

Compatibility of the Educational Systems and Capacity to Generate the Same set of Skills for the Future Employees

Cătălin POPESCU

Petroleum- Gas University, 39 B.dul Bucuresti, Ploiesti, Romania

Abstract – The discussion on the educational systems in varied countries seems endless. There are different viewpoints from one country to another; yet, as the demand on the labour market has become global and, implicitly, the access to the jobs has been extended, the question naturally rises, to what extent are the educational systems convergent and can they generate an identical offer, based on similar skills of the candidates from different countries, aspects which should create equal employment opportunities. In the given context, it is of the utmost importance to create unitary educational systems, across wide geographical spaces, meant to answer such an evolution on economic-social and geo-strategic levels. Also, the education providers have to customize their offer in a proper way in order to meet the dynamical demands of employers.

Keywords – educational systems, labour market, qualifications, skills

1. The Bologna Process

In the last 25 years were many discussions between experts in order to create a proper link between education and employment requirements based on the trends of the labor markets [17].

On June 19th, 1999, one year after the Sorbonne Declaration, the Ministers responsible for Higher Education from 29 European countries signed the Bologna Declaration, agreeing upon six common objectives of the highest importance for the coherent and harmonious development in the field of higher education for the year 2010 [5].

The Bologna Process meant, for all participating countries, thorough reforms of the higher education, marked by legislation changes and by reconsideration of the principles underlying the educational process, for the benefit of a knowledge-based society [2], [9].

The main decisional forum in the framework of the Bologna Group is the Bologna Follow-up Group (BFUG), where 47 States participating in the process

are represented on the level of State Secretary, General Director or Expert.

The progresses attained in the fulfilment of the Bologna objectives are marked by biennial national reports, achieved for the purpose of the Conference of the Ministers in charge with Higher Education, from the countries participating in the Bologna Process. The progresses are thereby evaluated within the process of *stocktaking*, and the results of this inventory process are concretized in the presentation of a country score, according to the progresses and to the stage of the reforms. Three such assessment exercises have been made so far - in 2005, 2007 and 2010.

During the next Conference, held in Prague, on May 19th, 2001, the number of objectives increased from 6 to 9 [10]; and the signing States reaffirmed their obligations to form the European High Education Area, until 2010.

On September 19th, 2003, The Ministers responsible for Higher Education, from 33 European countries gathered in Berlin to analyse the progresses and to set the new objectives for the years to come with a view to accelerating the formation of the European High Education Area. In Berlin, the Ministers identified the necessity for the European High Education Area to benefit from the synergies with the European Research area [22]; consolidating thereby a knowledge-based Europe. The purpose of this action is to preserve Europe's cultural wealth and linguistic diversity, as well as to educate the potential of innovation, as well as economic and social development, by the cooperation between the European higher-education institutions.

The Bergen Ministerial Conference, held in 2005, brought up the implementation of the national qualification frameworks [2], the common diploma awarding and recognition, inclusively on Ph.D. level, and the creation of opportunities for flexible higher educational paths, inclusively by procedures for acknowledging the previous learning [16].

On May 2007, in London, the ministers discussed the characteristics of the European Higher Education Area, setting as priorities for the following two years:

mobility, social dimension, statistic-data collection and graduate employability [3].

The Leuven Ministerial Conference, held in April, 2009, agreed on the strategic priorities for the following 10 years, targeted on the consolidation of the European Higher Education Area.

On March 11-12th, 2010, Austria and Hungary organized the anniversary Ministerial Conference of the Bologna Process, occasioned by the completion of a decade of successful cooperation within the Bologna Process and marked by the launch of the European Higher Education Area[7]. The Conference proceedings were mainly focused on the presentation and discussion of the independent-evaluation report as regards the implementation of the Bologna process goals; and the two-day discussion conclusions were synthesized in the Budapest-Vienna Declaration.

The other States' interest in the policies developed within the Bologna Process significantly augmented; the first Bologna Policy Forum was therefore organized, in 2009 at Leuven, at the end of the Ministerial Conference, forum which was attended by various States all over the world, interested in the innovating instruments and objectives of the Bologna Process. The second Forum was organized at Vienna, following the extraordinary Ministerial Conference, forum which reunited ministers from the States participating in the Bologna Process and ministers from states all over the world. The theme of the Forum was "Building the Global-Knowledge Society: Systemic and Institutional Change in Higher Education". At the end of the reunion, the Bologna Forum Declaration of Vienna was adopted.

2. International standard classification of education ISCED 2011

The Classification ISCED 2011 was adopted by UNESCO General Conference, during its 36th session, held on November 2011. Initially elaborated by UNESCO in the 70-ies and reviewed in 1997 [25], the classification ISCED serves as instrument for compiling and presenting the education statistics on both national and international level. Time to time, the framework is updated, in order to include the trends and changes from all over the world's education systems [4],[24].

ISCED 2011 includes improved definitions for the types of education and clarifies their application to ISCED. New categories were added to level classification, in order to acknowledge the early-education extension and the academic-education restructuring.

ISCED classifies the study programmes by their content, using two main cross-classification variables: education levels and education fields.

ISCED 2011 presents a review of the education-classification levels formulated in ISCED 1997[18],[20].

Likewise, it introduces a related classification of the graduated level of education, based on the recognized international qualifications. In ISCED, the study programmes are classified first and the qualifications are immediately following. The correlation ISCED is the instrument that shows the connection between study programmes and qualifications. Normally, a study programme leads to a classification. Yet, in certain cases, several programmes may lead to the same qualification, and a single programme can result in various qualifications.

ISCED 2011 has not been designed to directly evaluate the persons' skills, as there is no direct relation between study programmes or qualifications and actual educational accomplishments. The study programmes attended or graduated by a person are, at best, an approximation of the abilities, knowledge and skills acquired until graduation.

ISCED 2011 includes the formal and non-formal study programmes provided at any stage of a person's life. The qualifications endorsed by the competent authorities within national education, irrespective of how they are obtained, are being used in order to measure the graduated level of education.

In the framework of ISCED levels, the programmes and qualifications are classified by complementary dimensions. They include:

- programme orientation;
- ISCED-level graduation;
- access to ISCED higher levels;
- rank in the national structure of titles and qualifications.

The ISCED-classification criteria for the formal - classification study programmes are:

- ISCED 0-*Early education*: there are no duration-related criteria; yet, a programme should consist in the equivalent of at least 2 hours per day and 100 days per year of educational activities, with a view to its being included herein;

- ISCED 1- *Primary education*: it normally lasts between 4 and 7 years. The regular duration covers 6 years;

- ISCED 2 -*Gymnasium education/ Secondary education*: the duration normally varies between 2 and 5 years. The commonest duration is of 3 years;

- ISCED 3 -*High school education / Upper secondary education*: the duration normally ranges between 2 and 5 years. The most frequently encountered duration is of 3 years;

- ISCED4 -*Post-secondary education*: the duration normally lasts between 6 months and 2 or 3 years;

- ISCED 5 -*Short-term higher education*: the duration normally ranges between 2 and 3 years;

- ISCED 6 -*Undergraduate / Bachelor's degree or equivalent studies*: the duration of the Bachelor's Degree study programme or of the equivalent level programmes usually covers 3 to 4 years, even more, when it directly follows the level 3 ISCED; or 1 to 2 years, when it follows another level 6 ISCED programme;

- ISCED 7 -*Graduate / Master's degree or equivalent level*: the duration of the Master's Degree study programme or of the equivalent level programmes regularly covers 1 to 4 years, when it directly follows the level 6 ISCED; or 5 to 7 years, when it directly follows the level 3 ISCED.

- ISCED 8 -*Ph.D. Degree or equivalent level*: the duration is of minimally 3 years.

The education level can be classified according to the finalized (graduated) or partially finalized ISCED level, the programme orientation and the access to higher ISCED levels. If a person succeeds in graduating the same ISCED level more than once (for instance, by his/her choosing two different study programmes that are being provided as parallel options), the characteristics of the most recent obtained qualification must be reported.

3. European education systems. Description and characteristics

The education system, viewed as a whole, refers to the organization of education in institutional form [11],[13]; to this effect, the educational system includes all institutions that pursue the achievement of educational purposes [6]. Likewise, the education system has a national and historic character; in other words, it evolves and develops in relation to each country's material development and cultural specificity [19]. Consequently, there are commonalities among the various countries' education systems, similarities and dissimilarities which are related to each country's economic, social and cultural conditions [23].

The education system includes:

- Input flow- which consists in human and material resources: teaching staff, pupils, students, school buildings and spaces, material and technical facilities, school time, money;

- Education process- it processes the full set of resources, with a view to attaining the educational goals; intertwining, to this effect, the three essential educational functions: teaching, learning and evaluation.

- Output flow- which is the system product: educated, instructed persons, who possess the skills

and attitudes required by the social demand for education [14].

Education system in Denmark

Denmark has one of Europe's most efficient and well-structured educational systems. The Danish educational system consists in an optional pre-school year; and 9-10 years within the primary and lower education; thereafter, the pupils have to choose between the academic courses within the upper secondary education, provided by Gymnasium, and the vocational colleges, practical-orientation professional education, as well as training, instruction courses provided by vocational colleges.

The next study-related choice is made at the age of 19-20 years old and consists in the choice between university courses and non-university higher education institutions.

Folkeskole(primary school), which is the first part of the secondary education, consists in an optional pre-school year, followed by nine compulsory-study years and a tenth optional year. After the 9-10 primary-school years, the pupils may opt for the Gymnasium (theoretical schools, which provides them with comprehensive education and whose graduation diploma is a must for the Faculty entrance examination.

Higher secondary education is of general or professional orientation. It splits into three great branches, the study period covering between 2 to 5 years, depending on the branch. These branches are:

- Gymnasium (theoretical schools);
- Technical and commercial schools;
- Training and vocational-education schools.

Higher education in Denmark includes both academic-training courses and short-term non-academic courses. The higher-education diploma is awarded within the Universiteter (University) and HøjereLærestalter (higher- education institutions). The latter offers training courses up to the university level.

Denmark has a well-developed higher-education system. There are differences between universities, technical universities and other higher-education institutions. Variations are also seen between short-term studies (up to 3 years), medium-duration studies (3 - 4 years) and long-term studies (over 4 years).

Education system in France

The education is compulsory between 6 and 16 years old. The French education system is organized in several education levels [8],[12]:

- *Pre-primary*, which refers to "nursery" schools and targets children aged between 2-3 and 6 years old. Almost all children participate in the nursery, starting with the age of three years old, despite its being optional. Such schools constitute thereby, along with the elementary level – part of the "primary education level".

- *Primary education*, which is provided in the "elementary schools" and enrolls children aged between 6 and 11 years old. It marks the beginning of the compulsory education, it is secular and free, being distributed in the state-owned schools. At the end of 5 course-filled years, the pupils avail themselves of the secondary education level (there are no standardized tests, no orientation procedures);

- *Lower secondary education*, which is provided in 4-school year colleges (pupils aged between 11 and 15 years old). The college education is compulsory and common to all pupils. A national-level diploma (licence) is awarded in the end. The admission to the upper secondary level is not conditioned by a licence. At the end of the facultative tuition (15-year-old pupils), the school makes recommendations to the families, based on the pupils' school reports and particular interests. The children will continue their tuition, in the general, technological or vocation system, provided it should be on upper secondary level;

- *Upper secondary education*, which is distributed in "general and technological high schools" or in "vocational high schools" and covers 3 years (pupils aged between 15 and 18 years old). Upper secondary education offers three educational routes: general route (that prepares the pupils for long-term studies), technological route (that prepares the children mostly for technological higher-education studies) and vocational route (that mainly leads to active labour life; likewise, allowing the students to continue their studies by higher education).

A national diploma is awarded at the end of the secondary tuition: baccalaureate. It is both an indicator of one's having successfully finalized the secondary studies and a first step towards higher education; as the access to higher education is conditioned by the baccalaureate diploma. The vocational high-school graduates can prepare the PAC (*Certificat d'aptitude professionnelle*), after a study course, covering 2 years; thereafter they may either integrate themselves in the active labour life, or may prepare the vocational baccalaureate, after 2 further-study years.

Higher education is being distributed in higher-education institutions. The courses delivered in these institutions have different objectives and entrance conditions; yet, many thereof are structured in three study cycles (Bachelor's Degree, Master's Degree

and Ph.D. study programmes) and in ECTS credits, in line with the Bologna Process principles.

Education system in Germany

All German pupils, at the age of six years old, enter the *Grundschule*, which, in almost all lands, refers to classes from 1 to 4. After the primary-school stage, the secondary school splits into different educational routes.

Hauptschule – General School, which comprises the grades 5 –9, ends with a graduation examination (Qualifizierter Hauptschulabschluss). It is possible to graduate the special 10th grade, whose correspondent is the graduation of Realschule, namely the possession of Mittlere Reife, which consists in a very good grade at the graduation examination (Qualifizierter Hauptschulabschluss) of the Hauptschule and in a very good school situation; in the end, making an average between the two. Likewise, it is possible, after the promotion of the tenth grade, to pass the graduation examination within Fachoberschule – "FOS". After the graduation, the compulsory education moves to the upper secondary education. The range of courses within the offer includes the general educational and the vocational schools; as well as the vocational training within the System of Duales (dual system).

Realschule is the specialized-profile school, which supposes the promotion of 10 classes (Mittlere Reife). The successful graduation of the 10 classes opens the path to the admission in the gymnasium or within Fachoberschule. Yet, there are differences, from land to land, in terms of onset of a Realschule, as it may start either with the 5th or with the 7th grade.

Fachoberschule – is the correspondent of the post-secondary school and covers a 2-year study period, which means the 11th and 12th grades, and ends with a technical or economic-profile baccalaureate examination (Fachabitur). With this type of baccalaureate, one can enrol the higher education, yet only within a faculty of the same profile, bearing the name of Fachhochschule.

Gymnasium – is the correspondent of the high school and ends with a general baccalaureate examination (Allgemeines Abitur) at the end of the 12th grade; the promotion of the 10th grade, within the gymnasium, is equivalent to the Mittlere Reife.

Gesamtschule – is a form of school education, which does not exist in all lands and starts with the 5th grade and ends with 9th or 10th grade.

The tertiary sector includes the higher-education institutions and other institutions that offer eligible study courses, to the students having graduated the upper secondary level and obtained greater qualification in education.

The undergraduate education system in Germany is focused on three forms of education: Gymnasium, Fachoberschule and Berufsbildende Hochschule. Each of them refers to:

-*Fachoberschule* (FOS): the condition for attending such a school is to have passed the examination of Mittlere Reife.

-*Berufsbildende Hochschule* (BOS): the attendance of such courses is conditioned by the possession of Mittlere Reife or Fachoberschulreife and by the possession of a profession; the graduation of such a school, called Fachhochschulreife (the equivalent of the specialized baccalaureate examination within Fachoberschule – Fachabitur) opens the path towards university education.

Likewise, the promotion of the examination attesting the knowledge of a second language confers upon the graduate the Allgemeine Hochschulreife (the equivalent of the Gymnasium baccalaureate – Allgemeines Abitur).

The people who want to study in Germany may opt among several forms of university education, such as, on the one hand, universities and technical universities; and, on the other hand, faculties, which are based on the assimilation of the practical, rather than the theoretical aspects of the subjects, the so-called Fachhochschulen.

If the first two types of faculties are encountered all over Europe; as regards Fachhochschulen, they are a particularity of the German system of education. The main characteristics of such a faculty are:

- the stress is laid on practical aspects, and less on theoretical aspects;
- the courses are attended by fewer students;
- the subjects are related to the practical problems to be faced by the graduate at his/her workplace;
- the time study is shorter than in the case of a regular faculty / university;
- the graduates of Fachhochschule, having obtained very good marks, can only enrol the Ph.D. programme within a University, as Fachhochschulen does not provide this possibility.

Education system in Portugal

The Portuguese public educational system splits into 3 distinct cycles:

1. Elementary education: 6 grades, from 6 to 12 years old (grades 1-6);
2. Secondary education: 4 classes from 12 to 16 years old (grades 7-10);
3. Baccalaureate: 2 classes from 16 to 18 years old (classes 11-12).

After the promotion of the secondary education (the end of the 10th grade), the pupils may leave the school with a secondary-cycle graduation certificate or may continue the high school education for other two years.

Within the secondary cycle, most study disciplines are compulsory: Natural Sciences, Social Sciences, Plastic and visual Education, Portuguese language and education, Foreign Languages (usually English), Mathematics, Music etc.

Within the Baccalaureate cycle, in the 11th grade, the compulsory disciplines are Portuguese Language and Literature I, Foreign Languages I (usually English), Philosophy and Physical Education; and, in the 12th grade, the compulsory study disciplines are Portuguese Language and Literature II, Foreign Languages II (usually English) and History. In both baccalaureate classes, the pupils must choose, based on the university education they want to attend, other 3 disciplines, among: Chemistry, Biology, Mathematics, Latin, Greek or other discipline in the optional curriculum.

As a conclusion still are maintained some specific issues in the educational systems for most of the countries within the European Union.

4. Towards a unique labour market, at the horizons of 2020?

The steps taken so far aimed at developing the human resources, at integrating the educational systems within the global, yet competitive labour market and also at adapting them to the qualification requirements, defining for a temporal horizon placed towards the end of 2020. For these purposes, the objectives are [1],[15],[21]:

- *Anticipative correlation of the educational-system offer to the labour market structure and requirements.* The developed economies can only remain globally competitive, by educating and training highly qualified labour force, which should provide society with solutions to its current and future problems. It is necessary to encourage both the individual professional development, and the overall society's economic and social development. The development of the universities' administrative capacity to determine the targeted labour market requirements, to define the formed skills and qualifications, as well as to monitor their own graduates (either via specialized institutions or via qualified internal resources) is a must. The situations where the universities produce under-qualified or over-qualified labour force with no adequate place on the labour market are thereby avoided. To this effect, the universities must

clearly and concretely identify the market segment where they stand and whom they must adapt to.

- *Knowledge generation (by innovation) and continuing learning.* In the context of the exponential increase in the knowledge volume, as well as of the diversification and regrouping of the professions, the individuals must be determined to acquire new skills and deploy regular professional activities. This fact encourages the formation of mixed educational teams, involving both academic and business environments, with a view to exchanging knowledge, expertise and good practices and to offering concrete answers to the questions: why is continuing learning so important and why do we learn?
- *Cooperation between universities (on internal, European and international level)/ Development of university consortia/ partnerships/ university networks.* In terms of human-capital development, the constitution of inter-university educational structures of permanent education and training, on an administrative and financial level, offers real opportunities to the universities, with a view to making a reform of the educational system, to enabling the recognition of the learning results on the level of these structures. The necessity to promote loyal university competition is also highlighted.
- *Follow-up of the Bologna system development an assessment of its effects, as well as of the effects of the education internalisation and globalisation.* The European System of Credit Transfer and Accumulation ECTS encourages the use of the modules, the student/professor mobility exchanges, as well as the fulfilment of the education and training needs, based on the dynamic market demands. The development of a set of indicators for assessing the study programmes; specifically, to establishing the degree of accuracy of the skills declared by the universities, respectively acquired by the students, is a must. Likewise, an integrating approach for all study cycles, by the development of a set of indicators to assess the skills acquired in the Bachelor's Degree cycle (basic skills) in correlation with the Master's Degree cycle (specialized skills) and Ph.D. cycle is a must.
- *Enhancement of the dialogue and cooperation between university and companies.* Despite the recent preoccupations for the intensification of

the cooperation between universities–business environment (via the promotion of dialogue platforms, on the level of the European commission, the openness of the higher-education institutions towards the extra-academic environment etc.), the business and education worlds are still at a great distance. The consolidation of the cooperation between universities and companies is a continuing challenge for the next period. The universities' orientation towards the employers' needs, given that the employers can modify the educational market, is a major desideratum for the universities. The employers must be also educated in line with an elitist spirit. The equilibrium between the universities' offer and the employers' needs is ever more necessary, by the development of an institutionalized communication between the two partners.

- *Increased university adaptability, flexibility and response to change.* Many employers claim that some study programmes are too sophisticated, too complex; and there are no extra-curricular activities at all. The universities must define and decide what extra-curricular activities to include in their educational programmes, which should offer their graduates the cross skills demanded by the employers. Likewise, it is necessary to clearly distinguish between the demands of the education in campus and the distance or online education.
- *Creation of career opportunities.* We cannot accuse the employers for their not employing the graduates according to their qualification, but according to the needs and associated costs. The labour market is confronted to both under-qualification and over-qualification problems, the latter tendency being on the wane. The universities must undertake the responsibility for their graduates' career opportunities, until the disappearance of the discrepancies between the skills acquired by the employees and the demands of the workplaces.

5. Conclusions

As can be seen in the paper there are a lot of initiatives to set up a general framework for education in order to create a unified educational system that is able to give an equal opportunity to get a job. On the other hand, every country and academic institution want to give or offer an additional qualification for their own graduates in order to offer them a supplementary chance to be hired on a very

demanding and competitive labour market. The future seems to be dedicated to a very strong competition between educational systems, academic institutions and curricula' contents but could also be related to the political decisions concerning educational issues and due to the social and economic pressures. Actually there are two possible scenarios: one that looks to propose a standardization for the educational system and the other that wants to customize the qualifications and skills from a country to another country, from a university to another university, issues required by a dynamic and competitive labor market.

It could be also considered a third scenario: a mass customization of the education which could be declared the winning solution, as long as the labor markets are becoming much more international and global ones.

In conclusion, it is not easy to propose a worldwide framework solution for the national educational systems since every country intends to offer a proper solution for their citizens, in order to cope to the local, regional or national labour market, to have adequate skills related to the job' requirements and to get the best job that anyone wants to have, according to their qualification and experience.

References

- [1]. Barrera, D. & Soares, V. M. (2010). *Advancing democratic practice: A self-assessment guide for higher education* (Council of Europe higher education series No.14).
- [2]. Bergan, S., (2003). *Recognition issues in the Bologna Process* (Council of Europe higher education series No.2,2003).
- [3]. Bergan, S.(2007).*Qualifications - Introduction to a concept* (Council of Europe higher education series No.6).
- [4]. Bergan, S. & Rauhvargers, A. (2006).*Recognition in the Bologna Process: policy development and the road to good practice* (Council of Europe higher education series No.4).
- [5]. Campos, N.F., Hughes, G., Jurajda, S. & München, D. (1999).*When the Future is not What it Used to Be: Lessons from the Western European Experience to Forecasting Education and Training in Transition Economies*, Working paper nr. 265, Comisia Europeană.
- [6]. Chapman, D.W. & Mahlck, L.(1993).*From Data to Action: Information Systems in Educational Planning*, Paris, UNESCO-IIEP.
- [7]. Curaj, A., Scott, P., Vlasceanu, L.&Wilson, L.(2012).*European Higher Education at the Crossroads. Between the Bologna Process and National Reforms*. Springer Science and Business Media Dordrecht Publications.
- [8]. Friboulet, J.L., Liechti, V.& Meyer-Bisch, P.(2000).*Les indicateurs du droit à l'éducation. La mesure d'un droit culturel, facteur du développement*, Fribourg, Université de Fribourg.
- [9]. Garben, S. (2011).*EU Higher Education Law: The Bologna Process and Harmonization by Stealth*, Kluwer Law International.
- [10]. Hersh-Salganik, L.&Calsyn, Ch.(2001).*Etats et Nations: de l'usage des indicateurs pour la politique en éducation aux États-Unis. En: Politiques d'éducation et de formation. Analyses et comparaisons internationales, Bruxelles, De Boeck Université, nr. 3, p. 29-45.*
- [11]. Johnstone, J.N.(1985).*Indicators, Educational*. In: T.Husén, T.N. Postlethwaite (eds.) *The International Encyclopedia of Education*, Oxford, Pergamon Press, vol. V, p. 2432-2438.
- [12]. Meuret, D.(2001).*De la contribution des indicateurs au débat sur l'éducation. Un cas d'étude: L'état de l'école. In: Politiques d'éducation et de formation. Analyses et comparaisons internationales, Bruxelles, De Boeck Université, nr. 3, p. 13-27.*
- [13]. Nuttall, D.L.(1994).*Choosing Indicators*. In: K.A. Riley, D.L. Nutall (eds.) *Measuring Quality: Education Indicators - United Kingdom and International Perspective*, London, The Falmer Press, p. 17-40.
- [14]. Panduru, F., Martelli, C.&Istrate, G. (2001).*Social Trends*, UNICEF, National Institute of Statistics, Bucharest, Romania.
- [15]. Rauhvargers, A. & Rusakova, Agnese (2010). *Improving recognition in the European Higher Education Area: an analysis of national action plans* (Council of Europe higher education series No.12).
- [16]. Reinalda, B. & Ewa, K.(2006).*The Bologna Process - Harmonizing Europe's Higher Education: Including the Essential Original Texts* (2nd Revised Edition), Barbara Budrich Publishers.
- [17]. Ross, K.&Mahlck, L.(1990).*Planning the Quality of Education: The Collection and Use of Data for Informed Decision-Making*, Paris, UNESCO-IIEP.
- [18]. Sauvageot, Cl.(2001).*Un outil au service des comparaisons internationales: la Classification Internationale Type d'Education(CITE)*. En: *Politiques d'éducation et de formation. Analyses et comparaisons internationales, Bruxelles, De Boeck Université, p. 95-117.*
- [19]. Sauvageot, Cl.(2003). *Des indicateurs pour la planification de l'éducation: un guide pratique*, Paris, UNESCO: IIEP, 2^e édition.

- [20]. Sauvageot, Cl., & Bella, N. (2003). *Key Indicators. Education Indicators and Policies: A Practical Guide*, Torino, European Training Foundation.
- [21]. EUROPEAN COMMISSION (2010). *Higher education for modern societies: competences and values* (Council of Europe higher education series No.15).
- [22]. COMMISSION OF THE EUROPEAN COMMUNITIES (2004). *Progress towards the Common Objectives in Education and Training. Indicators and Benchmarks*. Brussels, CEC.
- [23]. OECD (2004). *OECD Handbook for Internationally Comparative Education Statistics. Concepts, Standards, Definitions and Classifications*, Paris, OECD.
- [24]. OECD(2000). *Classifying Educational Programmes: Manual for ISCED-97 Implementation in OECD Countries*, Paris, OECD.
- [25]. UNESCO(1997). *The International Standard Classification of Education: ISCED-97*, Paris, UNESCO.