and that practice hours are not enough. Student teachers can not benefit from the process of practice as desired because they are not in environment in which they can display professional knowledge, skills and abilities (Tekfirik, 2000). As part of this restructuring process, the model of faculty-practice school collaboration is based on the principle that theoretical knowledge doesn't work well without practice. In other words, this model points out that student teachers will acquire skills and experience changes of behavior by practicing in the natural environment of a school. The purpose of the model of faculty-practice school collaboration is that both parties fulfill practices and responsibilities efficiently and effectively. Therefore, the success of the approach depends on the fact that the parties are aware of the responsibilities, establish effective paths of communication, and create an atmosphere where learning will prosper. The handbook of the faculty-practice school collaboration divides into seven chapters. The first chapter deals with the

objective and the structure of the practice, gives information on the scope, and defines words and phrases in the handbook. The last chapter is about the seminar and practice of teaching that student teachers need to do in the field during the last period of their teaching activity (CHE/World Bank, 1998). In accordance with the restructuring model, student teachers are educated for elementary education through undergraduate programs and for secondary education through master's programs (Karamustafao€lu and Akdeniz, 2005). With the new regulations the structure of the teacher training institutes is given in Table 2.

Teachers starting work at secondary education are educated through the two programs in accordance with the degree having the force of law published in the Official Gazette, issue no: 22945 dated

March 26, 1997. The first of the programs is the integrated undergraduate plus master's program without a thesis. Student teachers go through 5 years of education at the teaching departments of science and maths, and social sciences at the faculty of education. They acquire field knowledge and skills during the first seven semesters at the faculty of science-letters, and do courses on teaching the field during the last three semesters at the faculty of education as students of the postgraduate master's program without a thesis. The second program is for student teachers who have completed an undergraduate program at the faculty of science-letters. They can enter a master's program without a thesis in teaching for one and a half years at the faculty of education. Students of undergraduate programs such as science teaching do courses on field knowledge

Table 2. Structure of Education Faculties in Turkey

<i>Department</i>	<i>Entrant</i>	<i>Duration (year)</i>	<i>Division</i>	<i>Degree</i>	<i>Teaching practice</i> [†]
Primary Education	undergraduate	4	Science, Maths, Elementary and Pre-School Teaching	BA	a, b
Secondary Science & Mathematics Education	postgraduate	5/4+1, 5	Physics, Chemistry, Biology and Mathematics Education	MSc	c
Secondary Social Sciences Education	postgraduate	5/4+1, 5	History, Geography, Philosophy and Turkish Language Literature	MA	c
Computer Education & Instructional Technology	undergraduate	4	Computer and Instructional Technology	BSc	b, c
Educational Sciences	undergraduate	4	Psychological Counseling and Guidance	BA	a, b, c
Turkish Language Education	undergraduate	4	Turkish Language Teaching	BA	b
Foreign Language Education	undergraduate	4	German, French and English Language Teaching	BA	b, c
Physical Education & Sports	undergraduate	4	Physical Training and Sport Teaching	BA	b, c
Fine Arts Education	undergraduate	4	Art and Music Education	BA	b, c

[†] a: Pre-school education; b: Primary school (grades 1-8); c: Secondary school (grades 9-12).

and the teaching of the field for 8 semesters a period of 4 years. The course of teaching practices occurs during the last semester of the department before graduation in all programs. The course consists of 2 hours of theory plus 6 hours of practice which add up to a total of 8 hours a week. The handbook of faculty-practice school collaboration includes detailed information on the qualities and skills that student teachers must acquire and reflect at the end of education (CHE/World Bank, 1998). Programs for elementary education are found at almost every university while programs for secondary education are used at universities like Karadeniz Technical University and Middle East Technical University on a basis of both 3,5 + 1,5 years and 4+1,5 years.

Conclusion

In conclusion, student teachers are educated through two approaches: 1- teaching theories before practice and 2- teaching theories while practicing pedagogically on top of field knowledge. However, these two approaches have some advantages and disadvantages, especially in terms of teaching practices. As a result, they are regarded as complementary to each other. The idea is that student teachers learn by doing while practicing, by experiencing the theories of learning and teaching, and relating them to their life. An approach known as the model of faculty-practice school collaboration was introduced through the restructuring process in education. This model put a lot of responsibilities on practice schools as well as the faculty of education. Teaching theories and practice at school are on balance. Having looked at the models of

teacher education in Turkey and other countries, we can see that students complete these programs in a period of 4-6 years. The model in the USA takes on the approach of teaching theories while practicing while the one in England prefers the approach of teaching theories before practice. Teacher education in the countries mentioned above is at the undergraduate level for high schools. Teaching certificate programs are post-graduate studies through Proteach in the USA, and PGCE in England. Turkey has undergraduate programs as well as post-graduate programs of teacher education. Teacher education, in general, is implemented in two stages: i) field knowledge at the faculty of science-letters, and ii) teaching certificate program at the faculty of education (Karataşoğlu, 2007). Approaches in teaching practices vary from country to country in terms of the structure of the teacher education. Teaching practices are completed in a period of 1-3 semesters under the control of the faculty of education. This process is completed at the postgraduate level in a period of three semesters in England, two semesters in the USA, and one semester in other countries. It has been observed that student teachers have difficulty displaying skills such as classroom management, implementation of in-class activities on subjects, and that they feel nervous during warm-up activities.

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