Employability management in adult education and training

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Abstract: Romania's new Higher Education Law from 2023 aims to increase the number of graduates of adult training programs. The law also introduces the international standard for education and international standards for professional training of adults, while Romania's system of education and professional training is in line with the requirements of the labor market. As far as the equivalence of the study programs is concerned, we can no longer say that this criterion is also met because until this law was passed, we would not have implemented ISCED, but we have the fields of studies promoted by the Government Decision, that is impossible to be assimilated internationally. We have over 6,000 bachelor and master programs related to about 1,500 occupations in the Classification of Occupations from Romania (COR) and the classification of European Skills, Competences and Occupations (ESCO), which is unimaginable in European countries. More than half of these should be at most postgraduate programs for adults. Study programs remain a problem in equating studies, especially in the technical field, except for European regulated professions and IT where the equating is automatic. Passing post-graduate professional training for adults on either occupational or qualification standards will largely solve this impasse in the next five/six years. It makes sense to analyze employability as we have done here in case of increased mobility of Romanian qualified workforce on the European labor market, but according to the signed accession treaty, it must be understood that this does not come automatically, but as we have seen there are certain obligations and commitments of the Member State, conditions to be ensured so that it is as easy as possible for the graduate to be employed at the level held and the graduated field of study.

Keywords: adult, postgraduate, training.

1 Introduction

1.1 Organization- Education and training system

The adult professional training according to the new Higher Education Law from 2023 [1] is an attribute of the Ministry of Education carried out through higher education institutions with the support of the National Qualifications Authority, ARACIS and social partners. In this context, we refer here to postgraduate training and Lifelong Learning chapters of the Law. The new law

also brings facilities that can increase the number of graduates of adult training programs and improve Romania's position in the European rankings. We believe the percentage of trained adults Romania committed to in the European strategies and stipulated in the European Social Pillar will be closer to the assumed targets. It also introduces the term employability, which we try to present here in its real complexity for the training of adults. Our system has avoided it for many years, although it shows the efficiency of the education and professional training system. The new law [1] also introduces the international standard for education - ISCED, by UNESCO, for the classification of study fields and the European competencies portal - ESCO, which means a big step towards the recognition of tertiary qualifications. If we add the national qualifications framework - NQF and the national qualifications register -NQR, we can say that it created the framework for the training of adults at European level. Thus, we consider that based on the new law, the professional training of adults in universities will increase, quality will improve and the recognition by the labor market will be encouraging for the future.

In order to talk about a high-performing system of education and professional training of adults, we should actually explain how the standards used in the system are organized. Table 1 below presents the four international systems: education – ISCED 2013-F [2], labor ISCO-COR (National Classification of Occupations) [3], [4] and ISCO-ESCO [4] [5], and economy - the Statistical Classification of Economic Activities in the European Community NACE [6], with the number of fields that comprise them and that are the basis of internationalization of professional training, employability and mobility of graduates.

Table 1. Organization by field – ISCED 2013-F-ISCO-08-NACE –ESCO

STANDARD /the norm		FIELD broad/ fundamental	FIELD narrow/ branch	FIELD detailed/ Bachelor, Master	Obs. Occupations/ specializations
ISCED		10	26	80	1057
ISCO – COR Higher education	Major Group 2	Major subgroups 2 digits = 6	Minor groups 3 digits = 27	Unit groups 4 digits = 93	Occupations Tertiary level = 1398
ISCO – ESCO	Major Group 2	Major subgroups 2 digits = 6	Minor groups 3 digits = 27	Unit groups 4 digits = 92/ qualifications	Occupations Tertiary level = 804

NACE		Sections/ Sectors = 21	Divisions (major activities) 2 digits = 99	Groups (minor activities) 3 digits = 272	Classes (operational activities) 4 digits = 615

Figure 1. The education and vocational training system linked to the labor market to reduce the discrepancy between the labor market demand and the educational supply
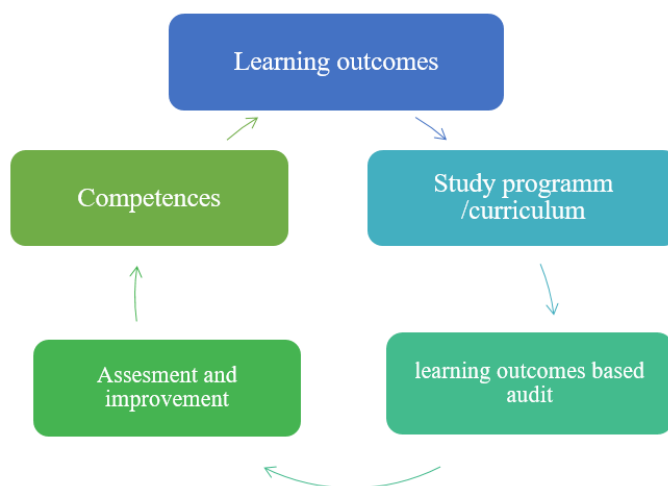
Sources: [7]

The system of education and professional training correlated with the requirements of the labor market which can be seen in fig.1 involves the following phases:

1. Taking over and correlating the competencies with the demand of the labor market, reviewing them every 5 years for compliance with the new scientific, technological, and social discoveries [8], permanent communication between the university and the economic sector to which it belongs according to NACE. [9]

2. Creating learning outcomes that describe the skills, specifically on qualification levels according to NQF and fields of study according to ISCED [7], [10]. A useful thing in the training of adults but also for employers, we are talking for the first time about postgraduate programs for the development of personal skills that we find in ESCO to transversal competences or in other European documents to competences for life [11]. Employers insistently demand these competences first and the professional ones second.

3. Establishing a curriculum based on learning outcomes and modular and flexible study programs with the related teaching staff. Here, a modern education makes the distinction between tenured teaching staff focused on teaching and acquiring basic and domain-specific skills or according to ISCED broad fields, restricted and detailed and the associated didactic frameworks that should be used especially for the acquisition of specialized and specialized skills.

4. Quality assurance, internal and external, along with a new element, audit of learning outcomes or the veracity of learning outcomes compared to the demand of the labor market. That is, graduates of the same specialized program, from different universities, should acquire about 80-90% the same learning outcomes, and for post-graduate training on a standard basis, this percentage should be 100% similar.

5. The evaluation and improvement of the system includes the certification of the graduate through diplomas, certificates or micro-certifications and the employability or recognition of the completed education and professional training. Employability does not automatically mean recognition, but only that in the graduate field, at least the fundamental one, but you can go deeper to the detailed one or even specialty, e.g. IT. That is, being employed is good, but being employed in the graduated field means recognition. [12] [7] When the percentage of those recognized is low, it means that something is not done well on the circuit: competences - learning results - curriculum - program - teaching staff - quality - certification and must be evaluated and improved.

Figure 2. The pillars of employability
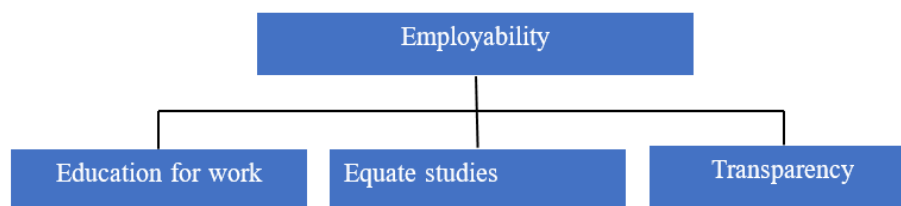
Source: authors' contribution

2 Elements of employability

If the system is taken in with the afferent feedback, we can talk about employability management, which includes, according to fig. 2, the following elements:

2.1 Education for work

Education for work is the sum of:

A- Primary education for work in the 21st century [8], [11] includes without being restrictive:

- Entrepreneurship
- Project management
- ICT for achieving results/objectives
- Visits/meetings/discussions with employers
- Development of physical skills through sport, movement
- Team spirit through games
- Personal communication
- Marketing

B-Secondary adult education and training in universities, which includes professional training through bachelor's, master's, and doctorate programs.

C- Tertiary education and training of adults in universities that includes professional training through postgraduate programs:

a) advanced research postdoctoral study programs; b) postgraduate professional training programs for adults; c) residency postgraduate study programs.

D-education throughout life, through postgraduate programs, for the acquisition of personal skills necessary at the workplace, such as:

„Cognitive Flexibility - The ability to generate or use different sets of rules for combining or grouping things in different ways.

Complex Problem Solving - Developed capacities used to solve novel, ill-defined problems in complex, real-world settings.

Coordinating with Others - Adjusting actions in relation to others' actions.

Creativity - The ability to come up with unusual or clever ideas about a given topic or situation, or to develop creative ways to solve a problem.

Critical Thinking - Using logic and reasoning to identify the strengths and weaknesses of alternative solutions, conclusions, or approaches to problems.

Emotional Intelligence - Being aware of others' reactions and understanding why they react as they do.

Judgement and Decision Making - Considering the relative costs and benefits of potential actions to choose the most appropriate one.

Negotiation - Bringing others together and trying to reconcile differences.

People Management - Motivating, developing, and directing people as they work, identifying the best people for the job.

Service Orientation - Actively looking for ways to help people." [12]

This type of program for adults promoted by the new law is a result of requests from employers and the European labor market who noted that only professional skills are not enough to have a good manager or a performing employee. In addition to those at the workplace, there are necessary and general social personal skills [8], [11], necessary wherever there are people and society, such as:

- Civic education, to know how to behave in society with peers, in the family,
- Social life, to know how to behave collectively, at work, conferences, etc.
- Elements of law, to know what the State, the nation, the constitution mean,
- Labor relations, labor law, to know labor rights and obligations,
- Equal opportunities, social ethics, professional ethics,
- Discrimination, in all its forms,
- Democracy, other forms of organization,
- Community, help and collaboration among peers,
- Personalized education, e-learning

Very important for these personal, general or workplace skills, they are unique by qualification level and field, that is, they are automatically recognized and equated from one specialization to another in the same field. Practically, they are established once as form and name, then are established as content on the ten ISCED fields. For example, engineering or ITC must follow them all, but in the field of administration, law and management or social sciences, some of them are current subjects of the programs and then it is possible that here the digital component, creativity, or skills in using equipment to grow. Similarly, each ISCED field must be analyzed, and the necessary personal competence packages established, using the transversal competences from ESCO as a helping tool.

Personal skills in their totality make up "Personal preparation for life" which is learned years ago in the family and at work.

2.2 Equivalence of studies

It is less used in our country, but those who left the European space especially felt it firsthand, the diploma was recognized but it was not equivalent, it resulted in employment but in a different position than the one with higher education and many or in another field or another qualification level. This also happens in countries like Germany, Italy, Austria, Holland and maybe others.

Equivalence of studies is interesting for universities when their graduates go far abroad, to other continents. For example, in many countries in Asia, India, Indonesia, the Philippines, Afghanistan, South Africa, Australia and many others, the British education system is used for to be able to recognize and equate the diploma in the context of global labor force mobility. We have not encountered this until now.

In this spirit, the new law comes with a very good proposal for students and the equivalence of studies that all providers of professional training who want to apply for NQF level 6 graduates should be accredited in a similar way, i.e. by the same ARACIS institution (The Romanian Agency for Quality Assurance in Higher Education).

The equivalence of studies includes:

I - Quality assurance, in our case by ARACIS of:

A-study programs, which means that the institution itself, through internal quality assurance, and the responsible institution, in the case of the ARACIS law, confirms that the announced program is running operationally correctly, that is:

- learning outcomes, modules, disciplines lead to the competencies assumed by the program,
- the number of hours, theory, and practice, is complied with,
- the number of credits is correctly calculated and assumed according to the importance in the field,
- the teaching staff has the training and practical experience necessary to teach in the mentioned field, here many times in the specialized fields the practical experience or

the reputation of the teaching staff (associate) is more important than the titles, articles, teaching experience,

- there are studio materials for individual studio classes, courses, books, films, websites etc.

B-institutional evaluation

It addresses the capacity of the training provider to ensure the necessary capacities for the training:

- communication systems with those registered,
- Halls, practice places,
- software, computers etc.,
- certification system with the related substitute, including the Europass model,
- last but not least, the competent staff, necessary for administrative activities.

Through quality assurance by ARACIS, an institution recognized at European level in the register of quality assurance institutes EQAR, we can say from now on that for adult training this criterion for the equivalence of studies is fulfilled.

II. The standards the work is based on:

a) If we look at the definition of qualifications in the law: "Qualification" means a formal result of an evaluation and validation process, obtained when a competent authority establishes that a person has acquired learning results corresponding to given standards". In the end, there is talk of standards, or we don't know what standards mean because we use the expression study programs.

b) Only in the new law, in the training of adults throughout life, do we find postgraduate programs based on occupational standards, which is new on our market and leads to the idea that study programs can also be based on occupational standards for the specialized part

c) More recently, the law also talks about qualification standards that have not existed in Romania until now, they will be able to support the preparation of curricula and study programs because they will contain, in addition to what has today an occupational standard:

- the tasks and attributions of the occupation from which the necessary knowledge and skills will result,

- the level of autonomy from which responsibilities and attitude result,
- the competences, according to ESCO or market requests, as the case may be,
- NWF and EQF qualification level,
- number of ECTS credits, identically calculated with those from the bachelor's/master's programs,
- modules organized by competencies,
- the training plan,
- specific to the qualification standard: learning outcomes.

As far as the equivalence of the study programs is concerned, we can no longer say that this criterion is also met because until this law was passed, we would not have implemented ISCED, but we have the fields of studies promoted by the Government Decision, that is, the local, national, and impossible to be assimilated internationally.

We have over 6,000 bachelor and master programs related to about 1,500 occupations in COR and ESCO [4], [5], [7], which is unimaginable in European countries. More than half of these should be at most postgraduate programs for adults. The number of these programs is difficult to reduce and come close to reality because they mean norms! The transition to study programs based on qualification standards, validated by the sectoral committees, at least for the technical field, will solve the number problem.

It is similar in the pre-university professional system where, after completing a standard professional training, the graduate knows how to do what four or five graduates of the same level do in adult training, an aberration!!

Study programs remain a problem in equating studies, especially in the technical field, except for European regulated professions and IT where the equating is automatic.

Passing post-graduate professional training for adults on either occupational or qualification standards will largely solve this impasse in the next five/six years.

2.3 Transparency

Transparency helps employability through its two elements: i) national registers and ii) media tools of the institutes described as follows:

I. The national registers include:

A. The National Qualifications Register – NQR, in which all study programs are registered: bachelor's, master's, postgraduate and which ensures the transparency and visibility of higher education vis-à-vis third parties and especially employers. [14]

These include information on: name, competences, qualification level, ECTS credits, program type, ISCED field, connection to the labor market through occupations specific to the field and qualification, supplement to the diploma. [14] Through the NQR a graduate from Romania can demonstrate in any corner of the world the content of what he learned in the program. Through the new law, after many years, we manage to approve the NQR format by government decision, something requested by the European specialized forums.

B. The register of accredited training providers will also appear thanks to new laws,

C. The register of informal and non-formal competence assessment centers to be established within universities, according to new laws,

D. Single Matriculation Register - RMU - in which all graduates and accredited institutions are registered,

E. RUNIDAS - The Single National Integrated Register of Diplomas and Study Certificates is new and will appear in the next two years based on new laws.

II. University media tools, which include sites/portals or other forms of media advertising through which those in the market are notified about:

A. The purpose and objectives of the institution,

B. Its organization,

C. Study programs, by fields, years, specializations, levels - what should be a Catalog of courses in the European concept,

D. Connections to job lists: Romanians, e.g. www.ejobs.ro, http://www.myjob.ro, http://www.bestjobs.ro/or European https://ec.europa.eu/eures/public/ro/homepage

E. The employability situation of university graduates, by fields of study,

F. Positioning of the institution in different rankings, international/national ratings,

G. Connections with the labor market, Alumni,

H. Studies and research to justify the market usefulness of one qualification or another,

I. Other information of interest such as fees, accommodation, information systems used in the institution, transport, etc.

J. Erasmus mobilities, scholarships offered by employers, internships for employed students,

Transparency and its elements are in a permanent dynamic system from one year to another, attractive, created by specialists for the applicants of the day and their tastes. Transparency is not for teaching staff; therefore it should be given to the association of students or those of their generation.

3   Conclusions

It makes sense to analyze employability as we have done here in case of increased mobility of Romanian qualified workforce on the European labor market, according to the signed accession treaty. It must be understood that this does not come automatically, but as we have seen there are certain obligations and commitments of the state, conditions to be ensured so that it is as easy as possible for the graduate to be employed at the level held and the graduated field of study. The local workforce active on the European market below the qualification level contributed to the national income with many billions of RON, let's imagine that they were employed at the appropriate qualification level, probably this income would have been at least double plus management positions through which the internal market is positively influenced.

This is the social advantage of increasing the employability and mobility of our graduates, in addition to their personal and professional development as a result of their education and training based on standards (fig.3).

Figure. 3. Standardization of education and training in relation to labor market
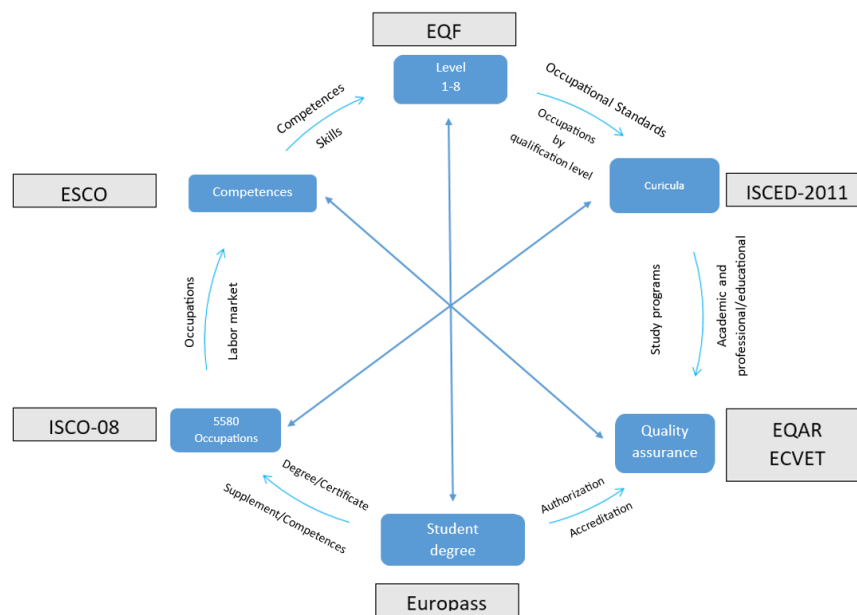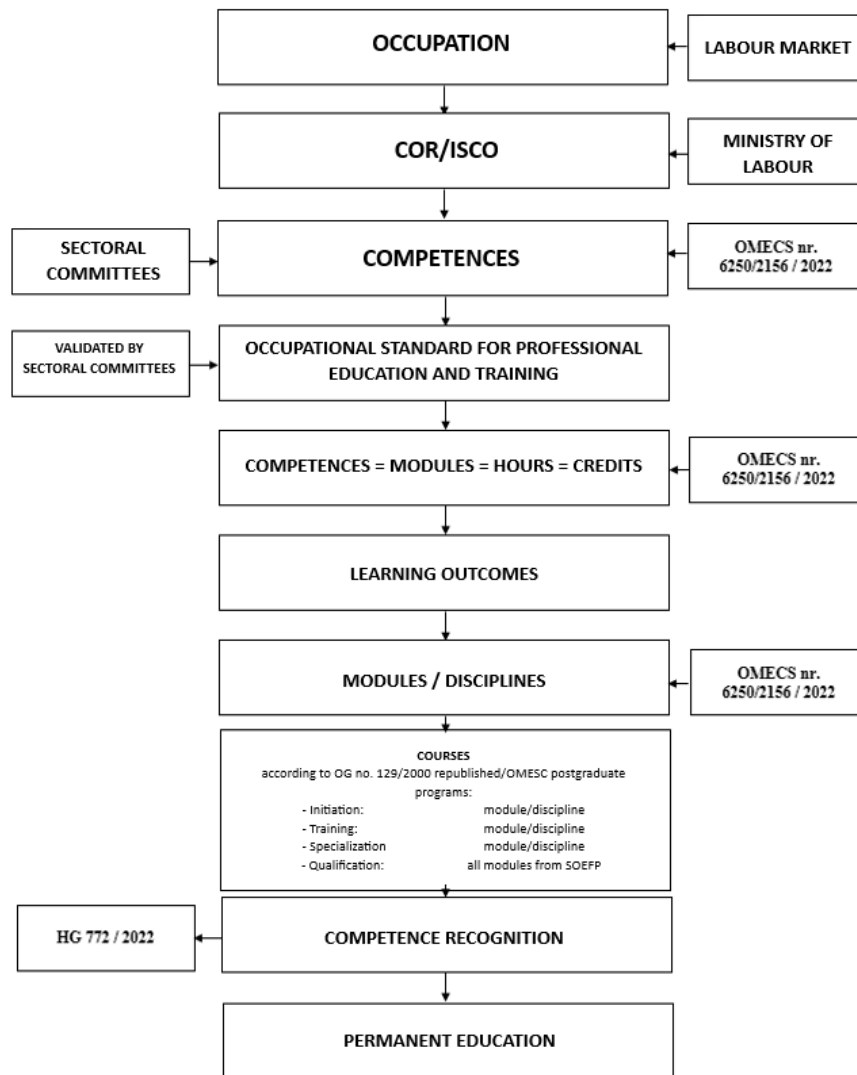

Sources: National Qualifications Authority – www.anc.edu.ro

In order to achieve this objective, we believe that we need to see a new management of professional training for adults, which integrates:

– financing the adult training system,

– the quality of adult training,

– mobility according to market requirements,

– partnerships between universities and companies directly engaged in the labor market that led to real and effective learning outcomes,

– career, professional and personal development, because as a proverb says: "interest leads the way", that is, the personal interest of young people and adults brings them to training. Fig. 4 shows the training scheme in correlation with market demand and factors involved in VET.

Figure. 4. Lifelong learning in relation to the labor market

Sources: National Qualifications Authority – www.anc.edu.ro

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