VOCATIONAL EDUCATION IN TURKEY AND COMPARISON WITH COUNTRIES

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Abstract
In Turkey, vocational education has been made by vocational high schools in the body of universities since 1981 as per law No: 2547. As per this law No: 2547, vocational high schools are four semestered high schools which aim to train workforce for specific jobs. According to this, vocational high schools have an important role in education of qualified intermediary workforce for industries like service industry, agro industry and other industries.
Till today, many projects have been applied to continue the effectiveness of vocational high schools in addition to solutions to solve the existing problems of them. These projects are involved in Bologna process which aim to integrate with European High School Area and European Research Area. As per this aim, the problems of vocational high education in Turkey have been searched and on the other hand innovations have been made.
In our study, According to the EU integration process, we will firstly set the current situation of vocational high schools in Turkey and discuss the effectiveness of development projects. Secondly, we will analyse the practices of vocational high education models of EU countries, USA and far east countries and compare them with our model to see the differences and similarities. In conclusion, we will try to find out some solutions to improve the effectiveness of vocational high schools in Turkey.

Keywords: Education, Vocational High Schools, Vocational Education

Clasificare JEL: I20, I23

1. Introduction

The diversity in vocational education means the presence of the different vocational high schools and programmes directed to meet different needs. A part of the high education programmes provides post graduate programmes and expertise on some certain fields, whereas another part focus on the research function by offering PhD Programs. The rest meets the demand of high education by focusing on 4 year bachelor’s degree and associate degree programs.

Although, different meanings are attributed to universities and high education programmes frequently, they are evaluated in the same frame in terms of their main purposes and functions. In high education institutions, the most distinct feature of universities, differing them from the others, is the fact that they focus their attention on research functions. Vocational high schools and academies, on the other hand, carry out a different function and head towards to training vocational personnel.
The importance of VHS (Vocational High Schools) is particularly big in the developing countries, such as Turkey, in terms of training intermediate staff, needed to increase the competitiveness in production.

In our country the topic of developing vocational education, is handled in far and wide and in the scopes of both universities and secondary schools. Vocational higher education has been given within the body of VHS and by incorporating them to the universities since 1981 as per law no: 2547. According to law no: 2547 (2547/31), Vocational High Schools (VHS), “are high education institutions, providing training for four semesters, aiming to train intermediate staff”. Within this scope, vocational high schools have an important role in training qualified intermediate staff needed by agricultural, industrial and service sectors.

During the period of EU harmonization process particularly, some quality constructive studies in vocational education, in terms of quality and quantity, have been carried out both at secondary education institutions and universities on the basis of projects. With the projects in question, the integration of VHSs and trainings at VHSs to the “European High Education Area” and “European Research Area” has been aimed. In accordance with this purpose, some studies for the detection of the problems about the vocational education have been carried out on one hand and some innovations have been brought to the vocational higher education on the other hand.

During the this period of EU harmonization process, in this study at which the high education have been dealt with, the current situation about the vocational higher education will be put forth firstly by conveying the foundation process of the VHSs in Turkey. Secondly, the similar and different aspects of VHSs in Turkey will be tried to be presented by analyzing implementations related to the vocational higher education in EU member countries, the USA, Far Eastern countries. Thirdly, the effects of the projects for the development of VHSs will be discussed. The study will end with the solution recommendations for the increase of effectiveness of the VHSs.

2. The Foundation Process of Vocational Schools In Turkey

In the background of today’s vocational high schools, technician training which started in 1953 exists. Technician training includes the start up of apprenticeship schools, evening art schools, Mobile and Temporary Courses, Secondary Vocational Schools, Technician Schools and Engineering Schools to train technical work force in various areas.

Yet, in 1967, technician training and in 1972, professional technician training were ended up and in 1975, vocational education was accelerated by opening 45 high schools in the body of Widespread High Education Foundation. In 1982, Graduate Schools were identified as “Vocational High Schools” in the High education law no:2547 and attached to the universities. They were identified as “Vocational High Schools: are high education institutes providing four midterm education and aiming to train intermediate staff for some certain professions” (www.yok.gov.tr, date accessed: 10.08.2014).

In Turkey, high education institutes entered into the process of academic, institutional and administrative reconstruction with the High Education Law No:2547 introduced in 1981. With the law introduced, all high education institutions were gathered under the roof of High Education Board (YÖK). Academies were converted into universities, Educational Institutes became educational faculties and VHSs and conservatories were attached to universities. As stated in the law of higher education VHSs were identified as “High Education Institutions”

The objective of the foundation of vocational high schools is the education of the intermediate technical staff, meeting the needs of industry in real terms and improving the quality of vocational education apart from the preventing piling for entrance to university education. In this context, VHSs, as they are in the whole world, are the higher education institutions training qualified work force for varied business lines.

In global competition in our day, one of the problems reflected frequently from the point of our country is the deficiency of “intermediate staff” despite the need of qualified, vocationally well educated work force (Biçerli, 2011: 122-127; Pnar, 2010: 153-156; Mertargem, 2000: 1-5). Intermediate staff is a stage between worker and engineer, administrator and administrative personnel. It is obvious that with the employment of this stage and with the efficiency and quality in the service, global competitiveness will increase. VHSs, having a mission of training intermediate staff have important missions in the rise of the location in the global competition.

3. The Present Situation of The Vocational High Schools In Turkey

While the number of VHSs transferred from ministry of education to the high education board is 44, this number reached 177 in 1992, 466 in 2002 and 777 in 2012. Today, the number of the VHSs is 802 (www.osym.gov.tr, date accessed: 24.10.2014) Since 1982, although there is an increase in the number of two year vocational high schools, their share in the university education is still about 20% (Günay, 2010: 7). Despite these developments, it is a debatable topic that how suitable is the education, having taken by the graduat students, to the foundation objectives of the VHSs and whether they have met the needs of the industry.
As it is seen in Figure 1, the large part of the VHSs in Turkey are the ones belong to state universities. Of the 802 VHSs in Turkey, 705 of them, that is about 88 %, are at state universities, 57 of them, meaning 7%, are at foundation universities, 8 of them, which is 1%, are at foundation vocational high schools and 32 of them, that is 4%, are at other vocational high schools. In terms of VHS numbers, the big difference between state and foundation universities indicate that the perception of vocational and technical education should be changed. Vocational and technical education, which are very important for providing competitiveness to countries and economic development, the necessity for the increase of the private sector participation comes into prominence.

Surely, the fact that the difference between state and charitable foundation universities in terms of the number of VHSs cause the difference between the numbers of students to be big. In Figure 2, it is seen that 91% of the 777,741 students receive education from the state universities and 6% from foundation universities.

In order for the VHSs to reach their objective of their foundation and development of the vocational education, apart from increasing their number, open admission from vocational secondary schools to vocational high schools has been provided, thus, the vocational qualifications of the students, whose background in from the vocational education, have been aimed to increase with the intermediate staff training offered at VHSs.

In Table No.1, among the number of the students placed in the VHSs the number of the students placed with free admission and the content of these students among other students is seen. Although the share of the students placed
with free admission in the sum of students have decreased since 2002-2003 academic year, when the implementation started, it is remarkable that this rate is still high, at 55%.

Table No.1: The Number Of Students Placed at VHSs (on space available basis-free admission)

<table>
<thead>
<tr>
<th>Academic Basis</th>
<th>Space Basis</th>
<th>Placed</th>
<th>Free Admission</th>
<th>Placed/Free Admission (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012-2013</td>
<td>359.628</td>
<td>286.622</td>
<td>154.775</td>
<td>54.0%</td>
</tr>
<tr>
<td>2011-2012</td>
<td>331.608</td>
<td>219.608</td>
<td>112.000</td>
<td>51.0%</td>
</tr>
<tr>
<td>2010-2011</td>
<td>308.980</td>
<td>232.939</td>
<td>129.462</td>
<td>55.6%</td>
</tr>
<tr>
<td>2009-2010</td>
<td>305.230</td>
<td>258.612</td>
<td>112.227</td>
<td>43.0%</td>
</tr>
<tr>
<td>2008-2009</td>
<td>260.155</td>
<td>287.547</td>
<td>110.733</td>
<td>38.5%</td>
</tr>
<tr>
<td>2007-2008</td>
<td>211.460</td>
<td>236.881</td>
<td>134.092</td>
<td>56.6%</td>
</tr>
<tr>
<td>2006-2007</td>
<td>202.342</td>
<td>235.033</td>
<td>130.663</td>
<td>55.6%</td>
</tr>
<tr>
<td>2005-2006</td>
<td>195.667</td>
<td>216.608</td>
<td>133.594</td>
<td>61.7%</td>
</tr>
<tr>
<td>2004-2005</td>
<td>189.562</td>
<td>195.086</td>
<td>133.612</td>
<td>68.5%</td>
</tr>
</tbody>
</table>


In Figure No.3, the number of instructors in VHSs in Turkey is given. In 2013-2013 academic year, in VHSs, 14,985 academic member, 2,171 of whom lecturer, worked at vocational High schools. This situation means that there are 358 assistants per an academic member, and 52 students per lecturer.

Figure No.3: The Number of Teaching Assistants in VHSs (2012-2013 Academic Year)

Since the number of teaching assistants in Turkey is not enough, the number of students per a teaching assistant is high. For this reason, it may be concluded that workshop and laboratory implementations are not at the desired level.

4. The Comprasion of Vocational High Schools With Other Countries

As mentioned before, in order to train intermediate staff needed for the increase of competitiveness production, especially in the improving countries like Turkey, development of the VHSs is necessary. In this part of the study, as a result of the comparison between the VHSs in some countries, which are powerful in terms of production and trade, and VHSs in Turkey, some important conclusions are expected to be reached.

Firstly, a comparison with the USA will be made in terms of VHSs. Although the USA does not have a high share in Turkey’s foreign trade, in view of its competition supremacy worldwide in production and technology, the fact that it is a country to be considered in this comparison is obvious.

The second comparison with regards to VHSs is with the Far East countries, such as Japan, who has a high competitiveness in terms of production and technology like the USA and China, with whom we are in a close relationship in our foreign trade in spite of the big distance between two countries.
In our other comparison, EU countries exist in the third group countries. EU Countries, is the union of countries who has the biggest share in foreign trade of Turkey. Accordingly, the importance of the comparison with these countries is quite important.

4.1. Vocational High Schools In The USA

The USA is one of the most successful countries, where the diversity in higher education is one of the main appliance. As it is seen in Figure 4, the higher education institutions in the USA diverse in terms of both programme periods and research and education and training functions of the higher education. As it can be concluded from the Figure 4, in the diversity of the high education in the USA, schools which offer vocational education are given a big importance.

![Figure no.4: The High Education Institutions in the USA Differing in terms of Education-Training](image)


In the USA, private higher education institutions have a big contribution to the expansion of vocational education. According to the datum of 2011, 27% of the High education students in the USA, receive education at private and foundation universities (Snyder, 2010).

4.2. Vocational High Schools In Far East

In Japan, the diversities in the higher education, like the USA, is remarkable. Likewise, the higher education institutions in Japan differ in terms of program periods and both education-training and research functions and differing in terms of functions meeting different needs. In Figure No.5, it is seen that the share of the specialized colleges offering education for 1-3 years is 70%. This rate shows the amount of importance given to vocational education in higher education.

![Figure No.5: Higher Education Institutions in Japan](image)

Besides the diversity in education-training, it is seen that in the expansion of high education in Japan private higher education institutions have big contributions. 70% of the students in Japan receive education at private and foundation universities (RIHE, 2009)

While China, the most crowded country of the world, is creating a market economy system, it is accelerating the reform process in its High education system and making an effort to make the higher education institutions closer to the public, trying to create a system giving schools autonomy on training management and make perfecter.

In China vocational education is given in 3 stages. They are “vocational secondary school”, “vocational high school” and “third education”. “Third education” level giving vocational education, is mostly for three years, but small part of it is for two years. Priority among the vocational schools, are for the agricultural schools. These are, training technical and administrative personnel at a baseline level and provide work force to work at varied areas locally. Although the best students are employed by the state, the graduates of these schools generally find a job themselves (rdb.meb.gov.tr/yayinlar/Cin%20Egitim%20Sistemi.pdf, date accessed: 01.12.2014).

In China, in 2001, Changchun Vocational Institute of Technology (CMTE) was founded by combining 10 VHSs. The foundation of this institute of technology is accepted as an important development as for Vocational Higher Education in China. In the institute there are departments of engineering school, communication, automobile, trade, tourism, nourishment-food, press, not agriculture any more (rdb.meb.gov.tr/yayinlar/Cin%20%20Egitim%20Sistemi.pdf, date accessed: 01.12.2014).

Today, there are 3000 VHSs in China in total. The students studying at these schools consist the 17% of the young population and their number exceeds nearly 20 million. Apart from this, dissimilarly from the USA and Japan, most of the VHSs in China are state schools (http://www.unitedtowers.com/cin-egitim-sistemi.html, date accessed: 21.12.2014).

4.3. Vocational High Schools In The European Union

In the EU, there is institutional diversity in the VHSs as well as the high proportion of the participation of the private sector to higher education. The diversity in the EU raised especially in 1960s and 1970s and some schools giving vocational education under the names of “Polythecnics” in Endland “University Institute of Technology” in France, “Fachhochschulen” in Germany, “Regional Colleges” in Norway, “Third Grade Colleges” occured. In Europe, in background of the enlargement of these instutions where the vocational education functions in the foreground, the concern of raising the qualified work force needed by the economy in the higher education schools giving vocational training after secondary school education lies down. By this way, vocational education is realized in a shorter period of time and less costly without enduring 4 year university education (Küçükcan and Gür, 2009)

For this concern of the EU, there is an increase in the unemployment seen in early 1990s, the decrease in the rate of growth and fall in the competitiveness versus the USA and Japan. For this reason, in Brussels Summit, organized in 1993, the EU accepted “the White Book” as its new strategy. The scope of the White Book includes taking some measures for preventing unemployment such as giving weight to vocational education, increasing the efficiency of labour markets and rearranging working hours. Besides, in order to increase the competitiveness of the union, employing a strategy towards increasing physical capital share, instead of decreasing the cost of work force, and giving weight to research and development have been decided (Tuzcu, 2002).

EU constitutionally recognized “European High Education Area” and “European Research Area” with the Maastricht Treaty. Although there is a regulation in Rome Treaty about vocational education, EU education area have improved during the periods of Bologna Process and Lisbon Strategy ( Sağlam et.all., 2011: 104). In “European Higher Education Area” and “European Research Area” which the Bologna process aimed to create, EU citizens will be able to travel freely in order to get education or work. By this means, Europe will become preferable in terms of higher education and business opportunities by other people from other people of the world.

In the direction of this aim, the least desirable thing is member countries’ making their education systems a monotype one. The main purpose in the Europe Higher Education area is forming balance between diversity and union and making higher education systems to be comparable among themselves by protecting their original differences and harmonious. In this way, simplifying the passing from a country or a High education system to the other and thus, increase in the mobility and employment of the students and instructors have been aimed. In accession process to EU, Turkey needs to accommodate itself into eu education policy and improve its education programmes according this policy. In the scope of the process, some regulations in the education system of Turkey have been realized and they are still going on.

5. The Projects For The Vocational Education In Turkey

For Turkey, in the status of a partner country, developments about the need for intermediate staff and their employment are continuously among agenda topics. In this context, some serious regulations have been made for reconstruction of the VHSs schools in our country, their integration with EU and to find a solution for student and teaching assistant problems.
In the scientific activities during the reconstruction of VHSs, site selection for foundation, teaching assistants, administrators and students, curriculum, equipment, relations with business market, undergraduate and external transfer, quality and accreditation problems were verbalized as the main problems and some serious steps have been taken to offer solutions and their implementation (4th High Education Principles’ Meeting Final Declaration, date accessed: 12.12.2014).

The need for vocational education in country to have flexibility in order to answer the developments in the labour market is vocalized in all platforms and the qualification problem has been maintaining its importance. During the 8th plan process, investments for education have gained importance and the use of information and communication technologies has been generalized. Yet, in order to increase the quality of education, the need for the renewal of the education programmes, physical infrastructure, improvement in the qualifications of hardware and teaching assistants is still at issue. In the scope of the studies “Professional Competency Board Law” with law no:544 was published in Official Journal in 2006.

The aim of this law is to found “National Vocational Sufficiency System” compatible with European Union and run this system. The aim of the Professional Competency Board created at law is setting the regulations of the national competencies in technical and vocational areas by grounding on national and international occupational standarts and conducting activitien on inspection, assessment and evaluation, documentation and certifying.

In our country, improvement of the vocational education has been dealt with widely, both under the roof of the university and in scope of secondary education. In evidence of the scientific research on this topic, it is shown that the relationship of the VHSs with the sector is weak, and developing cooperation with the private sector is extremely urgent (Acar and Tugay, 2007:1-12). On the other hand, the fact that VHS graduate is unqualified in spite of having received vocational education and the sources of teaching assistants at VHSs are needed to be increased for them to adapt into the changing technology and their renewal are among the topics which are remarkable (İçli, 2007: 263-272).

As a result, for the vocational education in Turkey to improve, some projects on the current situation have been accelerated. The most remarkable one among the projects on the current situation is private sector-university cooperation. The cooperation, is not only with the private sector but also has a voice in creating the legislation, in other words, cooperation with the state sector which is in the position of decision maker, has a big importance on vocational education. Especially within scope of the EU harmonization process, both universities and secondary education institutions have been observed to do some studies for increasing quality and quantity on vocational education. In this context, the implementations called “training at work” and “job training” are the most remarkable projects. These programmes are organized for students to be adapted to working life. By this means, students are provided an opportunity for getting to know the working life, gaining experience on their jobs, comparision of theory and application.

In the projects where vocational education is aimed to be improved, some studies for the increase of applied course hours have been realized (Bayer, 1998: 145-156). Among these studies, “YÖK/WB (World Bank) Industrial Education Projects” have been implemented extensively in terms of both the increase of hours in applied courses and vocational equipment since, apart from the applied course hours, professional competency of the instructors has been risen by sending them abroad (Varol and Varol, 2001: 610-620).

Another study for the improvement of the vocational education is “Vocational and Technical Education Regions Project”. As it has been mentioned before, with the project, professional qualifications of the students coming from the background of the vocational education have been aimed to increase with the intermediate staff training (Koşan, 2003: 107-130). “Leonardo da Vinci” and “Erasmus” programmes, in the context of “life long learning programme” contribute to the realization of this purpose. These programmes enable both students and instructors to increase their experiences harmonious with the necessities of the technological advancements by improving the relationships with the other schools abroad (www.ua.gov.tr, date accessed: 10.11.2014).

In the context of the “Improvement of the Human Resources by Vocational Education Project”, made for the improvement of the vocational training, with the way of increasing the modernization and quality of the vocational education, the development of the human resources has been encouraged and the cooperation of the VHSs and vocational technical secondary education has been aimed (http://ikmep.yok.gov.tr, date accessed: 10.11.2014).

With all these studies and projects, raising a work force to increase the qualifications and rate of employment, more importantly, to accelerate the foreign trade of Turkey and play important roles in the competition have been aimed. In that case, the selection of the VHS programmes, the qualifications of the teaching staff and their being open minded to the technological advancements become very important. In programme selection, it must be foreseen what contribution the programme will provide to local necessities and, in the long run, to the region and economy of the country. Taking the demand of the sector into consideration must gain functionality as a fact which increase the employment.

6. Result And Solution Recommendations

As a result of the analysis of the development of the VHSs and its comparision with other countries, the remarkable problems and solution recommendations for these problems may be classified as stated below:
Problems arising from the education programmes: Because of the indifference of the sector and its being not cooperative, the updating of the education programmes is on the shoulders of the instructors. Besides, it can be stated that there is a decrease in the quality of service and the efficiency of the vocational education have not been able to be provided because of the deficiency of qualified work force and finance although the increase in the number of VHSs seems to be an important development. As a solution to this problem, VHS-sector cooperation must be strengthened and theoretical and practical education must be integrated.

Problems arising from the education level of the students: The fact that the students of VHSs are academically less successful may cause promising students to become distanced to the schools. In this case, a decrease in the motivation of lecturers and education at a university level cannot be realized. Free admission system, applied since 2002, is though to increase the problems. In order to clear off the solutions depending on free admission, improving academic achievements at the secondary schools from which the students graduated is important.

It is also important to set “International Occupational Standarts”. Studies for setting the Professional standarts are quite new, but they have a big importance for enabling students to participate in the business world, equipped with all the qualifications desired. On the other hand, vocational directions for the students will be shaped in line with the students’ ability to choose profession and by strengthening counselling services at school and motivations of the students will increase. In profession routing in our country, unfortunately, the demands of the families and environmental factors are determinant, rather than the abilities of the students.

Insufficient infrastructure and old technology: The fact that physical infrastructure (hardware, building, instructor) is unable to meet the demand is another important problem. While the number of students per an instructor is 5-20 in developed countries, in our country it is over 70 in the VHSs. VHSs, opened for a development of a region, without need analysis and as a result of political pressure are not efficient because of the insufficient infrastructure. Especially the VHSs opened in the districts are far away from meeting sports, social and cultural needs of the students. VHSs not being able to train its own instructors and the need for improvement of the intructors’ personal rights are among the other problems.

Providing VHSs an oppurtunity and basis to train their own lecturers will contribute to an increase in the quality of education. In the selection of the lecturers, featuring industrial experience criteria may be important to increase the quality of vocational education. VHSs, opened as a result of regional needs and vocational needs analysis will be able to meet the demands of both students and the sector more efficiently.

As a conclusion, unless solutions are found for vocational education, an important source will be kept using unecessarily. In order to overcome this situation, a new structuring must be implemented by following the recommendations above. In this context, “Applied Sciences High Schools” must be founded and VHSs must be gathered in this system and it must be made an attraction centre for students.

7. Bibliography


