A Study of the Significant Factors Affecting Pre-Service Teacher Education in Turkey

M. Zeki Tasdemir*, Muhammad Zafar Iqbal** and Muhammad Zaheer Asghar***

Abstract
Pre-service teacher education (PTE) is vital because adequately-prepared teachers positively add to student performance, school effectiveness, and the efficiency of an entire system of education in a country. This study aimed to examine the current pre-service teacher education (PTE) practices in Turkey by identifying the significant factors of pre-service teacher education to provide suggestions for the improvement of PTE. Therefore, the findings of this study will provide a reasonable basis for strengthening the quality of pre-service teacher education, which will, in turn, contribute positively to the quality of teachers. The present study is designed to examine Turkish secondary school teachers' perceptions of their preparation for the teaching profession. The sample of this study was selected by random cluster sampling as 800 teachers from 14 different cities located in seven geographical regions – two cities in each region. AMOS 20.0 was used for the testing of the pre-service teacher education model through path analysis. Attitude towards pre-service teacher education in general, curriculum, practice, proficiency, and relevance of theory with the practice was considered as endogenous variables, and preparedness was considered as an exogenous variable. Data obtained from quantitative results have shown that teacher preparedness as a dependent factor consistently relates to independent factors that are inter-related; i.e., teaching practice has a significant impact on the relevance of teaching practice, the relevance of teaching practice has a significant impact on proficiency and proficiency has a significant impact on curriculum, and curriculum has a significant impact on PTE in general. Future research would be conducted on the factors affecting the in-service teacher training programs.

Keywords: Pre-service education, teacher education, curriculum

* Ph.D. (Scholar), Department of Education, University of Management and Technology, Lahore
Email: zekinet@hotmail.com
** Department of Education, University of Management and Technology, Lahore.
Email: zafar.iqbal@umt.edu.pk
*** Doctoral Fellow, Faculty of Teacher Education, University of Helsinki, Finland.
Email: zaheer.asghar@helsinki.fi
Background of the Study

Teachers assume a vital responsibility to spread universal education among the younger citizens of a nation according to national values. Teachers' achievements or failures are often attributed to their readiness and professionalism. Pre-service teacher education (PTE) is vital because adequately-prepared teachers contribute to better student performance, higher school effectiveness, and the efficiency of an entire system of education in a country. If teachers do not meet expectations, educational activities in a school may not be successful.

Turkey bestrides unique geography among Asia, Europe, and the Middle East. Several influences have shaped a cradle of numerous ancient civilizations, Turkey and its culture. Education has always remained an essential factor of development in Turkey. Despite its long experience in education and substantial developments in teacher education in the last decades, Turkey still lags in dynamism for rejuvenating teacher education (TE).

The standard of teacher education impacts mostly the performance of educational activities conducted by teachers in institutions, and Teachers generally reflect on how they were trained (Cruicschank, Jenkins, & Metcalf, 2009). Pre-service teacher education and significant factors affecting PTE are absolutely crucial for effective teaching and learning procedure. Currently, Turkish pre-service education moves slowly as compared to the educational reforms and expectations. PTE needs to renew itself in the light of significant factors that need to be considered for TE's sustainability in Turkey. The researchers consider that a closer analysis of the current PTE by conducting the perception of fresh teachers.

Problem Statement

Despite massive investments in the education infrastructure and recruitment of fresh graduates into the service, the current Turkish TE system displays an underperforming profile. Because of frequent policy changes, it may be highly optimistic to state that the Turkish teacher education system has achieved all that it aspired for.

According to Güven (2008), Turkish PTE reforms neglect particular Turkish socio-cultural contexts. Failing to respond to the stakeholders' expectations and needs, pre-service teacher education policies do not work their effect on the system. The university-based pre-service teacher education in Turkey does not match the in-service standards set by the Ministry of National Education (MoNE). The main challenges for current pre-service teacher education in Turkey are shortage, quality, and teachers' lower status.
Turkey does not have an adequately-composed teacher education policy with the ground realities of schools in mind. The current Turkish PTE underachieves before the expectations and needs of the stakeholders, and this increases challenges. Consequently, pre-service teachers in Turkey are inadequately prepared for the profession. This all happens because teacher education in Turkey is based on factors that have not been identified for the preparedness of the teachers.

**Purpose of the Study**

It is necessary for research that a problem should be re-examined by its different dimensions, actors, and dynamics as well as from a different perspective (Bean, 2006; Caires, Almeida, & Vieira, 2012). The present study primarily aims to examine the current PTE practices in Turkey by identifying the significant factors of pre-service teacher education to provide suggestions for the improvement of the PTE system and the consistency between the educational reforms and ground realities, primarily in Turkey, and in other countries.

**Research Objectives**

**Research Questions**

The following are the research questions of this study:

1. What are Turkish teachers’ perceptions about the adequacy of their pre-service education?
2. What are the remarkable factors that affect teacher education in Turkey?

**Significance of the Study**

The study is significant by identifying the factors affecting pre-service teacher education. Therefore, the findings of this study will serve to strengthen the quality of pre-service teacher education, which will, in turn, contribute positively to the quality of teachers. This “will have overall benefits for all aspects of teaching and learning across the education system” (UNESCO, 2011). During the new phase of development embarked by Turkey, there is a pressing need for highly-skilled teachers to uplift education standards. This can be materialized by a consistent and coherent pre-service teacher education. Teacher education policy and TE institutions need to appreciate teachers' perceptions of essentially preparing student teachers for the profession.
A Study of the Significant Factors Affecting Pre-Service TE in Turkey

Chapter 2: Literature Review and Theoretical Framework

Education is composed of three essential components i.e., teachers, students, and educational programs. Guiding students and implementing educational programs, teachers are the most significant, among other educational factors. This brings teacher quality to the fore as the vital in-school factor affecting student performance. This is why all societies should place the utmost concern about teacher preparation. TE entails the policies and procedures that endeavor equipping teachers with prominent qualities such as professional knowledge, skills, proficiency, methodology, speed, philosophy, and sense of responsibility – as required by their profession and the dynamism of the modern age – and elevating teachers to a position that enables them with an edge to address the emerging generations academically and socially.

Pre-service teacher education courses critically contribute to educating new generations by preparing skilled and qualified teachers. Pre-service teacher education lays the groundwork for the teaching profession and provides the first step in the professional development of teachers. Effective teaching is highly dependent upon successful completion of pre-service teacher education, with “fulfilling his or her responsibility and duties effectively” (Yuksel, 2012), which in time leads to the status of Qualified Teacher.

Elevating teacher quality may only be possible by due importance invested in pre-service teacher education procedures. PTE is crucial in preparing prospective teachers to transfer knowledge and values to the next generation (Kavas & Bugay, 2009). PTE aims to equip teachers with research habits, accountability for the profession, and ample knowledge to convert challenges into opportunities in the face of educational reforms. Therefore, aspects of TE should start from student selection.

Teaching is a special profession and directly related to a country’s future that necessitates certain social, emotional, and ethical features besides a general intelligence, knowledge, and skill. Teacher candidates should be selected among those who love the teaching profession, who may dedicate themselves to the education of children and youth (Duman, 2009; Topsakal, 2015; Özcan, 2012; Gurbetoğlu, 2010). Believing, knowing, and practicing constitute the affective, cognitive, and kinetic dimensions of teaching. In order to attain professional success and job satisfaction, they must believe in the essentials of their profession, know what is demanded by profession, and act upon it (Başaran, 1996).

Gürbüztürk and Genç (2004) assert that “teachers affect students not only by their knowledge but also by their traits that will maintain the communication with the stakeholders.” Hotaman (2011) affirms that while helping individuals embark on a profession, for the sake of their personal and professional efficiency and self-realization, it should be ensured that the attributes of the profession and the personality traits, interests, and abilities of an individual match. This is also valid for those who aspire for teaching should possess the personality traits required by this profession.
Selecting student teachers is one of the essential steps that significantly contribute to the efficiency of PTE programs. It significantly affects the quality and characteristic of a prospective teacher and “affects the status of teachers” (Apeid, 1990). Among many figures in the history of Turkish TE, Sati Bey, holds central significance, which is elucidated by Akyüz as, “strongly opposing the idea that everyone may become teachers. Sati Bey defended the notion that teaching is a profession based on special talents and skills. Not understanding this fact does great damage to our education” (Akyüz, 2011).

“Quality is often sacrificed when pressure for quantity is intense, as is the case in Turkey” (Worldbank, 2012). Initiating a selection system in faculties of education will be a shot in the arm to innovate the TE system. Teaching is a demanding and a sacred profession as a nation-building endeavor, but the manner of selecting student teachers is not at par with the significance of teaching as a profession. Student teachers are selected instead in a ‘wholesale’ manner – without considering the background or basic necessities of the course and personality traits to become a teacher (Hotaman, 2011). Teachers are to be selected from student teachers who have personality traits befitting the teaching profession.

The selection of student teachers as a result of an MCQ (Multiple Choice Question) based university entrance examination has long been criticized for its limitations in Turkey. The most skillful individuals for the teaching profession cannot be selected by their marks obtained in one-dimensional knowledge-based examinations. Examination success of the candidates who secure marks high enough to be placed in a teacher education institution does not reveal whether they have suitable personality traits for the teaching field or not.

This issue snowballs to the challenges faced in teacher employment. Especially in teacher education and employment policies, the balance between supply and demand could never be met. During some periods, teachers were few in number, and at other times, there were more graduates than needed. To improve the desired balance between teacher demand and supply, a planned approach toward selecting student teachers should be adopted according to a quota system.

Due to the critical significance of teachers in educating individuals as high-quality and highly qualified brainpower, various countries have diverse teacher education models and programs outlined by national objectives and expectations and considering factors affecting pre-service teacher education. A practical and successful pre-service teacher education to prepare a teacher candidate depends on several critical factors such as pre-service teacher education in general, curriculum, and practice, the relevance of theory with practice, proficiency, and preparedness.
Pre-service Teacher Education in General

Teacher education is not only about the development of professional skills or knowledge or practice; it is complicated in all aspects. Pre-service teacher education strategies depend on a state's education policy to state stakeholders’ expectations as well. Teaching is currently regarded as a profession that necessitates particular expertise and skills. Although the status and respect for the teaching profession differ among various cultures and countries, teaching has always enjoyed privilege in Turkish society and respected as a sacred profession (Şişman, 2011).

Yiğit maintained that Turkey, on its quest for full membership of the European Union, embarked on several projects over the last two decades to improve the components of its national education. PTE in Turkey reforms made in 1973, followed by the reshuffles in 1982, 1997, and readjusted 2006. Significant changes were made in the primary curriculum in 2004, followed by changes at the secondary level in 2007, and the latest changes 2012 restructured and introduced the system of 4+4+4 years of Turkish basic education system. Despite these school-level reforms, no new considerations about TE have been introduced. The existing TE framework is expected to cater fittingly to the structured educational system to cope with the challenges and change requirements (Yiğit, 2012).

Every country has its own educational policy and philosophy that shape the objectives of TE and teacher proficiencies. These objectives and expectations draw a roadmap for teacher education by inspiring the selection of student teachers, curriculum, teacher standards, and improvement of practices to prepare future teachers.

Overall, the preparation for the teaching profession in Turkey is by means of general knowledge, subject content, and the knowledge and skills in pedagogical formation. These are the essential competencies of teacher proficiency. Teachers also assume additional roles such as consultant, mentor, professional expert, social leader, authoritative figure, family man/woman, and guide.

Currently, it is incumbent on teachers to educate the citizens of an information society as proficient in accessing and using information and knowledge at different times and for multiple purposes besides producing newer information. Knowledge and practice on contemporary education technologies endorse teachers’ quality. That is why especially components like e-literacy and computer-aided material development are offered as compulsory courses in the PTE programs.
Yüksel (2008) indicated that Turkish pre-service teacher education should be adjusted with the numerous national educational reforms and worldwide development. Teachers are proactive in responding timely to such rapid reforms in education, and the environment needs to be prepared”.

**The curriculum of Teacher Education**

The curriculum of teacher education significantly affects teacher quality. The element of dynamism is essential in any TE curriculum that prepares student teachers for the profession. Teacher education can only be improved with a well-constructed, balanced, and implemented curriculum.

Teacher education curricula must be designed according to the objectives of the teacher education institution and in line with stakeholders' expectations. Being at the heart of teacher education programs at all levels, curriculum deserves the care to be designed more realistically in terms of experiences, existing educational needs, and future projections of national education. This should be done in consultation and consideration of educators and institutions, for they are to implement the curricula according to expectations.

This is especially significant in times like these when academics and teacher educators disagree upon the balance of general versus professional content in the TE curriculum. While academics favor general education and knowledge of the discipline as the essentials of teaching, teacher educators in the majority promote that all prospective teachers must acquire a collective body of knowledge about teaching and learning (Yüksel, 2008).

Besides, the teacher education curriculum for student teachers must concurrently strengthen the study of the school subjects along with presentation skills. The research element should not be neglected in the curricula of teacher training programs, which should be relevant to the ground realities, i.e., real-life workplace conditions.

Teachers are empowered to inculcate the society's beliefs, values, and ethics besides the national curriculum, guidance, and shared understanding. Expectations from teacher education programs in terms of knowledge, attitudes, and skills differ among various cultures. Therefore, “Teacher education curriculum must aim at the development of both their personal traits and their professional competence. Teacher as to feed the minds and the hearts of children, the curriculum of teacher education should also take care of the spiritual progress of the prospective teacher” (Iqbal, 1996).
The latest reform initiated in 2006 meant for "strengthening the professional aspects of the TE curriculum" (Yüksel, 2008). This was expected to lead to strengthening the study of the subjects taught as well as the presentation methods.

Components of the TE curriculum include 50% subject content, 30% pedagogical knowledge, and 20% general knowledge. It is stated that the graduates who do not have teaching pedagogy knowledge will not be employed as history teachers, but as historians or will not work as mathematics teachers, but as mathematicians. The issue of preparedness among pre-service teachers has been an issue of intensive research in Turkey. The findings of the research conducted by the YÖK indicated that almost half of the academic faculty think several courses overlap in content and objectives; hence, they should be removed from the PTE curriculum (YÖK, 2007).

All the components of TE should be compound meaningfully in TE programs. Teacher education institutions should keenly follow innovations, and curriculum should be flexibly designed to keep abreast of the existing and emerging unconventional, technological, methodological, and social conditions. Only quality teachers may educate quality generations; therefore, only quality TE programs may provide superior PTE to student teachers.

In this context, while the Turkish educational system has undergone sweeping changes in recent years, TE's issue is still highly relevant, and the faculties of education are to shoulder this great responsibility with more exceptional care and dedication. Therefore, for quality education, quality teachers must be educated. Therefore, the curriculum should be prepared in consideration of curriculum expectations in parallel with TE practices.

**Practice in Pre-service Teacher Education in Turkey**

Excellent teaching and learning directly depend on excellent pre-service teacher training and excellent practice. Student teachers’ theoretical knowledge can only be activated by practice, which endows it with value. This inter link enables emerging teachers with learning by teaching. Hence, student teachers should be provided with many opportunities to observe teaching in practice so that they may implement similar teaching and assessment strategies upon their theoretical knowledge learned in the PTE environment. This brings practice to the fore as one of the supreme dominant elements of PTE.

The practice provides student teachers with reflective opportunities to analyze and review their skills as emerging teachers and implement their knowledge learned during PTE to improve the quality of their teaching. During practice, pre-service teacher educators should ‘supervise and support’ student teachers individually to let them observe and analyze themselves and develop a range of personal teaching techniques. Although student teachers take theoretical courses about teaching and learning in their PTE, they perceive the realities and complexities of the tasks when they start full-time teaching.
Kiraz pointed out that in Turkey until the 1980s, the practice phase was considered as an instance of observation when teachers should observe the school and classroom environment (Kiraz, 2003). Tarman (2010) maintained that until 1999, student teachers in PTE programs used to spend two weeks in the schools to conduct their practice teaching. During those two weeks, they were required to teach four lessons. "This was the only school-based experience they received before receiving their teaching certificate." The restructuring in 1997 extended the time allocated for teaching practice and school experience, but this was still lesser than in many developed countries. The new approach is based on a partnership model, focused on more clinical practice than in the past.

Practicum consists of a number of comprehensive processes such as planning, research, observation, participation, analysis, supervision, evaluation, assessment, and development. Each of these processes is made of stages like preparation, application, evaluation and assessment, and development. It is highly essential to systematically plan and supervise the practicum at schools, so that student teachers may acquire the desired teaching and learning experience.

Currently, in order for them to implement and develop their acquired subject and professional knowledge in a practical, productive, and safe way, student teachers in Turkey undertake School Experience, Teaching Practice and Community Service Practice – since 2006 – under the guidance and supervision of the academic faculty and the in-service schoolteacher. The courses titled School Experience I and II are offered in two separate terms, along with a weekly seminar period and four periods at the school (Kiraz, 2003).

“School Experience” is a course based on observation and discussions. Teaching Practiceeis a course that aims to provide students with the skill to teach a particular subject or subjects in a planned manner and offers them the opportunity to develop themselves, understand the subject curriculum, evaluate textbooks and conduct assessment and evaluation. Community Service Practice is a newer course and, different from the other two practice courses, aims to give student teachers opportunities to develop projects in social and educational issues (YÖK, 1998).

Research literature emphasizes some challenges that practicum may underperform in transferring theory into practice. Researchers agree that the concept of practice is highly neglected and that short and inefficient Citing a variety of sources, Salihoğlu (2012) illustrates a number of challenges on practicum as being a field that is neglected or subject to short and inefficient practice sessions. At this junction, Salihoğlu (2012) claims some vague reasons may be the cause of the lack of opportunities for practicing what the candidates have learned.
Kaygısız and Akarsu emphasize the insufficiency of teaching practice in the line of time, process, and assessment. Time for practice in PTE should be increased. Teacher educators should meticulously deal with student behavior and practicing school should be constituted in each TE institution. Close cooperation between teacher training institutions and school teachers should be established (Kaygısız & Akarsu, 1997).

Volante's findings of pre-service teachers' responses are similar to that of student teachers in Turkey. Student teachers' responses generally suggested that the lack of practical focus in their TE courses negatively affected their self-efficacy feelings. "The practice needs to select teachers for school and or university from those who are equipped with an aptitude for teaching and who are keen on the teaching profession – this is to increase quality and overall satisfaction. Failure to do so invariably leads to teacher education graduates who are unable to connect pre-service content to the realities of daily teaching meaningfully" (Volante, 2006).

Equal to the time allotted to practice, it is also essential how effective it is implemented. Prescribed principles should have practicability. Since it is placed under the initiative of an institution or a faculty teacher, it should be well demonstrated in line with the three essential principles of practice: academic practice supervisor, a useful practice teacher, and a conducive school environment. Therefore, practicum in Turkey should be reconsidered in light of these principles. A control and supervision mechanism should be considered for a coherent, consistent, and effective teaching practice. Ministry of National Education (MoNE) and Higher Education Commission (HEC) should collaborate by soliciting teachers’ opinions while conducting the PTE in Turkey.

Teaching practice cannot be faked or simulated; this is contrary to the practical essence of the teaching profession. Figuratively speaking, people's theoretical claim of mastery in driving a car can only be proven when they actually drive it, and the extent of their learning can be realized by observing their driving experience. The practice is a crucial contribution to teaching and should be started from the PTE stage. The collaboration between in-service teachers and student teachers helps to improve teachers' proficiency and professional development of the student-teacher (Kavas & Bugay, 2009).

**The relevance of Theory with Practice**

Teaching is a practical activity, and practice is nothing but student teachers implementing their theoretical knowledge. Moreover, practice is a critical process through which teaching and learning complement each other. Teaching proficiency is directly linked with having plenty of practice, and this link exceedingly significant. TE institutions should focus on the relevance and complementary nature of theory and practice.
Regarding the improvement of the link between theory and practice, student teachers should be made well aware of both the reality of classrooms in which they are placed and their performance and behaviors in these classroom practicums; these should be fully integrated with the faculty programs. During teaching practice, classrooms work as labs for student teachers applying their theoretical knowledge by means of analyses and fortifications of their teaching experience. In addition to providing a better understanding of teaching, practice improves student teachers' management skills of time, classroom, and behavior. The practice is indispensable for student teachers as they witness in-service teachers responding to real-time teaching challenges.

**General Proficiencies of Teaching Profession**

Teachers should be educated to boost the whole and personal development of students by enabling them to learn, live, and work together, and to develop habits of responsible actions. Hence, teachers must be equipped with the necessary skills to guide the learning activities by various techniques. There is more to teaching than directly transferring knowledge: It is a profession and a way of life by itself; it requires a set of particular proficiencies. TE should be fruitful and measurable, and "proficiencies – which serve as scaffolds that support teacher candidates for quality growth and development – should be determined (Abazaoğlu, 2012).

The comprehensive definition of a teacher is “an individual who holds essential knowledge in three disciplines i.e., subject knowledge, teaching knowledge and general knowledge.” Şişman and Acat added the discipline of ‘ethical values’ to this definition. Teaching is a social set of interactions that needs to be enriched by universal and ethical values. Being familiar to all humanity, these values – once nurtured – primarily enhance the quality of teaching and retain information for a long time (Şişman & Acat, 2003).

Teacher proficiencies help to identify teachers, improving teaching quality, and selecting teachers. They are also highly essential for sustaining TE policies, pre-service teacher training programs of higher education institutions, and evaluation of teacher performances and achievements. Published in 2008, the policy document on teacher competencies listed down the teaching standards to be had by the graduates of the faculties of education across Turkey. Earlier works and research in this field and especially the teaching standards prepared by the US teacher education institutions for accreditation were consulted as a source; however, the competencies to be had by teachers in Turkey were also conceptualized and added to the list (TED, 2009; Özcan, 2012).
Özoğlu thoroughly criticized the PTE activities as being idealistic but not realistic: Definition of teacher competencies is undoubtedly essential for TE; however, since – during the preparation phase – the competencies do not address the issue of how to implement competencies in potential fields of use; a grave ambiguity is there about what to do with teacher competencies. It is unknown to teacher education institutions what changes they should make in their programs and how to implement changes in order to educate the teachers whose competencies are defined in the document and "what kind of sanctions and implementations should be presented to deliver the teachers who do not have these competencies to the desired level of quality?" (Özoğlu, 2010).

Turkish Education Society (TED) supports Özoğlu’s stance and adds, “Teacher competencies are defined. What is not defined is how to implement those competencies.” TED’s research titled, “TED Field Study on Teacher Competencies” revealed that 53 percent of the primary school teachers in Turkey have great difficulty in maintaining classroom control and discipline.

Expressing that a substantial ratio of the teachers is lacking in knowing and informing the parents, the field study indicates a problem of proficiency and a need for development in all fields of the general competencies of the teaching profession. Textbook- and teacher guide-bound for keeping abreast with changes in the program, most of the teachers have difficulty in grasping and perceiving the program holistically.

As a natural consequence, this leads to various challenges for proficiencies in the adaptation of the methods, strategies, and activities during the implementation of teaching programs according to students’ needs and environmental conditions, and in monitoring, assessing and evaluating the students’ growth in success. Incompetence in a field of competence leads to incompetence in other fields (TED, 2009). Abazaoğlu (2012) significantly stated that competencies, which have a substantial place among the actions meant for improving the quality of education, are not by themselves adequate for bringing about the intended development and maintaining sustainability in professional development. These competencies are a field of research that should be supported.

Consistency must exist between the professional qualities and skills demanded from teachers and the professional competence and qualities that are aimed to be taught at the faculties of education. PTE plays a decisive role in forming a teacher's proficiency and introducing them to the profession as prepared after acquiring the necessary skills required by the modern era; therefore, thereby improving the overall quality of education. The efficiency and proficiency of a teacher are directly proportional to the PTE program's efficiency and competence.
Preparedness

In this new era, the role definition of the teacher has considerably changed. The concept of 'born teacher' disappeared as the complexity of the needs of the society increased. Teachers assume the function of fulfilling society's expectations from education. In this respect, teachers bring the desired changes in students' behavior according to the needs of society. Hence, for the proper execution of the teaching/learning process, a teacher should be competent in his profession.

During the pre-service teacher education, student teachers are, in principle, prepared for real teaching with full confidence. Student teachers should not only be prepared for teaching, but also for the school conditions awaiting them during in-service. A good pre-service teaching education program should respond effectively to the expectations of the current educational system and have a productive learning environment. Preparedness of Student teachers to the teaching profession as they complete a teacher education program should be sufficient for effective and quality teaching, the Student-teacher should not learn everything once they started teaching for real.

Preparedness of student teachers is directly proportional to the linkage of theory and practice and the awareness of challenges and opportunities in pre-service teacher education. Preparedness is also interrelated with student teachers' motivation for the teaching profession. Such a modification in pre-service teacher education may only be possible by a thorough analysis of TE in Turkey. According to Gür et al. (2012), quality in pre-service teacher preparedness will only be possible by the excellent analysis of the existing challenges and proper management of the change process, in consideration with the perceptions of teachers (Gür et al., 2012).

Özcan (2012) identified that pre-service teacher education should prepare students with standards like, “general knowledge, content knowledge, learner development, learning differences, teaching strategies, learning environments, communication skills, planning for instruction, assessment, reflection and growth, social relations and collaboration, idealism and dedication, democracy and the rights of children, and environmental consciousness.” In other words, the student-teachers preparedness is to ensure fulfilling the teaching profession effectively and prolifically with an expected proficiency component.
Research Methodology

The present study is designed to examine the perceptions of Turkish secondary school teachers about their preparation for the teaching profession. The sample of this study was selected by random cluster sampling as 800 teachers from 14 different cities located in seven geographical regions – two cities in each region. Rather than selecting a random sample among all individuals of the target population, it was easier to cluster the population and select the cities in the regions randomly and implement the study with the participation of all the in-service teachers in these regions. This was also to ensure the diversity among the teachers serving across Turkey. Table 1 shows the distribution of surveys in each city in Turkey (N=800).

Table 1. Distribution of survey

In order to reflect teachers’ perceptions of their pre-service teacher training in an impartial manner, the researcher administered a survey questionnaire to the sample population. In this way, various perceptions by teachers have been compiled in anticipation of revealing a common perception of pre-service teacher education in the country. Figure 1 shows the map of Turkey with the cities where the surveys were administered. The legend shows in color the locations of the pilot and the actual surveys.
Instruments and Data Collection

The quality of instruments for data collection contributes to the validity and reliability of research positively. Following the quantitative research method, this research employed a 38-item survey questionnaire with the Likert scale. The researcher designed these instruments to help identify teacher training's adequacy during their PTE in Turkey regarding the significant factors. The data collection instruments were administered after reviewing the related literature and considering various Pre-service teacher education processes.

The researcher contacted close colleagues in cities where the research was conducted to solicit their assistance in collecting quantitative data by surveys. Data was collected by means of semi-structured questionnaires that were distributed and collected either in person or by postal mail. In all places, other than aided by his colleagues, the researcher administered the questionnaire himself in locations under study. The respondents completed the questionnaires all by themselves, and the researcher's colleagues aided by invigilation and addressing any questions by being in constant contact with the researcher.

Data Analysis & Findings

The derived Cronbach's alpha scoring was .815, which shows that the questionnaire used in the research has reliability. Data collected through close-ended questions in the present research were analyzed through correlation, regression, and Structural Equation Model.
Results showed that the curriculum was found to be significantly positively associated with Pre-service teacher education general while it was found to be significantly negatively correlated with practice, relevance, and preparedness, whereas Pre-service teacher education general was found to be significantly negatively associated with proficiency, teaching practice, relevance, and preparedness. While proficiency, teaching practice, relevance, and preparedness were found to be significantly positively associated with each other.

Table 1
Correlation Analysis between Age, Gender, Experience, Qualification, Curriculum, PTE General, Proficiency, Practice, Relevance, and Preparedness (8=800).

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<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>10.Preparedness</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1</td>
</tr>
</tbody>
</table>

| M       | 28.17 | 5.29  | 15.31 | 3.74  | 3.60  | 4.03  | 2.80  | 2.57  | 2.78  |
| SD      | 5.27  | 2.12  | 2.57  | 0.70  | 0.94  | 0.71  | 0.98  | 0.79  | 0.87  |

Note. Gender, men = 1, women = 2

AMOS 20.0 was used to test the pre-service teacher education model through Structural Equation Model path analysis. Attitude towards pre-service teacher education in general, curriculum, practice, proficiency, and relevance of theory with the practice was considered exogenous variables. Demographic variables (gender, age, qualification, and experience) were included as covariates, and preparedness was considered as an endogenous variable. The model fit of the estimated model is given in table 2.

Table 2
Fit Indices for Curriculum, PTE General, Proficiency, Practice, Relevance, and Preparedness

<table>
<thead>
<tr>
<th>Model</th>
<th>χ²</th>
<th>df</th>
<th>χ²/df</th>
<th>GFI</th>
<th>CFI</th>
<th>NNFI</th>
<th>RMSEA</th>
<th>SRMR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model fit</td>
<td>106.14</td>
<td>22</td>
<td>4.82</td>
<td>.97</td>
<td>.96</td>
<td>.95</td>
<td>.06</td>
<td>.05</td>
</tr>
</tbody>
</table>

Note: N=800, All change in chi-square values are computed relative to the model, χ²>.05, GFI= Goodness of fit index, CFI=comparative fit index, NNFI (TLI) =non-normed fit index; RMSEA=root mean square error of approximation, SRMR=Standardized root mean square, Δχ² = chi-square change.
The results of the fit indices indicated for the model shown in table 2. Absolute fit for model fit was $\chi^2 (22, 800) = 106.14$, $p > .05$. The fit indices were considered to indicate the good fit of the data with the tested model. The indices of absolute and relative fit (GFI, CFI, NNFI, RMSEA, SRMR) were compared. Hu and Bentler (1999) recommend $\chi^2$ should be non-significant or $\chi^2/df$ in between 1 and 5, RMSEA and SRMR values .08 or lesser and Comparative Fit Index (CFI), Normed Fit Index (NNFI) and Goodness of Fit Index (GFI) values of .9 or higher are considered as good while $0.9 \leq .8$ is considered permissible sometimes. Since the Root Mean Square Error of approximation and standardized root mean square (RMSEA, SRMR) for the initial model were .06 and .05 whereas the GFI, CFI, NNFI values were .97, .96 and -.95 respectively while $\chi^2/df$ was 14.82. The model was fit well according to the descriptive measures of fit.

![Empirical Results from a Complex Multivariate Model Representing Standardized Regression Coefficients.](image)

A complex multivariate model of three endogenous variables, four covariates (exogenous) variables, and three exogenous variables. Ultimately standardized maximum likelihood parameter estimates. After done with the model, fit the estimates to be analyzed for direct and indirect effects for the tested model with 5000 bootstrapped samples (Hayes, 2013). (see table 3 and 4).
Table 3

Standardized Estimates of Direct Effects of the Paths

<table>
<thead>
<tr>
<th>Variables</th>
<th>Relevance</th>
<th>Practice</th>
<th>Preparedness</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$\beta$</td>
<td>$SE$</td>
<td>$\beta$</td>
</tr>
<tr>
<td>Proficiency</td>
<td>0.09**</td>
<td>0.03</td>
<td>0.25***</td>
</tr>
<tr>
<td>Curriculum</td>
<td>-0.32***</td>
<td>0.04</td>
<td>-0.09*</td>
</tr>
<tr>
<td>PTE General</td>
<td>-0.28***</td>
<td>0.03</td>
<td>-0.07</td>
</tr>
<tr>
<td>Relevance</td>
<td>-</td>
<td>-</td>
<td>0.39***</td>
</tr>
<tr>
<td>Practice</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Covariates</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Age</td>
<td>-</td>
<td>-</td>
<td>0.06</td>
</tr>
<tr>
<td>Gender</td>
<td>-</td>
<td>-</td>
<td>0.05</td>
</tr>
<tr>
<td>Qualification</td>
<td>-</td>
<td>-</td>
<td>0.04</td>
</tr>
<tr>
<td>Experience</td>
<td>-</td>
<td>-</td>
<td>-0.10**</td>
</tr>
<tr>
<td>Total $R^2$</td>
<td>.282</td>
<td>.326</td>
<td>.558</td>
</tr>
</tbody>
</table>

*p<.05, **p<.01, ***p<.001

Results of direct effects showed that proficiency was found to be a significant positive predictor of relevance, practice, and preparedness. In contrast, the curriculum was found to be a significant and negative predictor of relevance, practice, and preparedness, whereas practice and preparedness, were found to be significantly positively predicted by relevance. Moreover, preparedness was found to be significantly positively predicted by practice.

Table 4

Indirect effect to Practice through Relevance and Indirect Effect to Preparedness through Practice

<table>
<thead>
<tr>
<th>Variables</th>
<th>Practice</th>
<th>Preparedness</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$\beta$</td>
<td>$SE$</td>
</tr>
<tr>
<td>Proficiency</td>
<td>0.04**</td>
<td>0.01</td>
</tr>
<tr>
<td>Curriculum</td>
<td>-0.13***</td>
<td>0.02</td>
</tr>
<tr>
<td>PTE General</td>
<td>-0.11***</td>
<td>0.02</td>
</tr>
<tr>
<td>Relevance</td>
<td>0.11***</td>
<td>0.02</td>
</tr>
</tbody>
</table>

*p<.05, **p<.01, ***p<.001

Results of indirect effect showed that relevance was found to be a significant mediator between proficiency, curriculum, PTE General, and practice, while practice was found to be a significant mediator between relevance and preparedness.
Discussion

It is found out that Turkish pre-service teacher education does not adequately respond to the needs of schools and expectations for effective teaching. This is because pre-service teacher education programs in Turkey fall short in preparing student teachers for coping with dynamic changes in their in-service duties, roles, and responsibilities. The findings of the study support the previous research studies conducted in Turkey (Üstüner, 2004; Deniz & Şahin, 2006; Küçükahmet, 2007; Sişman, 2009; Akyüz, 2011; Dünya Bankası, 2011; Akdemir, 2013; Özcan, 2013; Ozoglu, 2013; Yıldırım, 2016).

The study's findings highlight that Turkey needs to focus on improving teacher quality instead of frequently seeking systematic changes. This is necessary to make Turkish pre-service teacher education as sustainable and malleable, taking lessons from the past to the present for educating teachers of today and tomorrow both in quality and quantity (Gurbetoğlu, 2010; Azar, 2011; Özcan, 2012; Özcan, 2013; OECD, 2014).

Conclusions

The quality of an educational system is directly proportional to the quality of teachers in that system. Teachers influence students' academic and social learning. Qualified and quality teachers are always in demand worldwide. While the concepts of school, teaching methodologies and curricula constantly change, teachers’ roles and responsibilities too are redefined. There are various reasons and factors behind the lack of a long-term or sustainable PTE with quality. These are usually vital factors that are related to teachers and the teaching profession such as the ambiguity in teacher education policy about the features of teachers-in-demand, criteria in selecting student teachers, requirements for pre-service teacher education in general, an agreement between the pre-service curriculum and school curriculum, the relevance between theory and practice, and proficiency.

Turkey should pave a more reliable and effective foundation of pre-service teacher education. An active and quality PTE in Turkey is possible if student teachers are adequately taught in knowledge and practice by a proper pre-service education in synch with the state's educational policy and reforms. Findings of the present study verified that PTE programs in Turkey should be urgently revised for improving the effectiveness of the education through modification of the pre-service teacher education right from the student-teacher selection stage and aligned with significant factors as mentioned above.
Recommendations

The entire planning and restructuring efforts regarding PTE in Turkey should consider significant factors aligned with the balance between the quality and the quantity. In addition to their academic success, student-teachers in Turkey should also be subjected to a set of precise and thorough selection criteria in terms of their interests, attitude, and skills towards the teaching profession to ensure their suitability with the personal qualities and talents befitting a teacher.

There should be a secure integration of theory and practice as well as an integration of pedagogy and subject knowledge within pre-service TE to bring about desired outcomes. Teaching practice courses need to be revised to improve quality control and accountability in teacher education. There must be a coherent and robust teacher education curriculum, which should be planned and sequenced judiciously. Instead of extending the education span, teaching quality should be improved in the standard duration of pre-service teacher education. Teacher proficiency and PTE curriculum should be aligned with the help of necessary organizational assessments.

Turkish Ministry of National Education (employer) and the universities (teacher educator) should be in constructive, effective, productive, and sustainable collaboration. All reforms and modifications in PTE should consider the opinions of the teacher unions and teachers’ real-life experiences. While introducing reforms, the country realities should be considered, and Turkey should revamp its own national TE policy, benefiting from her national and international experience.

References


OECD. (2014). Reviews of national policies for education - primary education in turkey


