SHORT-CYCLE HIGHER EDUCATION: A REVIEW OF OECD COUNTRIES AND EXPERIENCES OF TURKEY

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ABSTRACT: It is observed that parallel to social and economic development, higher education systems have undergone significant structural and functional transformations.

In the last 25-30 years, rapid and comprehensive changes have occurred in higher education systems of industrialised countries. Short-cycle institutions (SCIs) named as non-university sector (NUS) have had a great deal of importance in the process of this change and development. Community Colleges in the USA and Canada, Junior Colleges in Japan, Institutes Universitaires de Technologie (IUTs) in France and Regional Colleges in Norway can be given as typical examples of short-cycle institutions.

Similar to the western examples, short-cycle education institutions have occupied an importance place in Turkish higher education system. Especially, after the 1981 regulations, with the aims of expanding higher education capacities and responding to ancillary manpower of economy, Vocational Higher Schools (VHSs) have come into foreground and profound improvements were realised. In this paper, Turkey's experiences in the period of 1950-1980 and the years following 1981 are presented and some recommendations are made for the future.

KEY WORDS: Short-cycle Higher Education, Higher Education, Non-university Sector, Ancillary Manpower, Vocational Higher Education, Turkey.

ÖZET: Toplumsal ve ekonomik gelişmelere paralel olarak yükseköğretim sistemlerinin de önemli yapısal ve işlevsel değişikliklere uğradığı gözlenmektedir.

Son 25-30 yıldan beri endüstrileşmiş batı toplumlarının yükseköğretim sistemlerinde hızlı ve kapsamlı değişiklikler olmuştur. Bu değişme ve gelişme sürecinde ÜDK (Üniversite-dışı Kesim) olarak adlandıran KDK (Kısadönemli kurumlar) ın önemli bir yeri bulunmaktadır. Bu kurumlara, ABD ve Kanada'daki Community Colleges, Japonya'daki Junior Colleges, Fransa'daki Institutes Universitaires de Technologie (IUTs) ve Norveçteki Regional Colleges (RC) örnek olarak verilebilir.

Batıdaki örnekler gibi, Türk yükseköğretim sistemi içinde de kısa süreli kurumların (SCI) önemli bir yeri bulunmaktadır. Özellikle 1981 yükseköğretim düzenlemesinden sonra, yükseköğretim kapasitelerinin genişletilmesi ve ekonominin ara insangücü gereksiniminin karşılanması amaçlarıyla, MYO'lar (Meslek Yüksek Okulları) ön plana geçmiş ve önemli gelişmeler sağlanmıştır. Bu çalışmada, 1950-80 ve 1981 sonrası Türkiye deneyimleri sunulmakta ve gelecek için önerilerde bulunulmaktadır.

ANAHTAR SÖZCÜKLER: Kısa-süreli Yükseköğretim, Yükseköğretim, Üniversite-dışı sektör, Ara İnsangücü, Meslek Yüksek Okulu, Türkiye.

1. INTRODUCTION

In this paper, firstly, a general revision of the functions, models and quantitative growth in some countries in vocational higher education named as short-cycle higher education or/and non-university sector in OECD countries in general has been made, secondly, short-cycle higher education experience in Turkey in the period of 1950-1980 and since 1981 been handled and the future of short-cycle higher education discussed.

2. TRENDS AND SITUATION IN SHORT-CYCLE HIGHER EDUCATION IN OECD COUNTRIES

When the history of world higher education is analysed, it is seen that higher education institutions have undergone significant structural and functional transformations being parallel to social, economic and cultural development of the societies.

During the last quarter of the century, hardly any other sector within the Western industrial societies has experienced such a comprehensive

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and rapid expansion as tertiary education. For instance, in many countries the number of students has quadrupled over that period, traditional academic disciplines have flourished and many new disciplines or sub-disciplines have emerged, outdated structures of institutional authority and government have been substituted by more democratic and transparent decision most national higher procedures, education systems have changed from a restrictive elite mode to varied patterns of mass higher education [1]. This expansion of higher education has occurred through both the extension of the (partly by founding new existing sector universities) and the development of alternative educational structures. One of the general characteristics of this institutional differentiation process in several OECD countries was the emergence and expansion of vocationally-oriented forms of higher education named as short-cycle higher education (SCHE) and/or non-university sector (NUS).

Community Colleges (USA and Canada), Junior Colleges (Japan), Institutes Universitaires de Technologie (IUTs- France), Regional Colleges (Norway) and Colleges of Advanced Education (CAE- Australia) can be given as typical examples of short-cycle institutions (SCI).

2.1. The Functions of Short-Cycle Higher Education Institutions

The functions of these schools are listed in a study made by OECD about the problems and the future of SCIs rapidly expanded early 1970's [2]:

- 1. Responding to the increasing quantitative pressure and social demand for higher education.
- 2. Providing equality of opportunity. These institutions, through their wider geographic distribution, shorter duration of study, and courses more closely adapted to aptitudes and motivations of the less privileged social strata, might provide the means of easier access to higher education for those excluded.
- 3. Responding to ancillary manpower needs of the economy. The manpower supply function of these institutions has always dominated in European SCIs.

4. As an agent of innovation, taking over the functions which are difficult to perform in traditional practices. Some of these functions are adult education, involving in regional development and various community services.

2.2. Short-Cycle Higher Education Models

The higher education institutions named as SCIs and/or NUIs are grouped in three categories [3,4,5]:

- 1. The Multipurpose Model: American Junior and Community Colleges are typical examples of this model. This model has three major characteristics; (a) close links with universities and allowing transfer of students and inter-institutional mobility, (b) highly diversified curricula both vocational-oriented and continuation of studies at university, (c) responding to local and regional needs.
- 2. The Specialised Model: A number of post-secondary institutions in Continental Europe were close to this model. The IUTs (France) and Fachhochschule (Germany) are among the examples of specialised models. The development of these schools are based on the efforts of providing higher education with the graduates of non-academic secondary education institutions. The major characteristics of these schools are very limited links with universities, low academic autonomy and terminal programs. It is observed that short-cycle institutions in whole Continental Europe shared these characteristics until 1960's.
- 3. The Binary Model: This model is typically represented by British polytechnics and Australian CAEs. These institutions have a lot of programs in various fields and levels from part-time vocationally-oriented courses to post-graduate courses.

2.3. Quantitative Growth and Trends in SCIs

With the analysis of the data (1970-87) related to quantitative expansions in non-university institutions (NUIs) in some OECD countries, it

can be seen that the number of the NUIs increased faster than the universities in Australia, Belgium, Canada, Finland, France, Greece, Ireland, Norway, Portugal, Switzerland and the USA, in some countries they remained the same (for example in England) or decreased (for example in Denmark). On the other hand, in the same period, the share of the non-university sector (NUS) in total higher education increased in Australia from 35% to 54.1%, in Belgium from 39.8 % to 59.3, in Greece from 17.7% to 38%, in Ireland from 22% to 45.3%, in the USA from 26% to 37% and decreased in Yugoslavia from 31% to 14.7%, in Denmark from 42.2% to 20.8%. But, it should be taken into consideration that the source of these reductions are owing to the reorganisations of the higher education systems in those countries [6].

The data related to the development of NUIs in some OECD countries can be summarised as follows [7]:

In 1960 and 1970's, the USA higher education system expanded in large scale, after 1970 got into a stagnation period. In the period of 1970-1984, NUS expanded faster than the universities and doubled in number. On the other hand, today, it is pointed out that Community Colleges, Junior Colleges and Technical Colleges have become the largest step in access to higher education, 50% of the first year students of whole higher education and more than the 43% of whole higher education students are enrolled to these institutions.

Similar to the USA, in 1960's a great expansion occurred in Canadian higher education, in the period of 1970-1985 total growth rates fell down. Today, university sector is larger than the NUS. But, it is claimed that NUS has been growing faster than the universities and gradually will exceed the university sector.

Like the other member countries, in Japan, the number of the students in these institutions expanded rapidly in 1960's. There are three types of non-university higher education institutions; Junior Colleges with 437 thousands, Technical Colleges with 20 thousands and Special Training Schools (Senshu Gakko) with 483 thousands students. The share of the students in NUS is 50% of the total higher education students. The point drawing attention in Japan, the number of the students in Junior Colleges and Technical Colleges has remained almost the same since 1975, the third type institutions (Senshu Gakko) have continued to expand.

In France, there are two types of short-cycle institutions. The first type is Sections de techniciens süpérieurs (STSs), an extension and a part of secondary education, the other one is Institutes universitaires de tecnologie (IUTs) which has been recently taken into the framework of the university. While the number of the students at the universities doubled, the number of students in both types of short-cycle institutions quadrupled in the period of 1966-1980.

In about twenty years period, non-university sector expanded and went over the university sector in Norway. Between 1965 and 1984 the number of students at the universities increased more than two folds, the number of students in NUS increased more than three folds. Between 1978 and 1985, the share of the NUS in total higher education changed from 42% to 55%.

In general, in the last 20-30 years higher education systems in OECD countries have expanded in different rates in different periods. The expansions in the number of the students have emerged with the structural differentiation processes. In this context, in 1970's NUS expanded faster than the university sector. Currently, the share of the university and NUS show differences from country to country. From the aspects of total number of students and new enrolments, in some countries NUS either does not exist or exists in a limited number (Italy and Spain), in some countries the number of them is larger than the university sector.

3. TURKEY'S EXPERIENCE OF SHORT- CYCLE HIGHER EDUCATION: FROM 1950'S TO 1990'S

Short-cycle higher education practices in Turkey can be dealt with in two periods; in the first period (1950-1980) they developed as separate higher education institutions from the university sector, in the second period they developed in the body of the university.

3.1. Short-Cycle Higher Education as a Non-University Sector: the Period 1950-1981

In Turkey, the first practices of short-cycle higher education based on secondary education started with the schools for technicians and higher technicians. These schools, very similar to STS in France, were active in between 1952 and 1972. They were the extension of secondary education and established under the administrative authority of the Ministry of Education. In the mentioned period, 26 technicians schools and 2 higher technicians schools were opened. The schools for technicians were 2 years and schools for higher technicians being complementary of the schools of technicians were 1 year. The latter type that had the graduates of school of technicians gained the status of higher education. Schools for technicians were closed in 1968-69 academic year and school for higher technicians were closed 1971-1972 academic year. According to Karhan [8], there are two reasons of stopping the operations of those schools; (a) as they took place in vocational secondary education, they were deprived of the concept of higher education, (b) as the graduates of these schools could not get access to higher education, the interest for these schools were lost.

Vocational higher schools of Ministry of Education and a limited number of pre-licence schools in the framework of the universities constitute the second stage (1974-1981) of short-cycle higher education practices in Turkish higher education system. Since early 1970's, the increase in social demand for higher education has directed the governments to the pursuits of

additional capacities for higher education. These pursuits led to capacity increases by opening new pre-licence schools at the universities and vocational higher schools in the body of Ministry of Education.

The major aims of these schools were to meet both the social demand for higher education and ancillary manpower demand of the economy. On the other hand, some schools provided the access possibility with university [9].

From the pre-license practices started by Hacettepe, Ege and Boğaziçi universities (1974), only Boğaziçi University has been able to continue its practices. Hacettepe and Ege pre-license their universities ended up programmes late 1970's. Employment and title problems, increasing pressure on access to undergraduate schools are among the reasons of the failure of those practices [10]. Kaya [11] states that the experience in the period of 1974-1980 shows that pre-license school system does not work.

On the other hand, the number of vocational higher education schools belonging to Ministry of Education reached 56 and the number of students in these schools reached 12 thousand. These schools were two years and consisted of three major fields (technical sciences, social sciences and health science). These schools constituted the nucleus of today's Vocational Higher Schools (VHSs-Meslek Yüksek Okulu) as a result of the reform of 1982 which gathered all the higher education institutions under the administrative body of the university with the aim of making use of facilities of financing, planning and coordinating.

3.2. Short-Cycle Higher Education Institutions as a Part of the University: since 1981

As is stated in an OECD publication [12], today except Austria and Italy, there is no OECD country where higher education is only provided by the universities. In every country, there are some non-university institutions providing higher education. They are different from the universities from various aspects such as legal statue,

financing, student selection, teaching period, diploma. After 1981, all higher education institutions (except military and police institutions) were placed in the framework of the university and an institutional differentiation and new structuring at the university happened. In this new structuring two sub-sectors emerged:

- 1. Formal higher education (Short and long cycle),
- 2. Open higher education (Short and long cycle).

These two sub-sectors are categorised within themselves as long-cycle higher education (formal higher education: under-graduate and graduate programmes, open higher education: under-graduate programmes) and short-cycle higher education (two years short-cycle vocational higher education in formal education and pre-license programmes in open short-cycle education).

In 1995-1996 academic year, the number of students enrolled at the universities (except graduate programmes) was 1.150 thousand. 59.1% and 39.9% of them were respectively enrolled to formal higher education and open higher education. 21.6% of the formal higher education students (691 thousand) enrolled short-cycle vocational higher education programmes and 61.4% of open higher education students enrolled to short-cycle higher education programmes.

After having given a general revision of various higher education institutions following the 1981 regulations in the lines below short-cycle higher education institutions (Vocational Higher Schools-VHSs) were analysed in detail. 1981 regulations took a priority over the opening VHSs to meet the **ancillary manpower** requirements of Turkish economy [13]. In addition to meeting the **ancillary manpower** supply, meeting the social demand for higher education was also among the reasons of this priority.

Compared to universal models, the characteristics of Vocational Higher Schools model in Turkey can be summarised as follows:

- 1. VHSs, resembling to IUTs in France, represents pre-license models linked with university with the characteristics of depending on university, using its facilities and being separate department (school),
- 2. VHSs have the characteristics of specialised model basing on vocational secondary education and presenting programs aiming at employment.
- 3. Besides having the characteristics of specialised models, VHSs have the characteristics of multi-purpose model as well. They are very similar to Community Colleges in the USA and Regional Colleges with their academic independence, limited access to under-graduate programmes (10% of it graduates), multi-purposed community services.

All these characteristics show that VHS model in Turkey is a mixture making use of both international and national experience.

After having stated the characteristics of VHSs, the data related to the improvement of VHSs between the years 1982-1995 can be summarised as follows:

- 1. The number of the schools: The number of schools, with a seven folds increase, reached from 54 to 372. The increase were realised with the expansion of them in provinces and counties outside the big cities. So, through the VHS, higher education has expanded all over country.
- 2. The number of the students: Being parallel with the increase in school number, there has been a great increase in the number of students too and in the period of 1982-1995, the number of students, with 11-fold increase, reached from 13000 to 149000. In the same period, formal higher education expanded about 3 folds. In this respect, the share of the VHSs in total higher education rose from 5.2% to 21.6% In addition to this, while opening higher education programmes taken into consideration, the share of VHS in total higher education is 37.4 [14, 15].

3. School types and distribution of them into scientific fields: The period of 1982-1995 is not only a period in which only quantitative expansion occurred, but also a period in which VHSs specialised in specific fields emerged apart from VHSs applying various programmes. Currently, 372 VHSs have various programmes in social, technical and art fields, and the rest of them have specialised in specific fields. 71 VHSs organised under the name of Health Services Vocational Schools have programs only in the field of health sciences such as nursing, medical laboratory, radiology etc. and 5 VHSs Technical Sciences VHSs, 5 Social Sciences VHSs and 5 Theological Sciences VHSs.

Being parallel with the variety of types and programmes of VHS, distribution composition of the students in scientific fields has changed as well. In this context, in the period of 1983-1995, while share of the students of social and technical sciences decreased respectively from 41.9% to 36.2%, and from 56.4% to 44.9%, in 1995-1996 teaching term, the shares of health services (which were almost non-existent in 1983-1984 academic year), agricultural and art programmes reached respectively 11.9%, from 0.1 to 4.2% and from 1.6% to 2.9% [16, 17].

Being parallel with types of schools, programme types (textile, machinery, tourism, secretaryship, industrial electronics etc.) also enriched and the number of programme variety reached from 24 to 111. In other words, the variety of human resources supply to meet the requirements of the economy has increased.

In short, the developments of VHSs in Turkey following the years 1981 (1982-1995) can be summarised as follows:

- 1. Before 1981 VHSs were mainly non-university sector, after that year they got into the administrative body of the university.
- 2. As school and student quantity, they have grown faster than the total higher education and increased the higher education opportunities for the youngsters.

- 3. They have been used as an effective tool to expand the higher education institutions outside the big cities.
- 4. With rapid increases in student capacities, they have reduced the pressure on formal higher education (under-graduate programmes).
- 5. Even if it is in a limited quantity (10%), they have provided access possibility to their graduates into under-graduate programmes.
- 6. With the financial credits provided by international institutions, 49 VHSs have reached international standards in terms of teaching staff, curriculum and equipment.

In spite of these improvements, the difficulties with which they have to deal can be listed as follows:

- 1. Although they have become a part of the universities by getting rid of being the extension of the secondary education, there is a question mark on the interest level of the universities in these schools. As there are some VHSs having a definite standards with support of industrial education and university environment, there are also some VHSs left to local support and there are also certain number of VHSs having lower institutional capacity than vocational high schools.
- 2. Instead of objective standards, political influences came into foreground in the expansion of those schools all over the country, and this situation has prevented the development of some VHSs.
- 3. Although school-industry relations have crucial importance in vocational education, as it was preceding years 1981, many VHSs have very limited relations with the industry.
- 4. With foreign resources provided in the frame work of the Industrial Education Projects, only 49 schools have made use of these resources and the innovations provided by these projects have not been able to be expanded in other schools.

- 5. Despite the advantages provided for the graduates of vocational high schools, the links between VHSs and vocational high schools have not still been established yet.
- 6. As it was before 1981, the problems of status and titles which can be effective in making the VHSs attractive have still been keeping the importance.

4. A GLANCE AT THE FUTURE

Turkey, with its demographic structure, higher birth rate compared to the average of OECD countries, in return with reason of low enrolment ratios at all educational levels, has to expand the capacities in secondary and higher education. The mentioned factors combining with increase in social demand make the expansion compulsory. In this respect:

- 1. Turkey should meet a significant amount of the demand for higher education by means of VHSs. However, it seems that it is difficult to form additional capacities under the framework of the university, because the universities have difficulties in operating the present VHSs. So, it is necessary to look for new wayouts. These are:
- Similar to the Technical Colleges in Japan and STSs in France, as an extension of vocational secondary education, new regulations should be done in the structure of these institutions.
- Opening new VHSs or/and being taken over the sponsorships of the present ones by public and private sector organisations.
- Foundations and/or voluntary people or organisations can be encouraged to set up VHSs and necessary legislative arrangements can be done.

In short Turkey has to bring all national potentials with private or public institutions, volunteers or institutions into action to expand the capacities and improve the quality in general in all education sector, in particular in higher education sector.

2. VHSs should be handled as a separate sector in higher education and at national (in the body of Council for Higher Education)and local

levels VHSs committees being only responsible for the planning, financing and coordinating of VHSs should be formed.

- 3. In order to make these schools more attractive, access rates to under-graduate programmes should be increased to the level of 20%.
- 4. The links between VHSs and vocational high schools should be strengthened by making new arrangements related to the access to higher education

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