

ROMANIAN POLICIES, INITIATIVES AND GOOD PRACTICE IN EDUCATION AND VOCATIONAL TRAINING

Introduction

Training refers to the acquisition of knowledge, skills, and competencies as a result of the teaching of vocational or practical skills and knowledge that relates to specific useful skills. It forms the core of apprenticeships and provides the backbone of content at technical colleges and polytechnics. In addition to the basic training required for a trade, occupation or profession, it is recognised today that there is need to continue training beyond initial qualifications to maintain, upgrade and update skills throughout working life. In the context of many professions and occupations this may be referred to as professional development.

A similar term used for workplace learning to improve performance is training and development. Such training can be generally categorized as on-the-job or off-the-job. On-the-job describes training that is given in a normal working situation, using the actual tools, equipment, documents or materials that they will use when fully trained. On-the-job training is usually most effective for vocational work. Off-the-job training takes place away from normal work situation which means that the employee is not regarded as productive worker when training is taking place. An advantage of off-the-job training is that it allows people to get away from work and totally concentrate on the training being given. This type of training is most effective for training concepts and ideas.

Training methods have been developed for artificial intelligence as well. Evolutionary algorithms, including genetic programming and other methods of machine learning use a system of feedback based on "fitness functions" to allow computer programs to determine how well a task is being performed. A series of programs, known as a "population" of programs are automatically changed and then automatically tested for "fitness," i.e. how well they perform the intended task. New programs are automatically generated based on members of the population that perform the best. These new members replace programs that perform the worst. The procedure is repeated until optimum performance is achieved. In robotics, such a system can continue to run in real-time after initial training, allowing robots to adapt to new situations and changes in itself, for example due to wear or damage. Robots have also been developed that can appear to mimic simple human behaviour as a starting point for training.

Training differs from exercise in that exercise may be an occasional activity for fun. Training is specific and done to improve one's capability, capacity, and performance.

Vocational education (or **Vocational Education and Training (VET)**), also called Career and Technical Education (CTE)) prepares learners for careers that are based in manual or practical activities, traditionally non-academic and totally related to a specific trade, occupation or vocation, hence the term, in which the learner participates. It is sometimes referred to as technical education, as the learner directly develops expertise in a particular group of techniques or technology.

Generally, vocation and career are used interchangeably. Vocational education might be contrasted with education in a usually broader scientific field, which might concentrate on theory and abstract conceptual knowledge, characteristic of tertiary education. Vocational education can be at the secondary or post-secondary level and can interact with the apprenticeship system. Increasingly, vocational education can be recognised in terms of recognition of prior learning and partial academic credit towards

tertiary education (e.g., at a university) as credit; however, it is rarely considered in its own form to fall under the traditional definition of a higher education.

Up until the end of the twentieth century, vocational education focused on specific trades such as for example, an automobile mechanic or welder, and was therefore associated with the activities of lower social classes. As a consequence, it attracted a level of stigma. Vocational education is related to the age-old apprenticeship system of learning.

However, as the labour market becomes more specialized and economies demand higher levels of skill, governments and businesses are increasingly investing in the future of vocational education through publicly funded training organizations and subsidized apprenticeship or traineeship initiatives for businesses. At the post-secondary level vocational education is typically provided by an institute of technology, or by a local community college.

Vocational education has diversified over the 20th century and now exists in industries such as retail, tourism, information technology, funeral services and cosmetics, as well as in the traditional crafts and cottage industries.

Education in Romania

During the 24-year reign of Nicolae Ceausescu, Romania's system of education remained under strict state control. Curricula strongly emphasized Marxist-Leninist ideology, and universities, in particular, came under the direct influence of Ceausescu and his wife, Elena. As a result of the government's isolationist policies, higher education was virtually cut off from the rest of the world.

Since the overthrow of the Ceausescu regime in 1989 and the country's transition to a market-based economy, many educational reforms have been implemented. However, not everyone has been happy with the changes. Under communist rule, all Romanians were required to attend primary school. But starting in 1989, mandatory primary school was abolished, and as a result, illiteracy has increased throughout the country, especially in rural areas. The country's successive post-communist governments have attempted to reverse this trend by offering educational programs to young people who abandoned compulsory schooling. These programs have been targeted especially towards children living in rural areas, urban slums and geographically remote communities in addition to ethnic minorities. So far, progress has been slow.

The language of instruction in schools and universities is Romanian, but Hungarian and German are also used for the benefit of the country's two largest ethnic minorities.

The academic year runs from October to June.

FIRST AND SECOND LEVEL EDUCATION

Based on education reforms introduced in 2000, primary and secondary education is organized in the 6+3+3(4) schema. The duration of studies depends on the type of secondary school. Academic, industrial, agricultural, economic and administrative secondary school and normal schools are 9-12. Forestry, fine arts, sports computer science are 9-13.

The schema prior to the recent reforms was as follows:

PRIMARY EDUCATION

- Type of school providing this education: Scoala Primara
- Duration of program: Four years (ages 7 to 11)

SECONDARY EDUCATION

Lower Secondary School (compulsory)

- Type of school providing this education: Gimnaziu
- Duration of program: four years (ages 11 to 15)
- Certificate/diploma awarded: Certificat de Capacitate (certificate of compulsory education)

Upper Secondary School (no compulsory)

- Type of school providing this education: Liceu
- Duration: four years (ages 15 to 19)
- Curriculum: Upper secondary school is divided into science, technical orientation and humanities streams.
- Certificate/diploma awarded: Diploma de Bacalaureat (after passing a bacalaureate examination called the examenul de bacalaureat).

Technical Secondary School

- Type of school providing this education: Liceu de Specialitate
- Duration: Four years (ages 15 to 19)
- Leaving Certificate: Diploma de Bacalaureat + (Atestat) de (Vocational Certificate)

Vocational Secondary School

- Type of school providing this education: Scoala Profesionala
- Duration: Two years (ages 15 to 17)
- Leaving Certificate: Diploma de Absolvire a Scolii Profesionale (diploma of completion of vocational school).

HIGHER EDUCATION

There are 64 public institutions of higher education, which include universities, academies, polytechnics, institutes and colleges. The distinction between these types of institutions is one of fields of study (the polytechnics are normally entirely engineering or other vocationally-oriented institutions).

Since 1990, a number of private universities have been opened throughout Romania.

Most institutions of higher education in Romania are administered under the Ministry of Education and Research. Universities and other institutions of higher education enjoy a large degree of autonomy.

UNIVERSITY HIGHER EDUCATION

The minimum admission requirement for short- and long-term university programs is the Diploma de Bacalaureat. Students must also take a competitive entrance examination called the Examen de Admitere. An overall score of 5 is required for all higher education programs, except fine arts.

Graduates from professional schools do not have the right to apply for postsecondary education programs.

Accreditation of Private Institutions of Higher Education

In 1993, the National Council for Evaluation and Accreditation was created to carry out the accreditation of higher education institutions and the recognition of diplomas.

There are currently two steps institutions must undertake to acquire accreditation in Romania:

- 1) They must obtain legal authorization to operate.
- 2) They must obtain full accreditation after a designated period of time and must submit to re-evaluation after five years.

Private institutions of higher education currently operating in Romania fall into two categories:

- 1) Those that have been authorized by the government to operate based on the recommendation of the National Council for Evaluation and Accreditation (this authorization is the first step to accreditation).
- 2) Those that have absolutely no legal right to operate.

Once a private institution has been accredited, it enjoys the same organizational and functional autonomy as public institutions.

Until a private institution is fully accredited, it does not have the legal right to issue state diplomas. However, students can take the diploma examination at a state university, and if they pass, receive a state diploma issued by that particular institution.

Programs and Degrees

Stage I: The first stage of higher education is provided in universities, institutes, polytechnics and academies, offering long cycle programs lasting four-to-six years or a shorter cycle of higher education lasting three years at university colleges. Short-cycle university education leads to the Diploma de Absolvire (diploma of graduation) while long-cycle university education leads to the Diploma de Licenta (licentiate diploma), the Diploma de Inginer (diploma of engineer), the Diploma de Architect (diploma of architect) and the Diploma de Doctor-medic (diploma of medical doctor).

Stage II: Holders of a long-cycle first degree may either continue their studies by taking a one- or two-year post-graduate program, which leads to either the Diploma de Studii Aprofundate (diploma of advanced study) or the Diploma de Master (diploma of master). Students may also enroll in specialized programs (length varies according to the field of study, but may not be less than one year), leading to the Diploma de Absolvire.

Stage III: The Romanian doctorate, called the Diploma de Doctor, requires four-to-six years of study beyond the master's level, which includes research and the writing and defense of a dissertation. This qualification is comparable to the Ph.D. in the United States. The final qualification in the Romanian education system is the Doctor-Dozent in Stiinte, which is awarded after extensive periods of research and publication.

Teacher Training

Primary School Teachers

Pre-primary teachers and primary school teachers are trained in postsecondary colleges. They are trained to teach subjects such as foreign languages, music and drawing or physical education. The length of teachers' training programs is two years for postsecondary school graduates, and three years for university colleges.

Secondary School Teachers

All secondary school teachers are required to enroll in training programs at institutions of higher education.

Main achievements since Bergen

The higher education structural reform in Romania taking place at the moment aims to increase the mobility of the students, improve their chances on the labour market, reduce the number of university specializations and increase the participation in masters' and doctoral programmes.

The comprehensive legislative package brings closer the Romanian universities to the European Higher Education Area.

Romania has made major steps towards the European Higher Education Area by reorganizing the entire spectrum of university programs. A new higher education structure has been adopted by the Law 288/2004 on the organization of university studies, providing the legislative framework for the introduction of the three cycles, Bachelor, Masters' and Doctoral studies, according to the Bologna objectives. The Law came into force in the 2005/2006 academic year and the first generation of Bachelor students will graduate in 2008/2009.

Through the **Government Decision 1175/2006** a new structure of the first cycle (Bachelor) by fields of study in accordance with the principles of Bologna process was enacted. The decision provides **15 general fields of study** and the correspondent specializations and is applicable in all public and private higher education institutions.

By reducing the number of study fields we allow a better coordination between the study programmes supply of Romanian higher education institutions and that specific to higher education systems within the future EHEA.

The Minister Order no. 3235/2005 concerning **the organization of the first cycle (bachelor) of university studies** ensure that the reform of the education curricula of the first cycle programmes within the same field of study includes the clear definition of the knowledge and skills acquired by the graduate, different from those acquired through the masters' and doctorate cycles.

The Governmental Decision no. 404/2006 concerning the organization of the Master degree and the Government Decision no. 567/2005 defining the main objective of the doctoral programmes constitute the legislative framework defining **the structure of the second and third cycle.**

Since Bergen a special attention was paid to the development of the post-doctorate programmes in Romanian higher education. Introduced through **Minister Order No. 3861/2005**, these are two-year advanced research programmes and their aim is to train outstanding researchers through the involvement of young PhDs in sciences. The provisions increase the attractiveness of research opportunities in Romania and their relevance to young doctors in sciences in terms of career development, attracting Romanian young doctors in science working abroad back in country. The activities specific to these programmes are basic and advanced research activities, mobility, development of the research and management programme infrastructure.

The Minister Order No. 3617/16.03.2005 **generalises the application of ECTS** in the Romanian universities. ECTS was in place since 1998 but it was used mostly for the mobility schemes with the foreign partners. This new order stipulates a general use of ECTS which stimulates students in their mobility inside the same HEI and/or between programmes offered by various Romanian universities, similar to the mobility freedom promoted by ECTS across the borders of the country. The universities will establish their own rules concerning the passage from one year to another in terms of number of ECTS which has to be accumulated by a student in order to enrol in the next year of study.

The Minister Order No. 4868/2006 concerning **the implementation of the Diploma Supplement** for certifying the graduation of one study cycle stipulates that all HEIs will

issue, free of charge, the **Diploma Supplement**, starting from the 2005-2006 academic year.

One of the main achievements for the Romanian higher education with a view of becoming an active and attractive part of the future European Higher Education System was the adoption of the Law 87/2006 which approved the Emergency Government Ordinance no. 75/2005 on quality **assurance in education**. This law has a trans-sectorial approach of quality assurance by covering all the providers of educational services in Romania. **The Law on quality assurance in education** includes:

- The methodology for quality assurance in education;
- Quality assurance at institutional level;
- External assessment of quality education;
- Institutional arrangements involved in quality assurance.

The Law also provides the establishment of the **Romanian Agency for Quality Assurance in Higher Education** is an independent public institution with competencies in accreditation, academic evaluation and quality assurance.

In Romania, at the present there are:

- 56 state accredited higher education institutions (49 civilian state higher education institutions and 7 military universities),
- 29 private accredited higher education institutions,
- 28 private accredited higher education institutions authorized to function provisory,
- 6 post university academic schools.

Types of higher education institutions in Romania:

Academies are higher education institutions that prepare their graduates in a certain specific domain (economy, music etc.).

Polytechnic Universities train students for technical domains of study.

Private higher education is an alternative to public education. It is subject to an accreditation process. Accredited private institutions may obtain state support.

All legal acts apply in the same extend to public and private higher education institutions.

Stage of development of external quality assurance system

External evaluation of quality will be carried out in Romania by two bodies:

- **Romanian Agency for Quality Assurance in Higher Education**
- **Romanian Agency for Quality Assurance in Pre-University Education.**

The Romanian Agency for Quality Assurance in Higher Education is an autonomous public institution with competencies in accreditation and external quality assessment.

As regards quality assurance and evaluation, **the Agency establishes and revises periodically the national standards and performance indicators for higher education**. All documents elaborated by ARACIS are based on the European standards and procedures agreed by the ministers of education in Bergen.

It collaborates with other institutions to develop and promote policies and strategies for quality education, provides transparently its own procedures and mechanisms for external quality evaluation, has the right to use international experts and provides its own register of evaluators.

In order to inform the stakeholders, the Agency:

- Makes public the reports of external evaluations,
- Evaluates on the Ministry of Education and Research request the quality of higher education institutions and programmes,
- Publishes a Memorandum on its activity every year, and
- Provides every four years an analysis of the quality of the entire higher education system.

The Agency will be functioning based on its own funds coming from contracts with the Ministry of Education and Research, HEIs from Romania and abroad, or other institutions or bodies, accreditation and external evaluation fees, external no reimbursable funds, donations, sponsorship, other sources.

Romanian HEIs may ask for external evaluation of the quality of their educational services to be carried out by any agency recorded in the future European register of quality assurance agencies in higher education.

The law will be implemented from 2006 – 2007 academic year and will apply to the whole education system.

The Minister Order 3928/April 2005 on the quality educational services in higher education institutions aims at ensuring the continuous improvements in terms of quality of the educational services, both for students and other beneficiaries of initial and continuous training. It provides the establishment and the development of internal quality control mechanisms by each HEI and their own internal quality assurance system by the end of the academic year 2004 – 2005 and to apply it from 2005 – 2006, different according to cycle and study programme.

According to the Law, each HEI has already established a **Committee for quality assurance and evaluation**. The committee must have among its members representatives of the main stakeholders and of student bodies. HEIs have also to elaborate institutional *Guidelines for quality assurance*.

Annually they have to elaborate Institutional Reports on internal assessment of quality assurance which are forwarded to the Ministry of Education and Research. These reports are published on the universities' web sites. ARACIS elaborates each 3 years system analysis of the quality in higher education in Romania.

Lifelong Learning

At the present there are in place specific procedures for the recognition of non-formal and informal prior learning.

The common Order of Education and Labour Minister no. 4543/468 from 23 august 2004 provides the procedural guidelines for the evaluation and certification of professional competences acquired in other contexts than the formal one.

The assessment process of professional competences acquired in other contexts than the formal one is independent of the vocational training process and is based on occupational and professional training standards.

There are some principles as basis for the assessment process of professional competences acquired in other contexts than the formal one:

- ◆ Validity (competence evidence for the activities described in the occupational standard);
- ◆ Credibility (the use of the same methods leading always at the same result);
- ◆ Impartiality (no private interest);

- ◆ Flexibility (adapted to the needs of the candidates and the particularities of the work place);
- ◆ Confidentiality of the result;
- ◆ Simplicity (easy to understand and to be applied).

On demand of the individual, this kind of competences is evaluated by evaluation centres for professional competences.

The National Council for Adult Vocational Training authorizes and monitors the evaluation centres for professional competences and certifies the professional competences evaluators.

At the present are functioning 31 centres for the evaluation and recognition of prior learning, which are assessing 61 occupations and qualifications (www.cnfpa.ro).

The individuals declared competent following the evaluation process receive a certificate of professional competences, for those units which declared them competent.

There are also provisions at the university level for the recognition of certain courses taken to other institutions and which are included in the study programme by using ECTS.

Romanian Education Priorities and Policies

1. Assuring the chance equality for education and increasing the participation rate in education.
2. Development of the compulsory education.
3. Decentralization and autonomy of the pre-university education system.
4. Development of R&D and innovation activities.
5. Modernization of the educational system in the rural area.
6. Development of life long learning process.
7. Correlation of the educational system and the R&D and innovation system with the European objectives.
8. Increasing the quality of education and research to create creative HR.

Legal Framework

- The Romanian Constitution;
- Education Law no 84/1995;
- The National plan for Development, 2007 – 2013;
- Governmental Decisions and Orders: H.G. no 223/2005, H.G. no 1449/2005, Law 224/2005, Law no 346/2005, Law no 87/2006, H.G. no 88/2005, H.G. no 567/2005, H.G. no 769/2005, H.G. no 916/2005, H.G. no 1169/2005, H.G. 405/2006, H.G. 404/2006, H.G. no 234/2006, Order Ministry of Education no 3957/2005, H.G. no 1418/2006, H.G. 1424/2006, O.U.G. no 78/2005, Order Ministry of Education no 3253/2005, Order Ministry of Education no 3295/2005, Order Ministry of Education no 3545/2005, Order Ministry of Education no 3617/2005, Order Ministry of Education no 3714/2005, Order Ministry of Education no 3845/2005, Order no Ministry of Education 3861/2005, Order no Ministry of Education 3928/2005, H.G. no 1175/2006;
- European directions:
 - Bologna Declaration, 1999;
 - Lisbon Strategy, 2000;
 - Copenhagen Process, 2002;
 - Helsinki Statement, 2006.

Legal Initiatives for 2007

- Projects of law regarding the Educational Code, the Higher Education System, the Pre-university Education System, the teaching staff status, the improvement of the IT education infrastructure, the quality standards for education etc. all in agreement with the EU priorities.

“European Credit system for Vocational Education and Training” (ECVET) Consultation process in Romania

The consultation process in Romania was organized by the Ministry of Education and Research with the support of the National Centre for TVET Development and National Authority for Qualifications.

The target group involved policy-makers, social partners (Sectorial Committees and National Adult Training Board), training providers’ representatives, and experts in VET sector, hereinafter refer to as “respondents”.

The purpose of an ECVET system

- In “respondents” view ECVET is a device for promoting the transfer, accumulation, and a transparent instrument that is facilitating recognition of the learning outcomes in VET systems in Europe; it is also a driver of change together with the EQF that are inspiring the reforms in Romania.

- ECVET enables the transparency of qualifications, described in terms of learning outcomes (KSC), and facilitates the mobility of learning if methodologies for learning outcomes validation and recognition are in place.

- ECVET working document outlines the objectives and the main functions of a European system of credits for VET, and the role of competent authorities in the implementation of ECVET system at national level. Taking into account the diversity of VET systems in different countries, and the roles that the competent bodies should play at the national level, the working document should emphasize more on the importance of the Quality Assurance mechanisms for creating the mutual trust climate.

- Since the main added value of ECVET system is to facilitate the portability of learners’ achievements reached in different learning contexts, at national and European levels, the working document should emphasize more on the relation between the assessment of the learning outcomes achieved and the process of validation and recognition of the learning outcomes.

The technical specifications of ECVET system

- ECVET’s technical specifications describe very clear the evaluation, validation, recognition, accumulation and transfer of the learning outcomes in order to ensure a comprehensive view of the implementation process.

- The “respondents” are not welcoming the credit points’ allocation and the aim to achieve a European credit points’ allocation reference looks, in their view, rather an obstacle for the ECVET adoption, than a facilitator.

- The working document could take into account the possibility to correlate the number of allocated credit points to a qualification with the EQF levels. If there is an intention to create a European reference for the allocation of the credit points, this could be defined and used in the same approach as EQF level descriptors – as a translation device,

each country been responsible for the decision regarding the number of the credit points according to the procedures and practices in force.

Implementing ECVET

- The qualifications validated by the Sectorial Committees and delivered through the formal education system (TVET) in Romania are already described in terms of learning outcomes and organized in units, which contributed to the mutual trust accomplishment. Therefore, the respondents appreciated that the learning outcomes and units based structure of the qualifications are crucial for improving the transparency of qualifications and for the development of mutual trust.

- ECVET credit points could be allocated, at national level, on a basis of a combination of the following criteria, adjusted to each qualification' specificity (content, complexity, level):

- o the importance of the contents of each unit defined in terms of KSC

- o the importance of the unit for the whole qualification

- o the complexity' degree of the units' learning outcomes

- o the real or notional learner effort in an informal learning context

Workload criterion, used as singular criterion, is not appreciated by the respondents.

- As mentioned above, qualifications provided through the formal TVET system in Romania, have already fulfilled the conditions for making ECVET operational, but these qualifications represents only 30% of VET qualifications in Romania. Qualifications from other VET systems are still subject of learning outcomes development.

Operational procedures for validation of the learning outcomes achieved in informal and nonformal learning contexts have been developed, and specialized institutions for competence' assessment are in the process of accreditation by the National Qualifications Authority (National Adult Training Board is acting as NQA in Romania).

Therefore, we consider as respondents also mentioned, that Romania is partially ready for ECVET adoption and the planned developments are ensuring the full readiness.

- The respondents considered that an obstacle for the mutual trust achievement between VET providers within the country could be generated by the quality assurance system not fully operational at the training provider level. ECVET across Europe could be impeded by the language barriers. ECVET in HE is not yet subject for discussion, therefore the main purpose of ECVET - learning mobility in view of supporting LLL – will remain partially unsolved.

- ECVET implementation in Romania could be effective within a 5 years timeframe, if the qualifications, mainly those related to CVT and different sectors will be learning outcomes defined.

Measures for supporting the implementation and development of ECVET

- Several measures could be taken at European level in order to facilitate the implementation of ECVET system:

- promotion of projects and programmes related to ECVET implementation testing, for developing practical instruments or common methodologies for implementation purposes, for developing common procedures for assessment, credit allocation, validation and recognition of the learning outcomes.

- creation of networks and partnerships between the competent bodies from the different countries in order to ensure a higher transparency of the qualifications

systems, to ensure the coherence of the implementation process in different countries, and to increase the mutual trust. Common understanding of concepts and mutual trust are preconditions of all developments at EU level.

• At the Romanian national and sectorial levels an action plan could be set-up, with measures for ECVET implementation, such as:

- immediate adoption of CVT law in view of introducing ECVET and learning outcomes based training programmes.
- development of occupational standards and training standards with clear definition of credits and credit points allocated to units.
- enhancement of quality assurance at training provider level including quality assurance procedures at the level of the assessment centres in charge with certification of achievements from informal and non-formal learning contexts.
- Awareness campaign for the involved institutions to promote projects under ESF

• The ECVET implementation could be supported through the development of documents, studies, and practical guides regarding the validation and recognition of the learning outcomes, tools for defining the learning outcomes in terms of KSC, methods for allocation of the credit points, and practical aspects regarding the implementation process.

ECVET's potential for enhancing mobility

• Since ECVET is contributing to portability of the achieved learning outcomes there is an explicit potential of it to contribute to the mobility.

• If recognition of the learning achievements will be operational, ECVET will assist mobility enhancement, thus the participation rate to the Community programmes it is expected to increase.

• Europass is a tool created to make transparent the learning outcomes achieved by an individual. ECVET is a system that allows the transfer and the accumulation of the individual' learning outcomes achieved in different learning contexts. Together, Europass and ECVET ensure the transparency of the qualifications achieved, enhance the mobility of the learners, and increase the individuals' employability and LLL opportunities.

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