

2019



NATIONAL CENTRE FOR
TECHNICAL AND
VOCATIONAL EDUCATION
AND TRAINING
DEVELOPMENT

CURRICULUM **FOR TECHNICAL AND VOCATIONAL EDUCATION**



MINISTRY OF NATIONAL EDUCATION





**NATIONAL CENTRE FOR
TECHNICAL AND VOCATIONAL
EDUCATION AND TRAINING
DEVELOPMENT**

CONTENTS

Introduction	5
European Context	6
National Context	7
Conceptual clarifications	8
Designing the vocational training standard and the curriculum	10
Steps of the design process and the stakeholders	10
Vocational training standard (VTS)	12
Structure of VTS	
Curriculum for TVE (CRR)	13
Principles underlying the design of the curriculum for TVE	
Common core (CC)	
Differentiated curriculum (DC)	
Curriculum in local development (CLD)	
Modular curriculum for TVE	
Structure of the curriculum for TVE	
Learning outcomes specific to key competence areas	
Evaluation and certification	17
Professionalization tracks in TVE	19
Conclusions	21
List of abbreviations	21





INTRODUCTION

Curriculum for technical and vocational education

The initial vocational education and training process has a direct impact on the employment policies, being one of the priorities of European strategies and policies in this area

The Vocational Education Training (VET) in Romania beneficiates already from the outcomes of the modernisation efforts made with the support of European funds during the pre-accession to the European Union, as well as during the post-accession period.

The main strength of the VET modernisation in Romania is the simultaneous and coherent development of the main elements which are innovating the provision of vocational education and training.

Among these elements, the curriculum is, at this moment,

the element with maximum visibility in school world.

EUROPEAN CONTEXT

In European Union, the organisation of the vocational education and training systems and the contents of the study programme are the responsibility of the Member States. According to the principle of subsidiarity, EU can support and supplement the action of member states in certain education and training areas where it can promote their quality by generating the “European added value”.

For this purpose, numerous European initiatives were launched based on the political cooperation between member states.

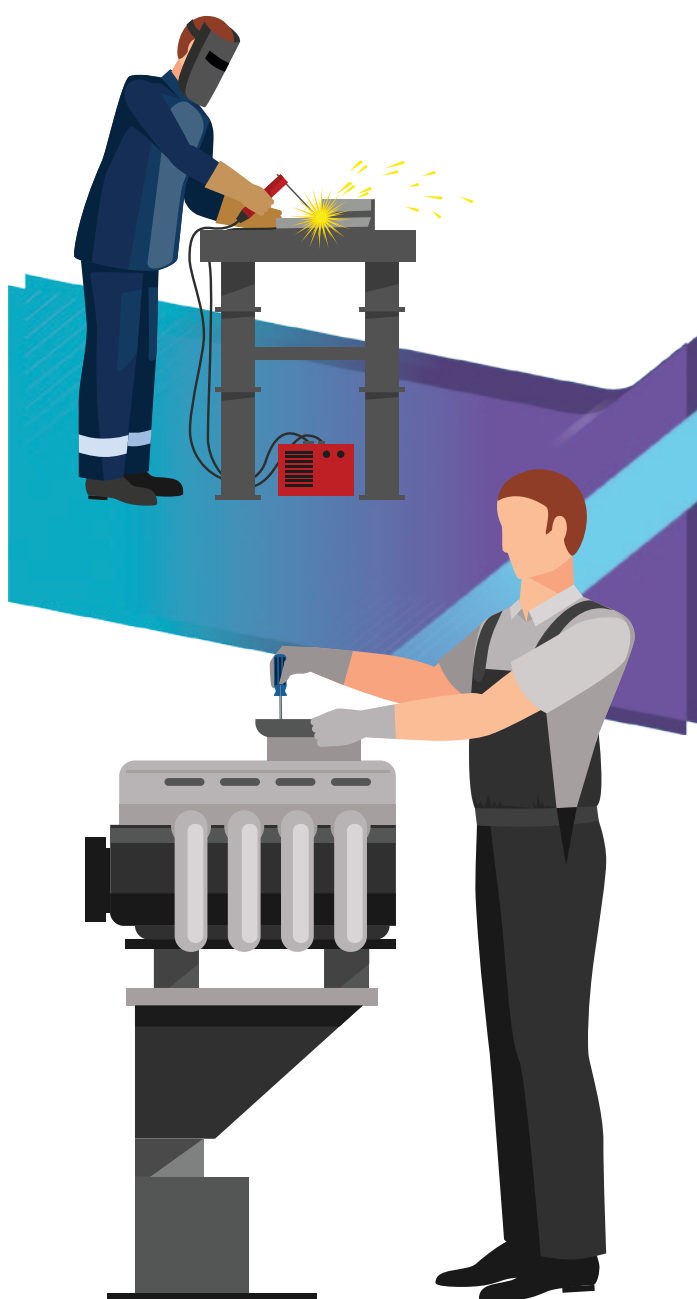
The European vocational education and training systems must adapt both to the society requirements, as well as to the needs determined by the desire to improve the level and quality of employment. They must provide education and training possibilities for target groups in various moments of life: young, adults, unemployed and people whose occupations are affected by the low competencies they have.

A dynamic economy based on knowledge depends on the skilled labour force, which has the necessary knowledge, attitudes and skills in order to adapt itself to the changing requirements in the labour market. In order to respond to this requirement, the vocational education and training systems in Europe have intensified the processes of defining the qualifications and training programmes based on learning outcomes, defining the national qualification frameworks in correlation with the European Qualifications Framework.

At this moment, at European level, Romania is at the forefront of the countries that have introduced vocational training systems based on learning outcomes.

The VET provides the initial vocational training in pre-university education, which is designed so that it accommodates, in a flexible way, all European developments

(Strategic framework for European cooperation in vocational education and training ET 2020, European framework for quality and efficient apprenticeship programmes, European Qualifications Framework EQF, European Quality Assurance Reference Framework for Vocational Education and Training EQAVET, Common European Framework of Reference for Languages, Common European Framework of Key Competencies, European Credit System for Vocational Education and Training ECVET, The New Competencies Agenda for Europe, Riga Conclusions, Alliance for Apprenticeships etc.)



NATIONAL CONTEXT

The main purpose of vocational education and training for children, young people and adults is the training of competencies understood as a multifunctional and transferable set of knowledge, skills/abilities and attitudes, necessary for:

- ✓ Personal achievement and development, by achieving the own objectives in life, according to the interests and aspirations of each person and his/her desire to learn during the entire life;
- ✓ Social integration and active civic participation within the society;
- ✓ Employment and participation to the operation and development of a sustainable economy;
- ✓ Building a life idea, based on humanistic and scientific values, on national and universal culture and on stimulation of intercultural dialogue;
- ✓ Education within the spirit of dignity, tolerance and compliance with the human fundamental rights and liberties;
- ✓ Cultivation of sensitivity towards human problems, towards the moral-civic values and the respect for nature and natural, social and cultural environment.

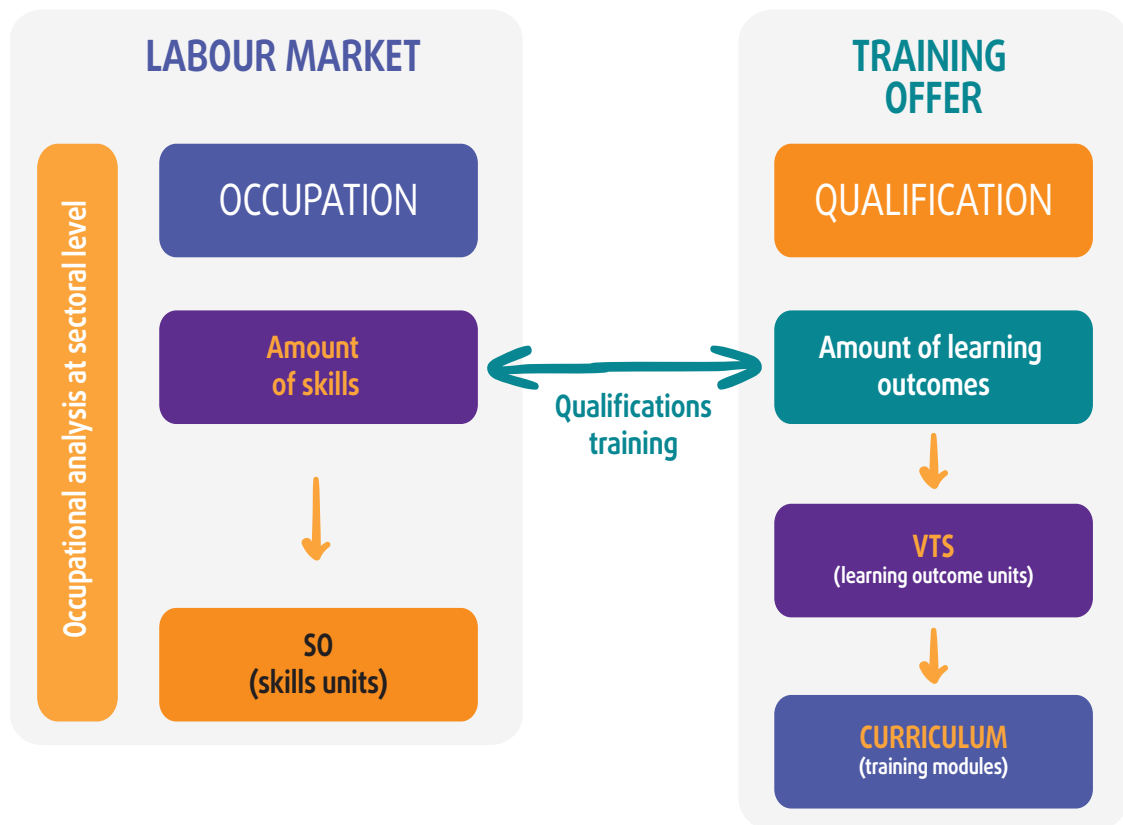
The pre-university education is organised on levels, types of education and, as the case may be, paths and fields of study and provides the conditions necessary to obtain the key competencies and for progressive professionalization.

The technical and vocational education is made of: vocational education, dual education, technological secondary (high school) education and post-secondary education.

The qualifications that can be obtained through the technical and vocational education are part of the national qualifications system and are described in accordance with the reference levels of the National Qualifications Framework.



CONCEPTUAL CLARIFICATIONS



- Skills refer to the ability to apply and use knowledge in order to fulfil tasks and to solve problems. In the context of the European Qualifications Framework, skills are described as being cognitive (involving the use of logical, intuitive and creative thinking) or practical (involving manual dexterity and use of methods, materials, tools and instruments). Skills are expressed by the following descriptors: application, transfer and problem-solving, critical and constructive reflection, creativity and innovation.

- Attitudes (in terms of responsibility and autonomy) are the proven capacity to apply, in an autonomous and responsible manner, his/her knowledge and skills. In the context of the European Qualifications Framework, attitude describes the manner in which the student reports himself to his own activity, mainly from the perspective of responsibility and autonomy.

- National Qualifications Framework (NQF) is an instrument for qualifications classification in accordance with a set of criteria corresponding to some specific reached learning levels, which purpose is to integrate and coordinate the national qualification subsystems and to improve transparency, access, progress and quality of qualifications in relation to the labour market and civil society.

- European Qualifications Framework (EQF) – EQF is a common European system of reference which will correlate the national qualification systems in various countries and the existing frameworks. In practice, it will have the role of a translation instrument which provides the transparency of qualifications. The framework will help the students and workers, who want to establish themselves in other countries, to change their jobs or to transfer to another education institution back home.



- Qualification is the formal outcome of an evaluation and validation process, obtained when a competent body establishes that a person has obtained, as a result of learning, outcomes according to certain preset standards.

- Professional qualification gives the official recognition of the learning outcomes on the labour market, which can be national, sectoral or at enterprise level. Professional qualification can lead to practicing one or more activities. The qualifications that can be obtained by technical and vocational education are described by learning outcome units.

- Professional competencies – the proven ability to select, combine and use, in an adequate manner, knowledge, skills and other acquisitions in order to successfully solve a certain category of work or learning situations, as well as for the personal or professional development in efficacy and efficiency conditions.

- Knowledge refers to the outcome of information assimilation by learning. Knowledge represents the set of facts, principles, theories and practices related to a certain labour or education area. In the context of the European

Qualifications Framework, knowledge is described as being theoretical and/or factual. Knowledge is expressed by the following descriptors: knowledge, understanding and use of specific language, explanation and interpretation.

- National Curriculum - the coherent set of curriculum plans and syllabi of the pre-university education.

- Curriculum in the technical and vocational education
The components of the technical and vocational education (VET) are the same as those of the National Curriculum: curriculum plans, syllabi, guidelines, methodological norms, support materials, alternative handbooks.

- Occupation, According to the Classification of Occupations in Romania (COR), is the useful activity which brings an income (in money or in kind) usually carried out by a person

in a business and which, for that person, represents a living source. Therefore, occupation is specific to active persons, who are practicing an activity recognised by society as being useful for himself and for his peers.

In order to be recognised according to the Romanian labour law, the occupation must be found in the Classification of Occupations in Romania (COR).

The occupation of a person can be expressed by: the position or job he/she exercises.

- ✓ Curriculum plans include disciplines, fields of study, respectively the compulsory and optional training modules, as well as the minimum and maximum number of hours associated with them.

The curriculum plans and syllabi for the disciplines/ fields of study, respectively the compulsory training modules in the pre-university education are developed by the authorised institutions and bodies of the Ministry of National Education and are approved by order of the Minister of National Education.

- Learning outcomes are what a person understands, knows and is able to do after completing a learning process and are defined as knowledge, skills and attitudes (responsibility and autonomy).

- Vocational Training Standard (VTS) is the document describing the learning outcomes which a participant to a vocational training programme, carried out within the technical and vocational education, must demonstrate at its completion.

The vocational training standard is the regulatory document with the most important role in designing the curriculum for the technical and vocational education, being developed based on the occupational standards in force. In the absence of occupational standards, the competencies associated with the occupation/occupations targeted by that qualification, which shall underlie the vocational

training standard, are established by consultation with the sectoral committees, professional associations, specific organisations, regulatory bodies.

The National Curriculum developed in accordance with the needs specific to personal development and with the needs of the labour market and of each community is applicable in the pre-university education, based on the principle of subsidiarity.




- National qualifications system means all aspects of the activity of a state regarding the recognition of learning and of other mechanisms correlating the education and training with the labour market and civil society. It includes the development and implementation of institutional agreements and processes relating to quality assurance, evaluation and granting of qualifications. A national qualifications system can be made of multiple subsystems and can include a national qualifications framework.
- Learning outcomes unit is the part of a qualification which includes a coherent set of knowledge, skills and attitudes, which can be evaluated and validated.



DESIGNING THE VOCATIONAL TRAINING STANDARD AND THE CURRICULUM FOR VET

STEPS OF THE DESIGN PROCESS AND THE STAKEHOLDERS

Main steps of the process of designing the vocational training standards and the curriculum for VET:

- Development of the Vocational training standard by the initiators under the methodological coordination of the National Centre for the Development of the Technical and Vocational Education (NCTVETD/(CNDIPT)) based on the identified professional qualification needs, for the qualifications in the Nomenclature of professional qualifications for which training is provided by pre-university education;
- Validation of the Vocational Training Standards by the Sectoral Committee 
- Development of the Curriculum plan based on the Vocational Training Standards by the MEN (Ministry of National Education), CNDIPT in collaboration with the Institute of Educational Sciences (IES/ (İŞE)), 
- Development of the Curriculum for the Technologies curriculum area under the coordination of CNDIPT, based on the validated Vocational training standards; 
- Endorsement of the Curriculum by the National specialised committees of the Ministry of National Education (MEN);



- Approval of the Curriculum by the Ministry of National Education (MEN).

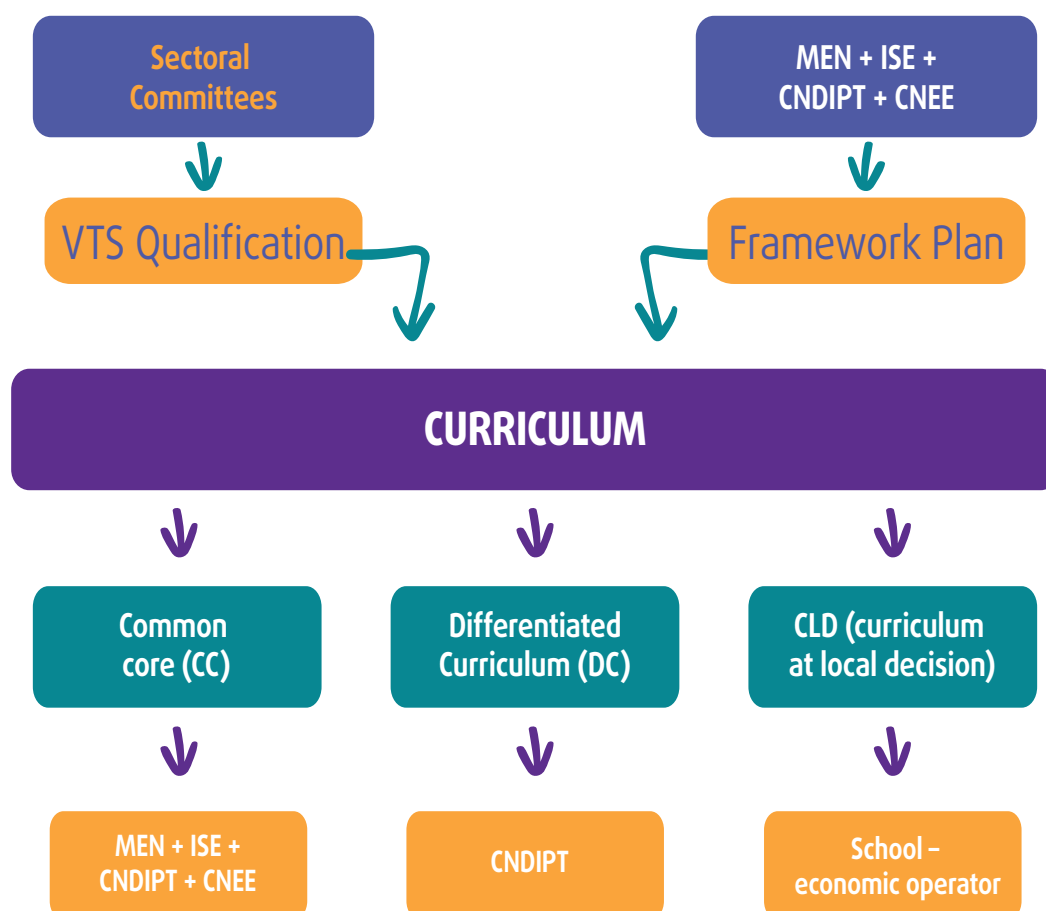
Main stakeholders involved in the process of designing the vocational training standards and the curriculum for VET:

National Qualifications Authority (ANC):

- ~~Coordinates the activity of the Sectoral Committees which develop and validate the occupational standards and the vocational training standards used to describe the qualifications;~~

National Centre for the Development of the Technical and Vocational Education (CNDIPT):

- develops the methodology on curriculum restructuration and supports its development considering the integration of information technologies;
- coordinates the development of vocational training standards for the new professional qualifications, for which the training is provided by VET;
- coordinates the development of curriculum component planned to be carried out in local development;
- coordinates the development of curriculum auxiliaries used in the teaching-learning process, including competencies evaluation.



Sectoral committees (SC) (social dialogue structures organised at the level of activity sectors, under the coordination of the National Qualifications Authority):

- validates the vocational training standards

Institute of Educational Sciences (IES):

- provides the scientific coordination for developing the components of the national curriculum, curriculum plans, syllabi and their periodic review;
- provides the scientific correlation and methodological coherence between the curriculum and other components of the national education system.

Ministry of National Education (MEN):

- approves, by order of the minister, after endorsement in the specialised national committees, the curriculum for each qualification in the Nomenclature of qualifications.

CNDIPT and MEN coordinate the development of the legislative regulations on the development and implementation of the curriculum for the technical and vocational education.

The concordance between the curriculum and the qualification granted by the pre-university study programme is a mandatory criterion for the evaluation of quality assurance. (LEN 1/2011)

VOCATIONAL TRAINING STANDARD (VTS)

The qualifications for which vocational training standards are developed are registered in the National Qualifications Register – NQR / National Professional Qualifications Register – NPQR. Until the registration in the NQR / NPQR, the qualifications for which vocational training standards are developed are those in the Nomenclature of professional qualifications for which training is provided by pre-university education, as well as education duration, in force.

STRUCTURE OF THE VOCATIONAL TRAINING STANDARD

I. INTRODUCTORY NOTE

II. TABLE FOR THE CORRELATION OF THE LEARNING OUTCOMES UNITS (LRU) WITH COMPETENCY UNITS / COMPETENCIES SPECIFIC TO OCCUPATIONS WHICH CAN BE PRACTICED

III. DESCRIPTION OF EACH LEARNING OUTCOMES UNIT CORRESPONDING TO THE COMPETENCIES IDENTIFIED FOR THE TARGETED OCCUPATION / OCCUPATIONS AND THE EVALUATION STANDARDS ASSOCIATED WITH THEM

(title, learning outcomes, minimum list of material resources, evaluation standard corresponding to the learning outcomes unit)

IV. LEARNING OUTCOMES SPECIFIC TO OTHER DISCIPLINES (MATHEMATICS, MODERN LANGUAGE, SCIENCES ETC.) NECESSARY TO OBTAIN THE PROFESSIONAL QUALIFICATION

Learning outcomes:

Knowledge	Skills	Attitudes
1.1.1.....	1.2.1.....	1.3.1.....
1.1.2.....	1.2.2.....	1.3.2.....

In the three digits code, the first digit corresponds to the registration number of the learning outcomes unit within the qualification, the second digit corresponds to the registration number of the learning outcome category (1 – knowledge, 2 – skills, 3 – attitudes) and the third digit corresponds to the registration number of the learning outcome within each category of learning outcomes





CURRICULUM FOR VET

PRINCIPLES UNDERLYING THE DESIGN OF THE CURRICULUM FOR VET

The design of the curriculum for VET takes into consideration the following principles:

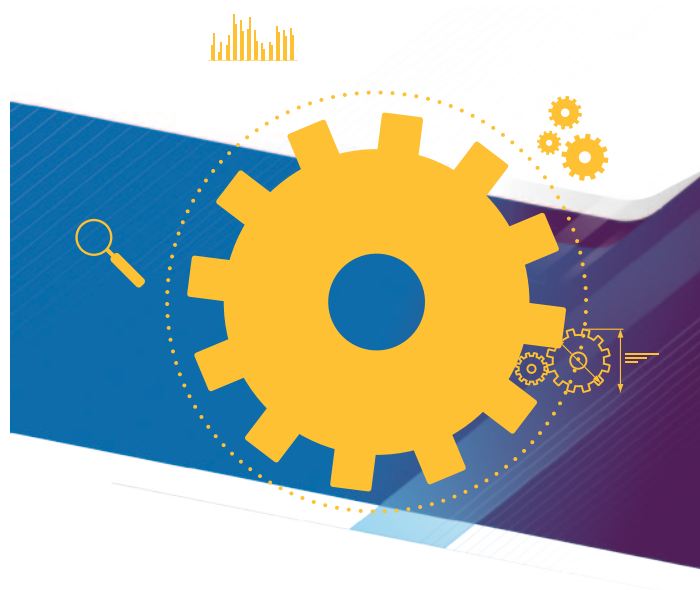
- **P**rovision of some purposes coherent with the national policies for educational development, by specific training paths;
- **A**daptation to the dynamics of technologies and professionalization models implied by them.

The fundamental purpose of the curriculum development for VET aims:

- The achievement, by the graduates, of the (general and specialised) learning outcomes necessary to adapt, currently and especially in the future, to the requirements of a labour market in continuous and fast change, preponderantly for the green economy and development of sectors with national priority;
- The achievement, by the graduates, of those learning outcomes corresponding to the areas of transferrable key competencies, necessary for social integration, as well as for fast and successful integration on the labour market.

The objectives of developing and implementing the curriculum of VET are the following:

- **A**daptation of the vocational training contents to the level of economic and social development;
- **D**esign of the Curriculum for local development (CLD) in order to adapt the qualifications to the local and regional labour market;
- **P**romoting the use of didactic strategies based on student-focused learning;
- **A**daptation of didactic strategies for the integration and stimulation of students performances with special educational requirements (SER);
- **E**valuation and certification based on learning outcomes;
- Development of the curriculum based on vocational training standards;
- **D**evelopment of modular curriculum;



- **D**evelopment of the curriculum for local development in order to adapt to the qualifications relevant for the local and regional labour market;
- **I**ntegration, in the vocational training standards, of the key competencies areas, within the general and specialised technical learning outcomes units;
- **C**onsolidation of the school counselling and orientation role, in order to train some of the learning outcomes / key competencies.

The principles of designing the curriculum for VET are in harmony with those underlying the design of the National Curriculum.

The specifics of initial vocational training create a series of challenges regarding the direct social impact of offering professional qualifications through VET.

Both as process, as well as product, the curriculum for VET must observe the hardness of complying with the quality cycle (planning, action, review and implementation).

Periodic review of the curriculum is a natural process, considering that the labour market suffers technological and organisational changes which lead to qualification modifications and, implicitly, to VTS modifications.

Currently, the curriculum is developed or reviewed when:

- ✓ The Nomenclature of professional qualifications for which training is provided by pre-university education, as well as education duration/National Qualifications Register are modified;
- ✓ The educational structure is modified – levels/course paths/fields of study/specialisations;
- ✓ Vocational training standards are developed or reviewed;
- ✓ New specifications occur at the level of the national curriculum policy;
- ✓ The Curriculum Plans for the VET are reviewed;
- ✓ The system operation requires modifications.

Documentation and audit of the systematic review process for the VET curriculum remain the priority directions to be developed in the future.

The National Curriculum is structured in seven curriculum areas, which gather disciplines or modules: Language or communication, Mathematics and natural sciences, Human and society, Arts, Physical education and sports, Counselling and orientation, Technologies.

The Technologies curriculum area groups those disciplines and modules addressing directly to pre-professionalization or vocational training, displayed as three types of curriculum components: common core, differentiated curriculum and curriculum for local development.

COMMON CORE (CC)

The common core is established at central level and includes the educational disciplines, with the associated allocated hours, which are common to all qualifications within a vocational training area.

The common core aims to:

- Study thoroughly the learning outcomes / key competencies, relevant for the student training path;
- Achieve the general knowledge necessary for the specialised training and for registration to the graduation (baccalaureate) examination;

- Achieve the general knowledge necessary for the specialised training and for completing the studies specific to the educational level (lower secondary and upper secondary), which are to be recognised by academic-purpose evaluations (graduation (baccalaureate) examination).

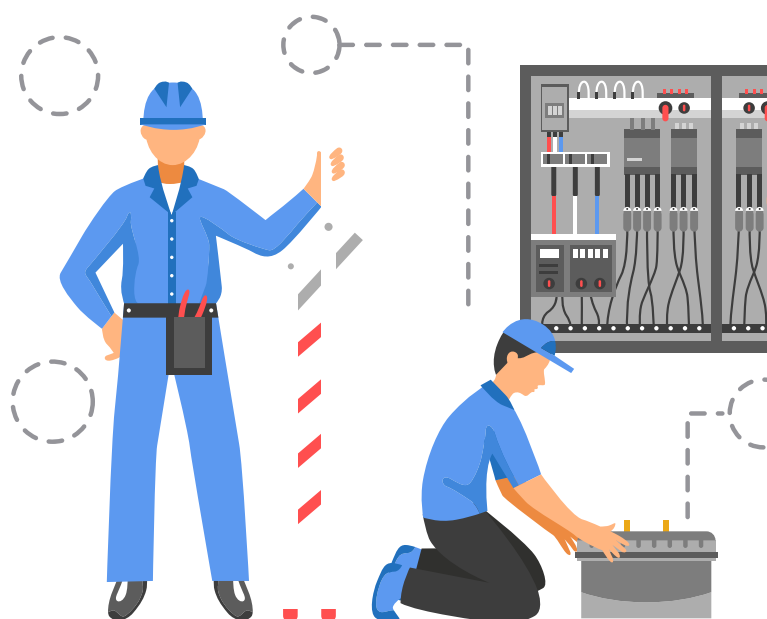
DIFFERENTIATED CURRICULUM (DC)

The differentiated curriculum is established at central level and includes a modules pack, with the associated allocated hours, which are specific to a professional qualification.

The differentiated curriculum aims the development of learning outcomes specific to the general and specialised technical learning outcomes units, necessary for the qualification, and the thorough study of the learning outcomes specific to the areas of key competencies.

The specifics of the curriculum for VET in relation to the National Curriculum are given by the following elements:


- 1) Design of the modular curriculum, in which the development of a learning outcome unit / competencies is carried out by a module.
- 2) The specific relation between the curriculum for the VET and the vocational training standards, which plays the role of referential based on which the curriculum for each qualification is designed.






CURRICULUM FOR LOCAL DEVELOPMENT (CLD)

The curriculum for local development (CLD) is the curriculum offer specific to each educational unit and is carried out in partnership with the economic operators / public institutions partners of the education unit. This curriculum offer provides the framework necessary to adapt the vocational training of students to the requirements of the local and/or regional labour market.

The design and evaluation of the curriculum for the local development provides conditions for the involvement of the social partners (economic operators, local organisations/ associations of the employers and/or employees etc.) in the process of identifying the competencies specific to the local and/or regional labour market, in order to transpose them into learning outcomes  and of learning situations provided for the students.


CLD responds to the need of granting more flexibility to VET units regarding the planning and design of the students' vocational training offer in partnership with economic operators/ public institutions.

Currently  the Methodological benchmarks were updated regarding CLD design, both for high school, technological course path, as well as for the vocational education.



MODULAR CURRICULUM FOR VET

The curriculum for VET is modular. In general, each learning outcome unit of the VTS is associated with a module. There are also situations when, due to reasons related to certain technological processes, in case of certain qualifications, this algorithm was not complied with.

The module name can be the same with the name of the learning outcome unit of the VTS  it can be different. What is important is that the relation between the module and the learning outcome unit of the VTS is clearly highlighted. Modularisation of the curriculum for the technical and vocational education consists in designing the vocational education and training path based on the learning outcome units of the Vocational training standards.

STRUCTURE OF THE CURRICULUM FOR VET

A. STRUCTURE OF THE SCHOOL/TRAINING PROGRAMS OF VET:

- ✓ Curriculum description note (includes the list of modules and the correlation between learning outcome units and modules)
- ✓ Educational plan (made in correlation with the curriculum plans)
- ✓ Modules

B. STRUCTURE OF THE MODULE:

Each module includes:

- ✓ INTRODUCTORY NOTE
- ✓ LEARNING OUTCOMES/COMPETENCIES (coded according to VTS)
- ✓ LEARNING CONTENTS AND CONTEXTS corresponding to learning outcomes
- ✓ SUGGESTIONS AND RECOMMENDATIONS REGARDING THE TEACHING – LEARNING – EVALUATION PROCESS
- ✓ EXAMPLES OF DIDACTIC DESIGN INSTRUMENTS
- ✓ EXAMPLES OF EVALUATION INSTRUMENTS

C. DETAILING THE LEARNING OUTCOMES:

LEARNING OUTCOME UNITS 1

Knowledge

(LEARNING OUTCOMES 1.1.1. ... LEARNING OUTCOMES 1.1.n)

Skills

(LEARNING OUTCOMES 1.2.1. ... LEARNING OUTCOMES 1.2.n)

Attitudes

(LEARNING OUTCOMES 1.3.1. ... LEARNING OUTCOMES 1.3.n)

Learning contents

LEARNING OUTCOME UNITS n

Knowledge

(LEARNING OUTCOMES n.1.1. ... LEARNING OUTCOMES 1.1.n)

Skills

(LEARNING OUTCOMES n.2.1. ... LEARNING OUTCOMES 1.2.n)

Attitudes

(LEARNING OUTCOMES n.3.1. ... LEARNING OUTCOMES 1.3.n)

Learning contents

- ✓ minimum material resources, necessary to go through the module;
- ✓ educational equipment, means (minimum those of VTS);
- ✓ methodological suggestions (including for the adaptation to students with Special Education Needs);
- ✓ suggestions regarding the evaluation;
- ✓ bibliography.

Both theoretical training hours, as well as practical training hours are allocated within the module, necessary for training the professional competencies and some key competencies.

The practical training can be carried out both by technological laboratory hours, as well as by practical training in school workshops or in an enterprise, during

hours allocated per week and in practical training stages (compact weeks). This educational offer provides training on specialised training paths.

LEARNING OUTCOMES SPECIFIC TO KEY COMPETENCE AREAS

The learning outcomes specific to the key competence areas targeted by the respective qualification are formulated in terms of specific knowledge, skills and attitudes and are integrated in the general and specialised technical competency units, for the thorough study of the key competency areas in vocational training contexts.

Complementarity between general knowledge disciplines and specialised modules provides a flexible coverage of the eight European key competence areas, therefore placing the curriculum for the VET in an innovative general curriculum context.

At this moment, the eight European key competence areas are integrated in the vocational training standards for 3rd and 4th levels, transposed also in Law no. 1/2011:

1. Communication competencies in Romanian and mother tongue
2. Communication competencies in foreign languages
3. Basic competencies of mathematics, sciences and technology
4. Digital competencies for using the information technology as a learning and knowledge instrument
5. Social and civic competencies
6. Entrepreneurial competencies
7. Awareness raising and cultural expression competencies
8. Competency of learning how to learn



EVALUATION AND CERTIFICATION

The VET evaluation and certification in Romania, part of the pre-university education, are based on the provisions of the Law no. 1/2011 on National Education, as further amended and supplemented and are implemented by the specific methodologies instrumenting these provisions.

In accordance with the provisions of the Romanian Law no. 1/2011 on National Education, as well as with the priorities established for the technical and vocational education by the Strategic framework for European cooperation in vocational education and training ET 2020, New Competencies Agenda for Europe, European framework for quality and efficient apprenticeship programmes, Alliance for Apprenticeships, Riga Conclusions on the cooperation within the technical and vocational education and training systems in Europe and the restructuring of the vocational training systems from this perspective, the evaluation and certification process within the Romanian technical and vocational education is designed as part of the initial vocational education and training process carried out by the pre-university education.

The purpose of the learning outcomes evaluation is the recognition and certification of the learning outcomes, specific to a qualification, proven by the student.

Each VET learning outcome unit is associated with an evaluation standard mentioning the conditions in which the achievement of the learning outcome unit is proven, namely:

✓ achievement criteria and their share – statements associated with learning outcomes, mentioning more exactly the student outcomes, by indicating some benchmarks to measure the performance level to which the competency is proven;

✓ achievement indicators and their share, by which each criterion is detailed, in relation with the learning outcomes and by which the level of knowledge, skills and attitudes achievement can be measured.

The evaluation standard associated with the learning outcome unit has the following structure:

Achievement criteria and indicators and their share

No.	Achievement criteria and their share	Achievement indicators and their share
1	Receiving and planning the work task %	<div><div></div><div>%</div></div> <div><div></div><div>%</div></div> <div><div>TOTAL</div><div>100%</div></div>
2	Achieving the work task %	<div><div></div><div>%</div></div> <div><div></div><div>%</div></div> <div><div>TOTAL</div><div>100%</div></div>
2	Presenting and promoting the accomplished task %	<div><div></div><div>%</div></div> <div><div></div><div>%</div></div> <div><div>TOTAL</div><div>100%</div></div>
TOTAL		%

Each learning outcomes achievement criterion is allocated with a share established depending on the importance of the work sequence. The achievement indicators are noticeable, but they do not describe the evaluation method or activity, this being described by specific regulations.

The established achievement indicators must reflect a certain process dynamics, as far as the complexity level, student autonomy and the achievement level adequate to a certain degree are concerned.

The formulation of the achievement criteria and indicators is capitalised by evaluators and by anyone involved in the initial vocational training quality assurance, in order to determine that the student proves a learning outcome.

The share allocated for each indicator is useful to express the performance level and it contributes to the quantification of the knowledge, skills and attitudes achievement level.

The evaluation method and mean must follow if the indicators are reached.

The evaluation standard can be used both in the formative evaluation, summative evaluation, as well as to certify the professional qualification.

The formative evaluation is part of the process of forming the learning outcomes specific to a professional qualification, aiming a closer correlation of the evaluative actions with the training/learning processes. The formative evaluation is carried out as part of the training process, either in school, by teaching professionals, or at the economic operators premises, by the tutors assigned for guiding and tracking the practical activity and/or by teaching professionals. This type of evaluation has mainly a training purpose, a purpose to get an immediate feedback regarding the status of students learning outcome.

The summative evaluation is carried out by a series of partial evaluations, scored along the programme and concluded by a final evaluation, at the end of the time period, cumulating also the outcomes recorded along the way.

A comparative analysis of the formative evaluation and of the summative evaluation highlights the fact that while the summative evaluation is focused on knowing the outcomes at the end of a training period, the characteristic of the formative evaluation is the systematic use of some evidences to diagnose the process and to estimate its effects on short learning sequences.

The evidences regarding the learning outcomes are regulated by specific certification methodologies and can be obtained by:

- ✓ direct observation, under real working conditions;
- ✓ demonstrations, under simulated working conditions;
- ✓ verbal test;
- ✓ written test;
- ✓ project;
- ✓ evidence portfolio (for the previous outcomes) etc.

In VET, the training and evaluation of key competencies are correlated, the evaluation being carried out according to the manner in which the training process was designed. From this perspective, the learning outcomes, expressed by knowledge, skills and attitudes, are integrating the 8 areas of key competencies.

The evaluation having a certification purpose ends up by obtaining the professional qualification certificate and the descriptive supplement to the Europass professional qualification certificate. The examination is carried out by mixed commissions made of teaching professionals and representatives of the economic operators.

For the **graduates of vocational education** obtaining level 3 qualifications according to the National Qualifications Framework, the certification of the professional qualifications consists in a practical examination and an oral examination.

The practical examination implies to make a product/subassembly/service or to carry out some operations specific for the qualification for which the examination is held. The topics of the practical examination are selected from the National list of topics for the practical examination. Each topic for the practical examination is accompanied by an evaluation sheet.

The oral examination consists in the presentation, defended by the candidate, of the product/subassembly/service/specific operations carried out during the practical examination and is complementary to the practical examination.



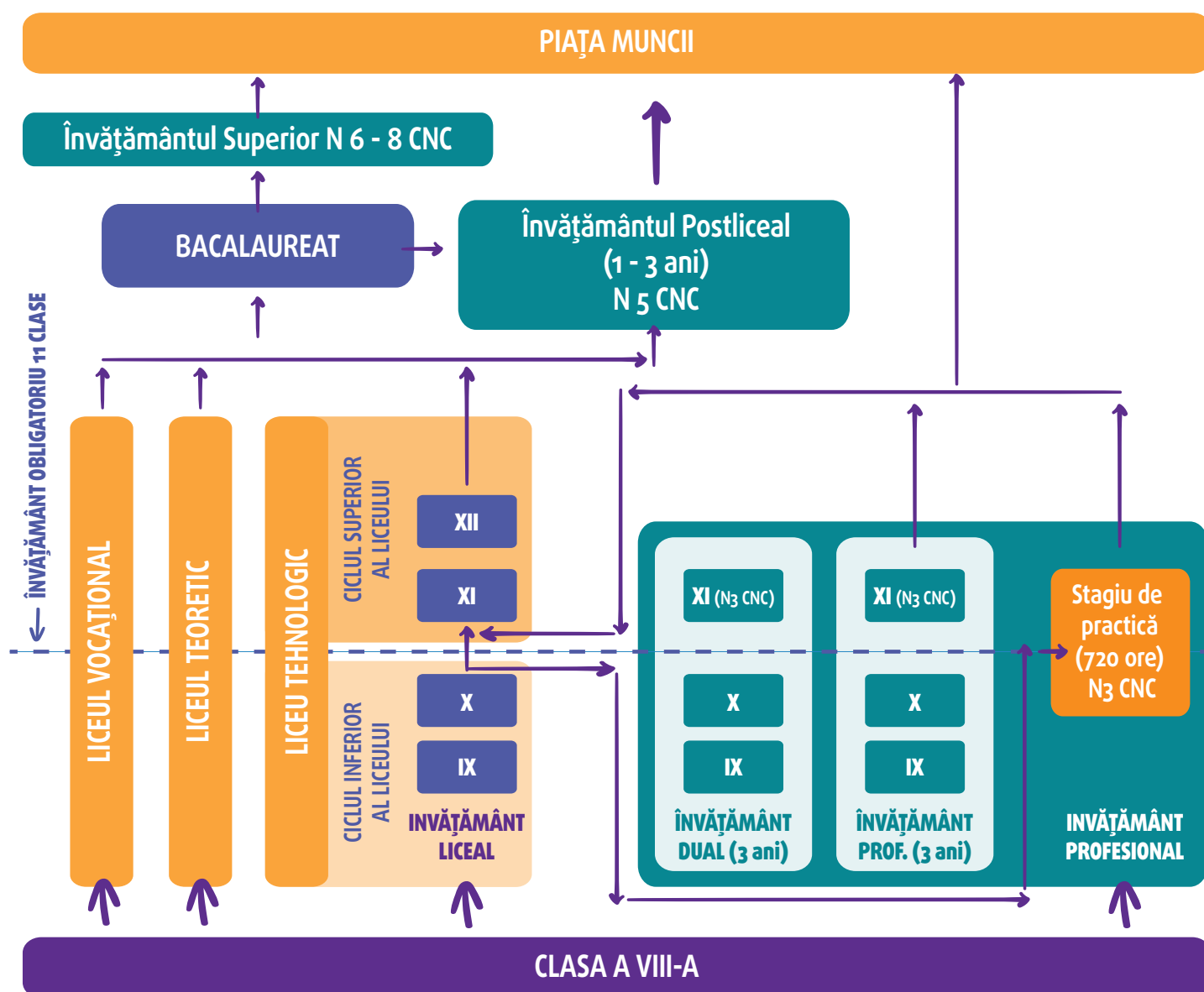
For the **graduates of technical high school education**, obtaining level 4 qualifications according to the National Qualifications Framework, the certification of the professional qualifications consists in a practical examination, a project and an oral examination – presentation and defence of the project. For the graduates of post-secondary education, obtaining level 5 qualifications according to the National Qualifications

The evaluation of the projects made by the students and of the oral defence is carried out based on a national evaluation sheet.

Framework, the certification of the professional qualifications consists in a practical examination, a written examination and a project which they must defend.

PROFESSIONALISATION TRACKS IN VET

Vocational education and training system in Romania



The professionalization tracks by the technical and vocational education are the following:

- ✓ Professionalization track by vocational education (including dual education) – provides a specialized vocational training level 3 according to the National Qualifications Framework, corresponding to level 3 of EQF;
- ✓ Professionalization track by technical high school (high school lower cycle and upper cycle) - provides a specialized vocational training level 4 according to the National Qualifications Framework, corresponding to level 4 of EQF;
- ✓ Professionalization track by post-secondary education - provides a specialized vocational training level 5 according to the National Qualifications Framework, corresponding to level 5 of EQF.

Levels 3, 4 and 5 are specific professional qualification levels, having as reference the Government Decision no. 918/2013 on the approval of the National Qualifications Framework, as further amended and supplemented and the Recommendation of the European Council as of 22 May 2017 on the European Qualifications Framework for lifelong learning.

THE PROFESSIONALIZATION TRACKS INCLUDE:

a. Vocational education (including dual education)

It has 3 years duration. It is completed by obtaining the certificate of vocational training level 3, corresponding to level 3 of EQF.

The main characteristic of the curriculum for the first two years of study consists in the preponderance of the vocational training for achieving key competencies. The third year of vocational education (including dual education) diversifies and deepens the vocational training.

b. Technical high school lower cycle

The curriculum framework for the technical high school lower cycle has the same purposes as the theoretical and vocational one. The lower cycle high school studies are not completed with a qualification certificate, but with a graduation certificate and the studies orientation is preponderantly theoretical.

“Technologies” curriculum area is designed by disciplines and modules. The disciplines of technical high school lower cycle are only theoretical and scientific fundamentals of the technical training in the upper cycle.

Although it is not completed by a qualification certificate, the lower cycle of technical high school is a cycle of acquisitions, acknowledged for the vertical transfer of the graduates to the upper cycle of the technical high school.

c. Technical high school upper cycle

Technical high school upper cycle is a type of post-mandatory education, having both academic recognition, by the baccalaureate degree, as well as professional recognition, by the certificate of vocational training level 4 according to the National Qualifications Framework, corresponding to level 4 of EQF.

d. Post-secondary education

Is completed by obtaining the vocational training certificate vocational training level 5 according to the National Qualifications Framework, corresponding to level 5 of EQF. Post-secondary education is partially subsidised by the state and the special post-secondary education fully subsidised by the state.





CONCLUSIONS

The design of the curriculum for VET aims both to provide learning relevance, as well as to substantiate lifelong learning.

Relevance refers to the purposes of the curriculum in relation to the interests and aspirations of the learners, hence the social and cultural component, but also to the economical and social development needs of the communities.

The curriculum for VET integrates the academic purpose training with professional purpose training, so that the curriculum cycles are not closed learning tracks, but tracks that allow training continuation by capitalizing the obtained credits.

The modular structure facilitates the capitalization of learning acquisitions and the key competencies and learning outcomes are representing a predictor for employability, as well as for learning continuation.

Of course, regardless of how coherent and logical would be the written curriculum, the VET quality depends on the applied curriculum, on what is happening in the classroom, laboratory and workshop, therefore it depends on the training of the teaching professionals.

Equally, the curriculum for local development component is designed to support, along the sectoral relevance, also the local relevance of the competencies acquired by the students. Therefore, this component reaches its purpose if there is a real partnership of the educational unit with the economic operators.

The significant share of the practical training can favour the growth of the students training quality if it is capitalized by practical training internships in companies, organised under quality assurance conditions.

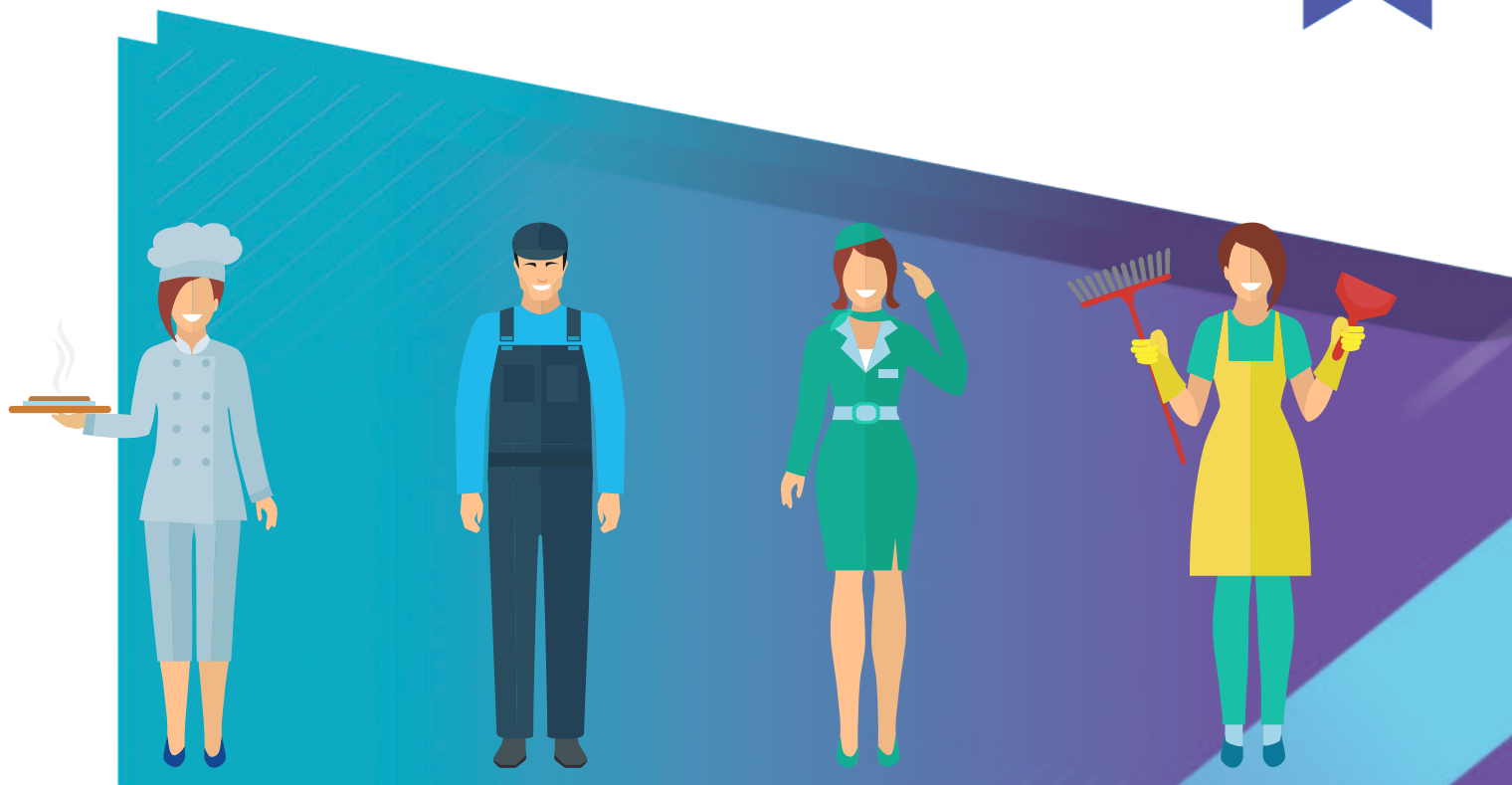
The National Qualifications Framework will definitely support the lifelong learning perspective if, by assuring the quality and recognising the competencies acquired both in formal learning contexts, as well as in non-formal and informal contexts, the trust in/between the institutions involved in vocational education and training will grow.



LIST OF ABBREVIATIONS

National Qualifications Authority - (ANC)
European Qualifications Framework (EQF)
National Qualifications Framework (NQF)
Special educational requirements (CES)
National Centre for the Development of the Technical and Vocational Education (CNDIPT)
Sectoral Committees (SC)
Classification of Occupations in Romania (COR)
Differentiated Curriculum (DC)
Curriculum for local development (CLD)
Institute of Educational Sciences (IȘE)
Technical and vocational education (VET)
Ministry of National Education (MEN)
National Qualifications Register (NQR)
National Professional Qualifications Register (NPQR)
Vocational training standard (VTS)
Common core (CC)

NOTES





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