

Research in Social Sciences and Technology

INNOVATION AND EDUCATION

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Abstract

We are living in a world that is changing rapidly and becoming more globalized. Especially the changes in the areas of science, technology and economy are becoming effective in the areas like education and health that are closely related to human life. We are experiencing a quick process named 'globalization' that changes economic, social and political structures of the world and that no one can predict the outcome. These changes create new opportunities while opening new challenging areas. In order for countries to compete with each other, they need to be creative in all areas and they also need to be reformist to cope with domestic, national and global problems. In this study, the innovations in the area of education throughout the world will be examined and the place of Turkey compared to other countries in educational innovations will be analyzed. Also the concept of 'Charter Schools' as acceleration in educational innovation in the United State of America, who is the leader in terms of innovation in the World, will be analyzed. This study will also analyze the Charter Schools in the USA and discuss whether the concept can be implemented in Turkey and bring dynamism to education or increase the quality of education. While looking for the answers of these questions, the researcher conducted a literature review and also used the data he gathered while staying in the USA for nine years for pursuing his MA and PhD degrees. **Keywords:** Education, innovation, USA, charter school, Turkey.

Introduction

Development of technology in today's Information Society has become one of the most important factors for economic development and competitiveness. Development of science and technology in a country can be achieved by the science and technology policies directed by state-government. On the other hand, having real science and technology policies depend on basing those policies on a more concrete system (Saatçioğlu, 2005). The importance of science and technology policies given by countries will also shape the administration of the science and technology systems of those nations. Science and technology administration system covers effective institutions and mechanisms that help developing national policies and implementing them. These systems are named as National Innovation Systems in today's World (DPT, 2000; 2006).

The United States of America (USA) is leader not only in science, economy and politics, but also in the area of innovation. Asking the question 'what makes USA so different and leader in the World?' will help us to understand the reasons why it is so and also give us ideas about creating effective social, political, economy and education policies for the developing countries, like Turkey.

The most important reason that innovation in the USA is so powerful is that innovation is supported both materially and spiritually (EurActiv, 2010). "While having a creative mind is noticed, the organizations within the system encourage creativity" (EurActiv, 2010). Also another aspect that exists in the USA but not in other countries is a developed and rich internal market. The world's largest and most competitive economy in the USA holds a dynamic internal market that request innovations. Education system in the USA also supports successful students by providing scholarships and scientifically rich environments (EurActiv, 2010).

In this regard, patent rights and their usage come first among the issues that the USA give weight to. They are very important for the USA based companies especially for R&D. IT companies in the USA invest in R&D at the level of 8 to 10 percent of their income. The USA came first in the area of investment in R&D in 2008 by investing 365 billion dollars and China followed it by an investment of 217 billion dollars.

These numbers indicates that Countries like EU members and other developing countries must seriously address R&D and innovation as important issues if they want to be involved in global race. It might be the reason that European Commission declared 2009 as the year of innovation and creativity". The aim was to promote creative and innovative approached in different sectors and help EU to go forward in the globalized world strongly.

It can be understood that by declaring the year of Creativity and Innovation, European Commission is aware of the importance of creativity and innovation on personal, social and

economic developments. Thus the main topics occurred in 2010 are as follow: Pre-school, the promotion of artistic and other creative fields during primary and secondary education; fore-fronting cultural diversity as the source for creativity and innovation; supporting mathematics, science and technology education for the development of creative minds; supporting innovation as a path to sustainable development; performing regional and local development strategies based on creativity and innovation; promoting innovation in the private and public services (EurActiv, 2010).

EU and Innovation

2008 European Innovation Scoreboard (EIS) reveals that throughout EU-27, the increase of the innovation performance during the last five years has been 2,3%. The main engines of this development are human resources sector with an increase of 4% and finance and support sector with an increase of 7.1%.

According to the EIS data, the areas where the EU is strong are; education for youth, public R&D expenditures, IT expenditures, knowledge-intensive services, and importation of advanced technology products. The areas where the EU is weak are innovative collaboration among SMEs and lifelong education. In line with these indications, Sweden, Finland, Germany, Denmark and the United Kingdom are considered as the "leaders of innovation". The innovation performance of these countries is above the average of EU. Among these countries the country that innovation performance is the fastest performing is Germany. Denmark is the slowest country in the field of innovation.

Austria, Ireland, Luxembourg, Belgium, France and the Netherlands are described as the "Innovation Followers". The innovation performance of these countries is lower than the innovation leaders' but higher than the average of the EU. The fastest developing country in terms of innovation performance in this group is Ireland and second is Austria.

Cyprus, Estonia, Slovenia, Czech Republic, Spain, Portugal, Greece and Italy are described as "Moderate Innovators". The innovation performance of these countries is lower than the EU average. Cyprus is the country that is fastest developing in terms of innovation performance. Portugal follows Cyprus. There is no development with the performance of Spain and Italy.

Malta, Hungary, Slovakia, Poland, Lithuania, Latvia and Bulgaria are categorized as countries 'Innovation Followers' that have performance lower than the EU average. Among these countries, Bulgaria and Romania are the countries that show the fastest development in terms of innovation performance.

2008 European Innovation Scoreboard shows that the EU is behind the USA and Japan in terms of innovation especially in four areas. These are international trademarks; governmental-public sectors connections, number of researchers and the expenditures of market on R&D.

On the other hand, 2008 Global Innovation Scoreboard reveals that the EU with its 27 members is performing better that developing economies like China, India and Brazil in terms of innovation performance.

Turkey, Innovation and Education

Turkey is placed towards the end of the list on the area of innovation compared to the EU countries. In "The Global Competitiveness Report 2013-2014", Turkey is in the 44th line among 148 countries.

Table 1
The Global Competitiveness (GCI) 2013-2014

| List of Some Countries According to The Global Competitiveness (GCI) 2013-2014 | | | | | | | | | |
|--|---------------|-------|------|-------|--|--|--|--|--|
| GCI 201 | GCI 2012-2013 | | | | | | | | |
| Countries | Rank | Value | Rank | Value | | | | | |
| Switzerland | 1 | 5,67 | 1 | 5,72 | | | | | |
| Singapore | 2 | 5,61 | 2 | 5,67 | | | | | |
| Finland | 3 | 5,54 | 3 | 5,55 | | | | | |
| Germany | 4 | 5,51 | 6 | 5,48 | | | | | |

| USA | 5 | 5,48 | 7 | 5,47 |
|--------------|-----|------|-----|------|
| Sweden | 6 | 5,48 | 4 | 5,53 |
| Hong Kong | 7 | 5,47 | 9 | 5,41 |
| Netherlands | 8 | 5,42 | 5 | 5,5 |
| Japon | 9 | 5,4 | 10 | 5,4 |
| England | 10 | 5,37 | 8 | 5,45 |
| Qatar | 13 | 5,24 | 11 | 5,38 |
| Avusturalia | 16 | 5,15 | 20 | 5,12 |
| Soudi Arabia | 20 | 5,1 | 18 | 5,19 |
| France | 23 | 5,05 | 21 | 5,11 |
| South Korea | 25 | 5,01 | 19 | 5,12 |
| China | 29 | 4,84 | 29 | 4,83 |
| Chile | 34 | 4,61 | 33 | 4,65 |
| Spain | 35 | 4,57 | 36 | 4,6 |
| Turkey | 44 | 4,45 | 43 | 4,45 |
| Italy | 49 | 4,41 | 42 | 4,46 |
| Portugal | 51 | 4,4 | 49 | 4,4 |
| South Africa | 53 | 4,37 | 52 | 4,37 |
| Mexico | 55 | 4,34 | 53 | 4,36 |
| Brazil | 56 | 4,33 | 48 | 4,4 |
| Bulgaria | 57 | 4,31 | 62 | 4,27 |
| India | 60 | 4,28 | 59 | 4,32 |
| Rusia | 64 | 4,25 | 67 | 4,2 |
| Iran | 82 | 4,07 | 66 | 4,22 |
| Greece | 91 | 3,93 | 96 | 3,86 |
| Algerian | 100 | 3,79 | 110 | 3,72 |
| | | • | | |

According to the European Innovation Scoreboard--(EIS) "Turkey is among the countries like Malta, Hungary, Slovakia, Poland, Lithuania, Latvia and Bulgaria that have lower performance compared to the EU average. However, development is taking place in recent years. Compared to the average performance of the country, the areas that innovation is most powerful are finance and support services." (EurActiv, 2010). However we cannot claim it in the education sector. "The weakest areas are human resources and innovation investments of companies. The performance of Turkey in especially human resource area is close to zero level. As a result of the increase in personal credits (18%), R&D expenditures of the market (17.5%), technology expenditures (19.8%) and importation of knowledge-

intensive services (31%), the leader areas of the innovation performance have been finance, support services and company investments."(EurActiv, 2010).

Table 2

Global Competitiveness Index (GCI)

| Global Competitiveness Index (GCI) | R | ank | V | Value | | |
|-------------------------------------|--------|--------|--------|-------|--|--|
| | (2013- | (2012- | (2013- | 2012- | | |
| | 2014) | 2013) | 2014) | 2013) | | |
| GCI | 44 | 43 | 4,5 | 4,5 | | |
| Basic Requirements (36,0%) | 56 | 57 | 4,8 | 4,8 | | |
| Organizational Structure | 56 | 64 | 4,1 | 4 | | |
| Infrastructure | 49 | 51 | 4,5 | 4,4 | | |
| Macroeconomic Stability | 76 | 55 | 4,6 | 4,9 | | |
| Health and Basic Education | 59 | 63 | 5,9 | 5,8 | | |
| Productivity Raisers (50,0%) | 45 | 42 | 4,4 | 4,4 | | |
| Higher Education and In Service | 65 | 74 | | | | |
| Training | | | 4,3 | 4,9 | | |
| Product Market Efficiency | 43 | 38 | 4,5 | 5,8 | | |
| Labour Market Efficiency | 130 | 124 | 3,7 | 4,4 | | |
| Financial Market Development | 51 | 44 | 4,4 | 4,1 | | |
| Technological Infrastructure | 58 | 53 | 4,1 | 4,6 | | |
| Market Size | 16 | 15 | 5,3 | 3,8 | | |
| Innovation and Variety Factors | 47 | 50 | | | | |
| (14,0%) | | | 3,9 | 4,5 | | |
| Development Level of Business World | 43 | 47 | 4,4 | 4,3 | | |
| Innovation | 50 | 55 | 3,5 | 3,3 | | |

As seen in the table that contains the components to calculate The Global Competitiveness Index; the most important improvements compared to the previous year have been in the areas of institutional structuring, healthcare and basic education, innovation, higher education and in-service training. (Demir, 2013). It is seen that the innovation capacity, which is composed of the quality of scientific research institutions, R & D expenditures of corporate sectors, university-industry collaboration in R & D, the public's purchasing policy for advanced technologies, the presence of scientists and engineers, patents and intellectual

property rights protection, has increased five steps and taken the 50th place in the 2012-2013 report compared to the previous year. (Ulengin, Ekici, & Tamer, 2014).

In the Global Innovation Index published by INSEAD, Cornell University and WIPO, Turkey is in the 68th country among 142 countries with a score of 36,03. Swetzerland comes first in this index with a score of 66,59 (Ulengin, Ekici, & Tamer, 2014). In the meantime the R&D investments of Turkey is equivalent to only 0.6 percent of GDP. 65% of R&D spending comes from the government and 35% comes from the private sector.

Table 3

R&D Performance of Countries

| | R&D Spendings (GERD, Million \$) | R & D expenditures to GDP Ratio (%) | R & D expenditure per person (\$) |
|----------|--|--|---|
| Germany | 93,1 | 2,88 | 1138 |
| USA | 415,2 | 2,77 | 1331 |
| China | 178,2 | 1,84 | 155 |
| Japan | 141 | 3,39 | 1146 |
| S. Korea | 53,2 | 4,03 | 1203 |
| Turkey | 11,1 | 0,92 | 166 |

(Source: OECD Science, Technology and Industry Scoreboard 2013)

The gross domestic R&D expenditures of Turkey increased 17,1% in 2012 compared to the previous year and was calculated as 6581 million dollar (13 062 millions TL). The share of R&D expenditures in GDP was 0,86% in 2011 and 0,92% in 2012.

Looking at the table below, one can see that Turkey is behind other countries especially in the areas of "Quality of Scientific Research Organizations, R&D Expenditures of Companies and university-industry collaboration in R & D".

Table 4

Competitiveness Ranking Index of Countries

| | Germany | USA | China | Japan | S.Korea | Turkey |
|--|---------|-----|-------|-------|----------------|--------|
| Competitiveness Ranking (148 | 4 | 5 | 29 | 9 | 25 | 44 |
| Countries) | 7 | 3 | 2) | , | 23 | 77 |
| Innovation Capacity | 3 | 5 | 30 | 6 | 22 | 45 |
| Quality of Scientific Research | 6 | 5 | 41 | 9 | 24 | 63 |
| Organizations | U | 5 | 41 | 9 | 2 4 | 03 |
| R&D Expenditures of Companies | 4 | 5 | 22 | 2 | 20 | 68 |
| University-industry collaboration in | 9 | 3 | 33 | 17 | 26 | 52 |
| R&D | 9 | 3 | 33 | 1 / | 20 | 32 |
| Public Procurement of Advanced | 17 | 15 | 13 | 37 | 31 | 23 |
| Technology | 1 / | 13 | 13 | 37 | 31 | 23 |
| Scientists and Presence of Engineers | 17 | 6 | 44 | 4 | 33 | 53 |
| Useful Models, Patents | 6 | 12 | 36 | 4 | 9 | 41 |

(Source: World Economic Forum | The Global Competitiveness Report 2013–2014)

Turkey was in 70th place among 148 countries in the Access to Research and Education Services Index in 2013-2014 periods. This Index is one of those few indexes that show Turkey as performing low since 2006. In 2006 Turkey was in 44th place with a score of 4.23. In 2013, the country had the same score but placed 70th. In this index, Turkey has a score of 4,19 that is above the World average. The score of Switzerland that is placed first in this index is 6,47. Protection of intellectual property is indicator that is directly related to the level of development. Countries that are among the best performing ones in this are all the ones that have high level of national income per capita. (Ulengin, Ekici, & Tamer, 2014).

Table5
Last 8th Annual Development of Turkey

| | 2013- | 2012- | 2010- | 2009- | 2008- | 2007- | 2006- |
|-------|-------|-------|-------|-------|-------|-------|-------|
| | 2014 | 2013 | 2011 | 2010 | 2009 | 2008 | 2007 |
| Score | 4,23 | 4,04 | 4,24 | 3,88 | 3,88 | 4,34 | 4,23 |
| Rank | 70 | 77 | 58 | 75 | 68 | 43 | 44 |

Table 6
8th Annual Growth 2013-2014 Period and the Top Ten Countries

| | 2013-2014 | | 2013-2014 2012-2013 | | 2010- | 2010-2011 | | 2009-2010 | | 2008-2009 | | 2007-2008 | | 2006-2007 | |
|-------------|-----------|------|---------------------|------|-------|-----------|-------|-----------|-------|-----------|-------|-----------|-------|-----------|--|
| | Score | Rank | Score | Rank | Score | Rank | Score | Rank | Score | Rank | Score | Rank | Score | Rank | |
| Switzerland | 5,47 | 1 | 6,43 | 1 | 6,44 | 1 | 5,3 | 1 | 5,02 | 2 | 5,99 | 1 | 5,92 | 5 | |
| Germany | 5,1 | 2 | 6,09 | 4 | 5,98 | 2 | 6,03 | 2 | 5,81 | 5 | 5,98 | 3 | 6,07 | 3 | |
| Netherlands | 5,09 | 3 | 6,13 | 2 | 6 | 4 | 5,97 | 4 | 5,83 | 3 | 5,81 | 7 | 5,7 | 8 | |
| Austria | 5,09 | 4 | 6,09 | 3 | 5,96 | 6 | 5,55 | 12 | 5,23 | 16 | 5,32 | 15 | 5,32 | 14 | |
| Belgium | 5,94 | 5 | 5,9 | 5 | 5,81 | 9 | 5,63 | 10 | 5,61 | 11 | 5,73 | 8 | 5,63 | 11 | |
| Finland | 5,87 | 6 | 5,67 | 8 | 5,64 | 7 | 5,94 | 5 | 5,82 | 4 | 5,71 | 9 | 5,82 | 6 | |
| Hong Kong | 5,75 | 7 | 5,53 | 10 | 5,27 | 15 | 5,05 | 20 | 4,88 | 25 | 5,08 | 19 | 4,93 | 21 | |
| Sweden | 5,69 | 8 | 5,77 | 7 | 5,97 | 3 | 5,84 | 7 | 5,73 | 7 | 5,89 | 4 | 5,59 | 13 | |
| USA | 5,67 | 9 | 5,6 | 9 | 5,63 | 10 | 5,98 | 3 | 5,12 | 1 | 5,99 | 2 | 6,14 | 1 | |
| Porto Rio | 5,61 | 10 | 5,51 | 11 | 5,35 | 18 | 4,95 | 23 | 4,68 | 31 | 4,72 | 30 | | | |

The EU was planning to be the world's most competitive market in 2010 within the framework of Lisbon Strategy by leaving behind the world leader, which was the USA. The essential element of economic growth in this strategy was innovation. However the year 2010 has passed and it is understood that the Lisbon Strategy is not realistic due to the unexpected results. Likewise the declaration of the year 2009 as the year of Creativity and Innovation does not sound realistic since it is not known whether it is only symbolic or will create tangible and concrete consequences. Therefore a new strategy document and development plan was prepared and called as The Europe 2020 Strategy. This is a strategy document that tells what Europe plans to do from 2010 to 2020 and aims at being the guide of the continent for the next 10 years. In this strategy document, five main measurable objectives are determined for the Europe in 2020 and 7 main initiatives are mentioned to accomplish these goals. "Innovation Union" is one of those 7 main initiatives (Innovation Union, 2013). Thus, it is targeted to increase the share of R&D expenditures, specifically the R&D investments of private sector, in Gross National Product to 3% by improving conditions for investment and developing a new indicator for measuring the innovation (T.C. Sanayi ve Ticaret Bakanlığı AB Koordinasyon Genel Müdürlüğü, 2011).

An Innovation Model in American Education System: Charter Schools

Charter means "transferred" or "transferred rights". The terms 'Charter Schools' means education and training activities financially supported entirely by the state and transferred to another organization or institution for a certain time period. Charter schools have a history of 20 years. The first time that Charter Schools gained an official status was in 1991 with the Charter School Act that was adopted by the State of Minnesota. The State of California followed this in 1992 by adopting its own State Law. Today there are more than 40 States in the USA that adopted Charter Schools laws and also there are more than five thousands charter schools. Its' ratio to the total public schools is %5.1. (National Alliance for Public Charter Schools, 2012)

These schools are like the private schools established in Turkey. Although the operation of those schools is different in each state, all of them are covered by the state budget. The students do not pay any tuition fee to those schools. People who want to open a school shall prepare a detailed proposal. This proposal is accepted as the constitution of the school. In the proposal, how the school will operate, curriculum and discipline practices are mentioned besides what it will offer different than the other schools, that is innovation. The people who prepare that proposal should introduce a different system or feature other than the local public should offer. In other words, the Charter school should be an alternative to the existing schools. Otherwise, justification for the existence of these schools will disappear.

The prepared proposals are submitted to various authorities of the State. Sometimes this authority is the Ministry of National Education, sometimes a school district or authorized universities in the state. The process of preparing proposal is difficult and time-consuming. To give an example from my personal experiences, it corresponds to about a two-year preparatory process with a team of twenty members. The team that prepared the proposal included specialists from different areas including science, social science and foreign languages. At the end of an intensive two-year preparation, there were two folders consisting

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an application file of more than one thousand pages that contained all information for a school to be opened. After submitting this proposal to the authorized institution, a team of 25 people specialized in different areas investigated it and prepared a detailed report. After submitting this report to the relevant authorities, they conducted a meeting called "public hearing" before giving their decision so that the applicants could inform the public about their project and answer their questions. In this meeting, the decision can be given or another date for public hearing can be decided if needed but it is understood that the process is very strict and detailed. These meetings are done open to the public since all these initiatives are done by the "Tax Money" coming from the local people and by doing that people find the chance to check whether their money is spent by the authorities according to their needs. Therefore, while people who support the applicants may be present in those meetings, people who do not support and want to block the proposal may also present their ideas.

Upon the acceptance of the proposal, the State Education Ministry pays a certain amount of money that may change from State to State to the applicants as a 'start up' for the costs during the opening process. This amount may change from 100.000 USD to 400.000 USD. However, sometimes it may take time to receive this Money so the applicants should be ready for the first spending. After getting the permission to open the school, the founding members first establish School Board of Trustees. In some States the school board of trustees should be established before opening the school. The board of trustees assigns a manager and then starts the process to open the school. The first step is to rent the building. State ministry controls the building to find out whether it is convenient for education and then upon the positive report, the school can be opened. The principal recruits the teachers after the approval of the board of trustees based on the criteria defined by the State Ministry. The teachers are recruited for one year.

There is no entrance exam for those students who live in the school zone and it is open to all. If the number of students applied to the school is higher than the quotas of the entire school, the students are accepted by drawing of lottery. The State Ministry pays tuition fee to the school for each student between 5.500 USD and 18.000 USD according to the State Laws and regions. This amount might be paid monthly, bi-monthly or quarterly. The schools can use this Money for the salaries of the teachers, rent of the building, social and sports activities of the students, electricity, water and gas bills and equipment materials. Some States provide the textbooks of students and in some States the schools buy the textbooks from the Money they receive from the state. Also based on the economic conditions of the students, the State contributes to the lunch of students.

The schools are audited strictly in two different areas. One of these is economically and the other is quality of education. Within the economic control, the State controls the school regarding how the money for opening the school and tuition fees is spent. In case of detection of improper use of Money, various penalties may be applicable including the closure of school. Evaluating the success of the students in national and statewide exams controls the quality of education. Within the framework of "No Child Left Behind" act, the school will be closed if the school fails for three consecutive years.

Charter schools were established in the USA in 1993 as the alternatives of the public schools. The interruption of education by the teachers who were members of teacher unions was one of the reasons of the establishment of those schools. The general success level in these schools is higher compared to the public schools in their regions. This success comes without further burden on the state budget. In the meantime, the public schools are trying to increase their quality by looking at those schools. The key point behind the success is the ability to bring an alternative way to solve the problems that current system cannot do. Thus even the schools hours and course hours can change in the proposed charter. The staff also

can work more than the ones in public schools. This is determined in the contract between the school and the teachers.

The number of students entering to charter schools varies but usually it is between 5% - 10%. Charter schools use the state Money in their expenditures and are regarded as non-profit organizations so that are exempt from tax.

A very convenient infrastructure has been created in the USA with the Charter schools to develop alternative educational models. It is the result of these alternative educational models that in each region new schools are opened based on the local students' profiles and needs so that programs different than the public schools can be offered.

Solution Focused and Innovative Glance At Turkish Educational System Problems

It is not the aim of this study to list or examine the problems of Turkish educational system. There are numerous institutional reports and academic papers written on this areas (Akyüz, 2012; Berberoğlu & Kalender, 2005; DİE, 2004; 2005; DPT, 2000; 2006; ERG, 2007; 2008; 2009; 2010; 2011; Gur & Celik 2009; EU Comission, 2007; 2009; 2010; 2011; 2012; 2013; Gedikoğlu, 2005; Küçükcan, & Gür, 2009; Tarman, 2008; 2010; 2011; Tarman & Acun 2010). For this reason, instead of examining the existing problems, a new concept that is 'Charter Schools' is added to the literature in order to develop a solution-oriented approach. Charter School concept that is solution-oriented and innovational might be considered as a solution to the problems of the Turkish education system.

With the starting of 2012-13 academic year, Ministry of National Education (MoNE) made a radical innovation by switching to 4+4+4 system. As a result of this radical innovation that did not have any groundwork, a situation that was never heard before in the history of MEB occurred and more than 500.000 students were not placed in a high schools (Soner, 2013). Authorities are trying to overcome these problems but whether fort his current problem

or other problems that are waiting for a solution for so many years, the concept of Charter Schools should be brought to our country and implemented according to the Dynamics and realities of the country.

On the condition that they do not conflict with the standards and goals of the National Education, the charter schools that develop their own curriculum and implement their own educational methods will result in new innovative approaches and let students to receive education based on their needs because the reason that those schools exist is to provide a better education with a reduced operating cost.

These schools, which are open to all students without discrimination of any kind, have to have effective programs to attract parents and students. Otherwise the administration of the school will not be able to run the school economically. This way it will be mandatory to provide better service in order to operate.

The concept of 'Charter schools' should be examined in depth in order to find solution to many of our educational problems. It is because it might solve problems with its' innovative feature but also might create more important problems if not planned carefully. Therefore the weaknesses of charter schools should also be laid down.

Criticism of Charter School System

People usually criticize Charter schools since they are regarded as additional cost to the budget. A charter school that is approved by the authorities is a school funded by the State with the funding coming from the tax Money. Spending those tax Money for the charter schools that appeal to a small group of society compared to the public schools is the point that is criticized by people.

Another criticism towards charter schools is that the founders might have secret agendas. This 'secret agenda' brings a more serious fear that the schools might be established

for different reasons other than the reasons suggested during the process of establishment. To give an example, people might fear that those schools will grow a new generation that is not supported by the current system.

Another criticism is towards the selection of administrative and academic staff by the school administration that makes people anxious about the competence of individuals. Many other criticisms can be added to the ones above. However, due to the scope of our study, the most prominent of these critics are highlighted here.

Conclusion

It can be said that both developed and developing countries are trying to reinforce their education system both nationally and internationally. In developed countries, this search for reinforcement is a dynamic structure that looks for the best, while in developing countries the search is for understanding and transferring the systems in countries that are in better positions. This situation might be supported and or may appear as a compelling reason by internal and external factors. Eventually the basic goal is to make the system better. In our country, the need for restructuring to strengthen the capacity MEB is accepted by many institutions. There are various think tanks (SETA, ERG, etc.) that prepare reports to help official executives of MEB to assist policymaking by addressing our education system from different perspectives. Also, the existing in-house trained personnel or trained external specialists help MEB to conduct research and analyze the results in order to determine new policies.

On the basis of both international and national assessments, the problems of quality in education are addressed but there is not any clear solution for those problems. Charter school concept that we tried to discuss in this study is s an approach to increase the quality in education. The strengths and weaknesses of this approach that we tried to explain in this study

will increase the quality of education by bringing a competitive environment and leading to a continuous search for a better system. It will also bring the idea of 'accountability and standardization in education' that is an important criteria for the quality of education.

A research conducted in the USA in 1983 (A Nation at Risk) found that in terms of student success, the USA that was one of the super powers of the world was in a critical level compared to the other countries. This situation made the politicians think about reconstructing educational system and resulted in an educational reform. This educational reform then turned into an act called 'No Child Left Behind Act' by taking the shape of standards-based accountability in 2000s.

In fact, this reform aims at upbringing of each student for each class in accordance with the minimum standards and then as a result, increasing the quality of education by helding the schools accountable. Accordingly, even though each school, town or state is free to practice different curricula, they need to reconfigure their curricula since NCLB brings a kind of standardization. For our country, a new system where standards for each student are determined and then evaluation of whether the students reach those standards is necessary instead of defining the curricula in a centralized system. This system will not only provide autonomy to teachers in determining curriculum on the basis of standards, but also force the teachers to become more professionals. By this way, it will be easier to track what students are learning. In order for this to be real, both teachers and administrators need to get trained with short, medium and long-term plans. In fact, to have autonomy on the basis of curriculum is possible with the "Charter School" approach we tried to examine above. The points that should be taken care of are to take measures against the weaknesses of the approach. Thus it will be possible to prevent moving away from increasing the quality of education.

There are numerous studies conducted on Decentralized or Centralized education systems. There are studies that are especially about highly decentralized and highly

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centralized education systems. To give an example, France is a "highly centralized" country. On the other hand, the USA and Canada are "highly decentralized". When one looks at the TIMMS scores of these countries, he/she can see that the success level of these two systems is very different. France is the strictest country in this subject and all the decentralization efforts have backfired. On the other hand, there are discussions in the USA regarding to have a more centralized system. Looking at the TIMMS scores, the United Kingdom is far beyond both the USA and France but the education system is neither "highly centralized" nor "highly decentralized". They have a more balanced system. In other words, the control is neither in the hands of local governments nor central government. The United Kingdom might be considered as an example for Turkey since existing ideological approaches will open the way for those ideologies to dominate in certain areas and the ideology of education will be different in all regions. Charter school concept exists in the United Kingdom and is implemented effectively.

There is not any system that is perfect all the times. It is for this reason that social, economic and cultural needs create the necessity for reconstructing and empowering the existing systems. The positive results and developments depend on to what extend this reconstructing process was effective. To do it effectively, there should be historical consciousness and a continuous search for the best practices, analysis and applications. A trust environment is a necessity to do this. To do this, as I have mentioned in my previous studies, there should be social 'mindset change'. Based on this understanding and without ignoring our cultural and historical accumulations, Charter school concept should be used after comprehensively examined. This implementation should start with a pilot Project and should be used throughout the country on after determining the deficiencies and addressing them.

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