

# SUPPORTING TEACHERS AND TRAINERS FOR SUCCESSFUL REFORMS AND QUALITY OF VET - MAPPING THEIR PROFESSIONAL DEVELOPMENT IN THE EU CROATIA



Agency for Vocational Education and Training and Adult Education This article on Supporting teachers and trainers for successful reforms and quality of VET - mapping their professional development in the EU is the second one of a set of articles prepared within Cedefop's ReferNet network. It complements general information on VET systems available online at:

#### http://www.cedefop.europa.eu/EN/Information-services/vet-in-europecountry-reports.aspx.

ReferNet is a European network of national networks providing information and analysis on national VET to Cedefop and disseminating information on European VET and Cedefop work to stakeholders in the EU Member States, Norway and Iceland.

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# 1. Introduction

In the Republic of Croatia 70.7% of the regular secondary school students (ISCED 344, 351, 353 and 354) in 2014 were enrolled in some of the VET programmes which prepare the students for inclusion into the labour market and enable them access to further and/or higher education. The most common among them were 4-year VET programmes (ISCED 354), based on the equal share of general and vocational competences, that are implemented mostly at schools, and which provide the students, in addition to the transition to the labour market, a possibility of progression to higher education. The second most common ones were 3-year VET programmes (ISCED 353), based more on vocational and practical competences, which have a higher share of practical lesson and apprenticeship.

There are 300 VET schools in the Republic of Croatia with an average of 400 students and average of 10 different educational programmes per school. Approximately 20% of the total number of class sections have combined lessons for two or more educational programmes, and about one-half of the total number of class sections in 3-year VET programmes are combining two or more programmes. This is exceptionally demanding in a financial and organisational sense, and especially for human resources.

In the implementation of high quality VET, the teachers have a crucial role. Therefore, their initial education, training and continuous professional development is of great importance. VET curriculum in the Republic of Croatia consists of a general education part that is being taught by the teachers of general subjects, and a vocational part taught by the teachers of vocational subjects. Focus of this article is on the teachers of vocational subjects.

# 2. Position of vocational teachers in the national policy documents

A strategic objective in the national policy and practice in the last ten years is the enhancement of quality and relevance of the vocational education and training, which is particularly underlined in following documents: *The VET System Development Strategy 2008-2013, Vocational Education and Training Act* (Official Gazette No. 30/2009), *The Croatian Qualifications Framework Act* (Official Gazette No. 22/2013) and *The Strategy of Education, Science and Technology* (adopted by The Croatian Parliament in October, 2014).

For VET, *The Strategy of Education, Science and Technology* clearly emphasizes the importance of better links between the education and the labour market, as well as the improvement of the learning outcomes and skills. Regarding the teachers, a modernisation of the educational and training programmes is foreseen, as well as the development of a model of continuous professional development and its monitoring based on the teachers' competency standards.

In addition, as one of the measures of The *Strategy of Education, Science and Technology, The VET System Development Programme 2015-2020* is being prepared. *The Programme* foresees the measures and activities that are aimed at the creation of new VET curricula, promotion and improvement of work-based learning (WBL), further development of the VET quality assurance system, improvement of teachers' in-service training and enhancement of mobility and employability of VET students. In the draft *VET System Development Programme*, measures and activities are proposed aiming to improve the teaching profession, to reinforce the capacity of teachers and to improve their social reputation. Within the quality system, it is proposed to begin a practice of licensing teachers for work in educational institutions in accordance with the competency standards for teachers. The same standards should also serve for the periodical relicensing of the teachers, which would enable professional progression in line with the verifiable, valid and objective criteria.

All of the mentioned documents underline the importance of teachers' position in VET, with a special emphasis on modernization of knowledge, skills and competences of teachers as well as the need for their better connection with labour market.

Within the VET system, and especially with regard to the in-service training system of teachers of vocational subjects, there are several challenges:

- Enhancement of the number of teachers who participate in the processes of in-service teacher training
- Availability and relevancy of contents and materials
- Quality assurance of the in-service teacher training process
- Combining national priorities and the in-service teacher training based on teachers'/schools' needs
- Ensuring strengthening of teachers' competences and motivation for professional development
- Creation of the comprehensive in-service teacher training strategy
- Improvement of teachers' progression system
- Enhancement of vocational teachers' participation in international mobility programmes in order to reinforce their competences.

Concerning the demographical indicators of Croatia (a long-term trend of de-population and ageing of the population) and the economic situation (a significant number of unemployed young professionals with profiles suitable for teaching) in VET system the problem does not seem to be a lack of teachers. On the contrary, due to the reduction of number of the students in the last period, many of the teachers are becoming surplus. Therefore, renewal of the teaching staff with young teachers which possess modern and relevant skills is not primarily limited by their availability, but by the availability of teachers' positions in the VET system.

It is of great importance to build a new continuous professional development (CPD) model. In doing that, it is necessary to make a turn towards new technologies and, besides classical seminars, create training models based on e-learning and the use of ICT, which will also enhance the number of teachers participating in the in-service teacher training processes.

In order to keep the teachers in touch with the development of new technologies, innovations and processes in their sectors, it is necessary to assure a legal framework and incentives for employers, which will give teachers permanent opportunities for professional development in the companies/institutions.

Most of the teachers are not sufficiently trained for work with students with disabilities, and with other vulnerable groups; therefore it is necessary to establish a model of support and in-service teacher training for teachers that work with those groups and with their parents.

It is necessary to strengthen the teachers' capacities for inclusion in the international mobility projects.

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# 4. Development and practices in the last five years

According to *The VET System Development Strategy 2008-2013* that has shaped the most important reform processes in VET in the last period, VET in Croatia is crucial for accumulating the human capital, as a precondition for achieving economic growth, higher quality employment and social objectives.

In the last period, within a whole range of activities and measures implemented by the Agency for Vocational Education and Training and Adult Education (e.g. linking VET with the labour market, establishment of Sector councils, development of modular and learning outcome based VET curricula, improvement of the VET quality assurance system and the introduction of self-assessment in VET schools, encouragement of innovations in VET schools, development of entrepreneurial learning through a model of Training firms, development of students' competitions system etc.), great attention has been given to the reinforcement of the VET teachers' capacities.

As a result of these measures and activities there are 29 newly developed VET occupational standards, learning outcome based qualifications and curricula, in which development there have been included more than 280 members of employers, VET teachers and HE professors, as well as more than 250 members of Sector councils.

As of the school year 2013/2014, 22 VET curricula are in the process of experimental implementation in 54 VET schools (and 1 additional VET curricula as of school year 2015/2016 is in experimental implementation in 1 VET school). Evaluation of contents and the implementation of these VET curricula from 2014 has shown that teachers have evaluated the new curricula better than the previous programmes, considering that they allow more flexibility and creativity in work, they are more learning outcome oriented and more than 73% of the surveyed teachers evaluated them positively.

The teachers have actively participated in the process of development and introduction of self-assessment model in VET schools, based on the VET Quality Assurance Framework. After the pilot phase in 2010, in the school year 2012/2013 self-assessment has been introduced into all VET schools in Croatia and for the VET teachers, the Agency for Vocational Education and Training and Adult Education has assured teacher in-service teacher training and support to the VET schools.

The Agency for Vocational Education and Training and Adult Education has encouraged development and strengthening of the VET schools capacities and development of teachers' competences for creating and introducing innovations in VET schools, through innovative projects, links with the local labour market stakeholders and preparing grant schemes projects of which have supported, among other things, the in-service teacher training.

# 5. Categories of teachers

There are five different types of teachers in VET schools: teachers of general subjects, teachers of professional-theoretical subjects, vocational trainers, teaching associates in training and craftsmen with a license for apprenticeship.

The teachers of general subjects (e.g. mathematics, physics, Croatian language, foreign languages etc.) usually teach one subject, they have university education that includes pedagogical and psychological subjects and methodics of certain subjects.<sup>1</sup>

According to the *Vocational Education and Training Act* (Official Gazette No. 30/2009), work of the vocational teachers is performed by:

- teachers of professional-theoretical contents
- teachers of practical lessons and exercise
- vocational trainers and
- teaching associates.

Work of teacher of professional-theoretical contents can be performed by a person that finished corresponding higher education through which a minimum of 180 ECTS points were acquired or higher, if so regulated by curriculum, and has required pedagogical-psychological-didactical-methodical education through which 60 ECTS points were acquired (hereafter: pedagogical competences), and meets all other terms regulated by curriculum.

Work of teacher of practical lessons and exercise can be performed by a person that has finished undergraduate university study or undergraduate professional study of corresponding type through which a minimum of 180 ECTS points was acquired and has pedagogical competences along with pre-acquired qualification of corresponding profile.

Work of vocational trainer can be performed by a person that has a level of education regulated by curriculum, and has at least secondary VET education of corresponding profile, pedagogical competences and work experience in appropriate profession in duration of at least five years.

A person that has finished corresponding secondary education, acquired pedagogical competences and has a work experience in profession with duration of at least five years; unless regulated differently by VET curricula, can perform work of teaching associate.

Teachers of professional-theoretical contents usually teach several vocational subjects, they have university education (e.g. technological, technical, health, economy etc.) which does not include pedagogical-psychological education, but is acquired through subsequent education.

Vocational trainers are teachers of practical lessons, they have usually finished professional studies, they are engineers in certain areas and their education does not include pedagogical-psychological education, but it is acquired subsequently.

<sup>1</sup> Julijana Zrno, Obrazovanje strukovnih nastavnika u hrvatskoj i europskim zemljama, Andragoški glasnik, Vol. 16, br. 1, 2012.

Teaching associates in practical lessons have a technical (four years) or craft (three years) secondary level of education, they usually work in pair with the vocational trainer, but they also acquire pedagogical-psychological and didactical-methodological education subsequently.

Teachers of professional-theoretical lessons, vocational trainers and teaching associates in practical lessons go through pedagogical-psychological and didactical-methodological training during the first year of work in the school.

It is often a case that professional-theoretical lessons are taught by teachers who have finished professional studies or secondary education programmes because no higher education programme covers their expert area.

In Croatia, there is no undergraduate education of VET teachers. Professionals who have finished corresponding non-teaching universities, professional studies or secondary schools are recruited for work in VET schools, and they acquire their teaching competences during their traineeships in the schools. Teachers of vocational subjects acquire teaching competences through additional pedagogical-psychological and didactical-methodological education, and they obtain their teaching license only after they have passed professional in-service exam.<sup>2</sup>

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## 6. Teachers and other experts in school-based settings

#### 6.1. Legal framework regulating teachers professional development

The Primary and Secondary Education Act (Official Gazette No. 87/08, 92/10, 105/10, 90/11, 5/12, 16/12, 86/12, 126/12, 94/13, 152/14) defines in-service teacher training, development, progression and licensing of teachers. Teachers within institutions have a right and obligation of in-service training through programmes which have been approved by the Ministry in charge of education.

Continuous in-service teacher training includes individual and organised training in their field of science in the area of pedagogy, didactics, educational psychology, methodics, ICT, counselling work, management, educational policy and other relevant areas for efficient and high quality performance of educational activities in school institutions. Programmes of in-service teacher training can be organized and implemented by institutions responsible for in-service teacher training, higher education institutions, civil society entities and school institutions.

It is regulated by the *Act* that the in-service teacher training programme should contain topic, purpose, objectives of the programme expressed in competences, teaching methods, organisation, means of evaluation and certification forms, number of participants, duration of the programme and expenses.

With the beginning of school year, every teacher develops individual in-service teacher training plan that, besides the number of hours, consists of fields and providers of in-service teacher training. Its purpose is to encourage the providers of educational process to work primarily on themselves through individual, but also organized in-service teacher training. The preparation of individual plan of in-service teacher training is the basis of continuous professional training of a teacher, by which he/she defines different forms of in-service teacher training (individual or in groups, within a VET institution or outside), and which is comprised of professional contents, especially new insights in a certain scientific discipline, current theoretical and practical issues, pedagogical, psychological and methodological development. With the beginning of the school year, every teacher is required to prepare a plan and programme of his/her in-service teacher training in accordance with all forms of permanent development, proportional for every mentioned professional field. Individual plan of in-service teacher training, except the type of training, includes training contents, literature, duration of activities, and number of hours for every form of training (planned and accomplished ones). Teachers deliver their plans to professional-pedagogical service of the school.

#### 6.2 Institutional Framework

Competent authorities of in-service teacher training are line Ministry and competent Agencies. The greatest support in professional development of VET teachers provides Agency for Vocational Education and Training and Adult Education. *Vocational Education and Training Act* (Official Gazette, No. 30/09, 24/10) defined the permanent development of teachers for a modern approach to the educational process as one of the cornerstones of the development of VET. Providing them the possibility of development in their field of expertise by organizing teacher-training events, visits, visits to business organizations as well as lectures and workshops by eminent experts from the highest scientific circles, teachers enhance previously acquired competences and stay in touch with technology.

#### 6.3 Entry into teaching force in VET

Article 105, paragraph 7, 8 i 9 of *Primary and Secondary Education Act* (Official Gazette, No. 87/08, 92/10, 105/10, 90/11, 5/12, 16/12, 86/12, 126/12, 94/13, 152/14) defines the conditions of employment of teachers, vocational trainers and teaching.

Vocational teachers do not acquire the basic profession of a teacher, but they are excellent professionals from various sectors which bring in the expertise and skills which need to be transferred to the students. Therefore, the professional development of teachers primarily implies an acquisition of pedagogical competences that should help them in the transfer of professional knowledge and skills.

It should be noted that the majority of teachers of vocational subjects have never met with pedagogical competences before beginning their work in the VET institution and must obtain the first license, pass a professional in-service exam.

Regulations of the professional in-service exam of teachers and assistants in primary education and teachers in secondary education (Official Gazette No. 88/03) prescribes the manner and conditions for realization of the traineeship, and the manner and conditions of taking the professional in-service exam for teachers and assistants in primary education and teachers in secondary education. In addition, this Regulation defines that a professional in-service examination verifies competences in the field of pedagogy, didactics and methodics that are the basis for successful, professional and independent transfer of expertise to the students.

Precursor to the professional in-service examination is a program of additional pedagogical-psychological-didactic and methodological education based on which the participants demonstrate their pedagogical competences. Employees who do not have work experience in the profession they were trained for, are entitled to the traineeship of one year during which a commission (school director, expert associate and mentor) monitors, analyses and together with a trainee aims to achieve better results in the process of teaching students.

The purpose of the traineeship is to train teachers, expert associates and teachers without work experience for successful, professional and independent work.

Trainee internship is performed based on the framework program of traineeship provided by the Ministry. Commission for traineeship develops operational traineeship program for each trainee and is responsible for program implementation. School is required to create operational traineeship program at least 15 days after the beginning of the trainees work.

Commission for traineeship is consist of school director as the commission chairperson, mentor of trainee and expert associate.

The mentor of the trainee is the teacher of the same profession as the trainee, with passed professional in-service exam, or one that is exempt from taking the professional in-service examination. If is not possible to find a mentor or expert associate in the school where trainee attends the internship, he or she is appointed from another school.

Traineeship starts on the day of employment of trainees, or on the date of the signing the volunteering contract.

Trainees are required to attend mentor's teaching hours; at least 30 hours during the traineeship and the mentor is obligated to be present at trainees' lessons for 10 hours. Trainee volunteers are required to be present on mentor's teaching hours at least 2 hours a week during the school year, or 70 hours, and independently have 35 teaching hours in the presence of a mentor. Obligatory demonstration classes should include all forms of work with students, equally distributed throughout the traineeship.

The commission must be present during traineeship period at least twice for two hours on regular lessons or other forms of educational work of trainees. Other members of the committee are obligated in the scope of their work to assist each trainee for a period of five hours. Official record of implementation of the traineeship program must kept by every member of the committee.

If the trainee during their training period transfers to another school, traineeship continues in the school to which he transferred. In cases such as extended sick leave, military service, maternity leave, etc., traineeship period stops, and continues when the reasons cease, and schools report that to the Ministry.

Rules of procedure of the commission for traineeship and a Commission for expert in-service examination (Official Gazette No. 89/95) regulates the work of these two commissions.

#### 6.4. VET teachers In-service training

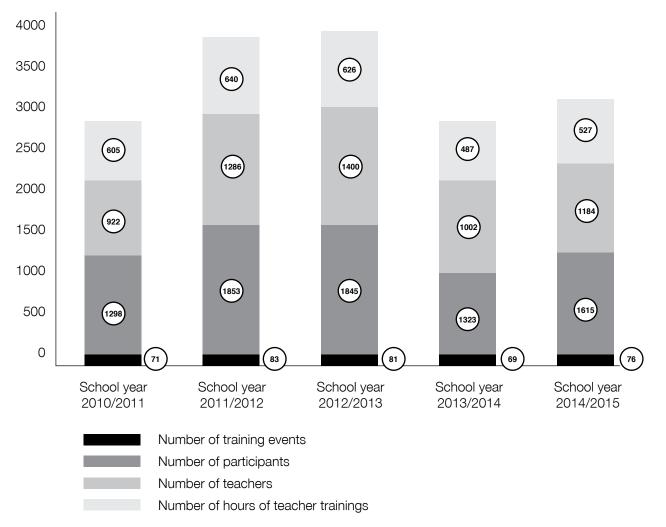
One of the fundamental tasks of the Agency for VET and Adult Education is to ensure adequate education and continuous training of VET teachers in Croatia.

Agency implements in-service teacher training of employees in the system of vocational education and adult education. Its senior advisers are planning, organizing, implementing and evaluating the in-service teacher trainings. In addition, they analyse the needs for in-service teacher training through evaluation questionnaires.

At the beginning of the school year, each sector senior adviser prepares a plan of in-service teacher training for VET teachers of their education sector. In-service teacher training Plan includes topics, goal, target groups, time and venue, duration, activity facilitators (organizers, managers, trainers), and plan is published on the Agency's website and through the information system of the Agency - VETIS. Senior advisors in agreement with other activity facilitators, following the teachers expressed needs, propose topics of in-service teacher trainings. In-service teacher training topics are planned in the area of individual professions, new technologies, scientific knowledge, pedagogy and teaching methodology. In-service teacher training plans also contains themes common to all VET teachers, in the area of the education of children with special educational needs, VET system quality assurance, mobility of students and teachers, the reforms in the VET system, etc.

Agency's data show that in the period from 2010 to 2015, Agency organized and implemented 380 in-service teacher training events, in which 7934 participants and 5794 teachers of vocational subjects from across Croatia were included.

## VET In-service tearcher training in Croatia



Source: Agency for VET and Adult Education, VETIS, 2015.

Data related to the in-service teacher training of VET schools teachers are regularly kept and recorded through VETIS, information system of vocational education and training, through which teachers register their participation at in-service teacher training events, and the Agency is keeping records of their participation, is-sues participation certificates and makes reports on in-service teacher trainings.

Speakers on in-service teacher training events organized by the Agency for VET and Adult Education are experts from the industry, scientists, experts in the field of pedagogy and teaching methods, teachers that have been elected for positions of mentor or advisor, representatives of state and public institutions. In-service teacher training events are structured through the plenary session and the workshops. Most of the trainings last 6 to 8 hours and some events are planned for two days (12-16 hours). The number of participants in the training meetings range from 15 to 100.

Agency for VET and Adult Education covers organizational expenses and travel costs of senior expert advisors and lecturers are covered by the. Each VET institutions cover the travel costs of their teachers. Due to economic crisis and multiannual budget cuts, Agency and VET schools have difficulties in securing required financial resources for conducting these activities. These difficulties are affecting the implementation of planned and required In-service teacher training events.

#### 6. 5. Promotion in the profession

System enables promotion in the profession of the teachers, vocational trainers and teaching associates. *Regulations of the Promotion of Teachers in Primary and Secondary Education* (Official Gazette No. 89/95) guide promotion in the profession, and teachers can acquire title of mentors and advisors.

Teachers can progress in the profession in at least two levels and acquire the appropriate titles. In addition, they can be awarded for outstanding achievements in the educational activity. Above mentioned *Regulation* proscribes levels, conditions and ways of progression. Evaluation elements of expertise and teachers work quality are: successfulness in work with the students (e.g. methodological creativity in teaching, application of modern forms and working methods in teaching and use of modern sources of knowledge, etc.); extracurricular expert work (e.g. lecturing on teacher training event on at least county level, mentorship of a trainee up to inservice professional exam, mentorship of a students that win one of 3 first places on international competition, authorship of a textbook, etc.); in-service teacher training. Requirements for promotion are proscribed with the number of years of work experience, grade, number of points and regular in-service teacher training. The school initiates the process of VET teacher promotion, with evaluation of teachers work by school director and with consent of teacher council and process is implemented by the Agency for VET and Adult Education. Teachers are elected into positions of mentor and advisor for the period of five years and can be re-elected.

Agency for VET and Adult Education at least once a year organises public promotion of teachers and trainers and awarding of their certificates, in order to highlight the importance of promoting excellence with leaders of the teaching process, which is the basis for stronger and better development of the education system.

# 7. Mentors of apprentices or instructors at companies (working environment)

In VET, practical classes are partly undertaken at the employer's establishment, which needs to have prescribed working spaces, and that can assign to the student a mentor with the appropriate qualifications and pedagogical competences and which is employed by the employer. The criteria for the nomination of mentor for student on practical classes at the employer are prescribed by laws and regulations (e.g. *Crafts Act* (Official Gazette No.143 /13), the *Vocational Education and Training Act* (Official Gazette No.143 30/09), the *Regulation on the organization of teaching in VET schools*, etc.).

Requirements for the qualifications and/or competences of apprentices mentors and instructors are defined by the *Crafts Act*, Article 56, paragraph 5: "... if they have passed the exam, which proves basic knowledge on teaching students and at least three years working experience in an occupation for which they perform practical classes and apprenticeship exercise". According to the *Crafts Act*, a special program to acquire basic knowledges on teaching of students and pedagogical competencies, is proscribed the ministry in charge of education in accordance with special regulations governing VET.

According to the *Regulation on the organization of and teaching in VET schools*, the teacher should provide educational and methodological help to the student's mentor.

Article 26 of the *Vocational Education and Training Act* (Official Gazette No.143 30/09) proscribes that the employer can sign a contract on implementation of practical classes: if he has required facilities and equipment, if he to the student assigns a mentor who is employed by the employer, with adequate qualifications and pedagogical competences.

Profile of competences for such experts is not systematically elaborated, nor is there any professional training.

## 8. Cooperation and partnerships between the world of education and the world of work in support to teachers and trainers' CPD

Cooperation and partnership between the world of education and the world of work in support to CPD of teachers include agreements and examples of practice that provide possibility for teachers to further their knowledge on the latest developments in their field of work, as well as their relevant competences. Mentors in companies can gain or improve their pedagogical competences or stay informed about the requirements of qualifications in their field of work. Moreover, partnership includes also a wider cooperation between VET schools and companies.

Within the framework of in-service teacher training of VET teachers, Agency for VET and Adult Education has organized a number of training events in companies (private, public, SMEs, large), where teachers are trained directly in the work process. The facilitators of all activities during the in-service teacher trainings in companies were employees of those companies. Events were held for one or two days, and some through several modules. This type of in-service teacher training enables follow-up of the latest technological achievements. Evaluation of these trainings have shown positive reactions from teachers and company representatives.

VET schools cooperate with external organisations with the goal of permanent professional development of teachers in all VET sectors in Croatia. The beginning of cooperation is often established on the initiative of VET schools, so that the educational process can be improved which ensures students' competences necessary for modern labour market. Partnerships are usually developed from long-term cooperation between VET schools and business entities, brought forward from the desire of the educational institution for successfully link with local employers and community.

With this purpose, new strategic determinants contain guidelines which support improvement and promotion of the WBL, such as: apprenticeship and practical lessons in companies and schools.

Draft of the Programme for VET Development anticipates, as a measure, investment in the professional development of teachers and mentors of practical training at employers' with the goal of improving and promoting WBL. Draft of the Programme states that informing and training of teachers and entrepreneurs on application of WBL will be carried out, and a simple model of pedagogical education of entrepreneurs and trainers will be developed. Furthermore, the draft of the Programme states that by enabling teachers to visit companies, a constant interaction of teachers with the labour market and new technologies is assured. This will enable transfer of that knowledge to students and teacher's competences are increased.

For CPD of teachers at work place it is necessary to agree on the appropriate methodology of training of teachers in business entities for all educational sectors.

# 9. National and EU financed projects as a support of the professional development of teachers and trainers in VET

In the VET system in Republic of Croatia, alongside with the provision of support for CPD of VET teachers, Agency for VET and Adult Education, also continuously improves and modernises the system of professional development for VET teachers, for which it also uses resources from EU funds.

In this chapter various forms of in-service VET teacher trainings are presented, those which are either implemented or in the process of implementation within the framework of national projects and projects financed from EU funds from 2010 to 2015 and where Agency for VET and Adult Education took part in.

### 9.1. National projects for support of the professional development of teachers

From 2010 to 2015, several national developmental projects were being realized, which include the training of teachers for their implementation.

## 9.1.1. Comprehensive curricular reform

Strategy of Education, Science and Technology, adopted by Croatian Parliament on the 17<sup>th</sup> October 2014, as one of the goals for the early and pre-school, primary and secondary education states the *Implementation of Comprehensive curricular reform*. VET teachers participated in training events for leaders of county and inter-county teacher councils organized in collaboration with Expert working group for the comprehensive curricular reform and Adult Education. 156 leaders of county/inter-county councils of all educational sectors in VET were a part of this form of in-service training.

## 9.1.2. Experimental implementation of VET curricula

The experimental implementation of 22 VET curricula commenced in the 2013/2014 school year. Agency for VET and Adult Education monitors the experimental implementation of VET curricula, performs professional and pedagogical evaluation of experimental programmes. As the support for the teachers in the process of implementation of VET curricula, since 2013 Agency has been organising in-service teacher trainings for educational workers participating in the process of experimental implementation of VET curricula. In-service teacher trainings in the experimental implementation of curricula is aimed towards educating teachers on new approach to teaching and learning in learning outcomes based curricula. In addition, in-service teacher trainings are also focused on exchange of experiences and examples of good practice in the implementation of new VET curricula for acquiring VET qualifications. In this form of in-service teacher trainings, 357 school directors, expert associates and teachers from all VET educational sectors from schools, which are included in the experimental implementation of 22 vocational curricula, were involved.

### 9.1.3. Self-assessment of VET schools

In accordance with the VET Act, VET schools are obligated to perform self-assessment. In order for

schools and school teams to be capable of performing the process of self-assessment Agency for VET and Adult Education is providing support to schools through continuous in-service VET teacher trainings. From 2012 to October 2015, 22 in-service teacher trainings events were implemented, with the main topic *Quality assurance*, during which teachers were familiarised with the process of self-assessment and the self-assessment online tool.

#### 9.2. Projects financed from EU funds

Agency for VET and Adult Education has successfully planned and implemented a series of projects financed from EU funds from 2010 to 2015, which included strengthening capacities and in-service teacher trainings for VET teachers.

With the project *Strengthening Institutional Framework for the Development of the VET Occupational Standards/Qualifications & Curricula* teachers were enabled to participate in trainings on the methodology of development of VET occupational standards, qualifications and curricula. Through the project, Agency has implemented a series of trainings for 250 members of work groups for the development of VET occupational standards, qualifications were VET teachers.

The VET Quality Assurance Development project enabled teachers to participate in seminars about the process of self-assessment.

Furthermore, Agency prepared and implemented series of projects awarding grants to VET schools in total value more than 20 million euros. Projects included sets of activities of teacher trainings in which schools and teachers developed capacities for successful preparation and implementation of grant schemes, VET teachers in-service training on introduction of modern, student-oriented teaching approaches and utilisation of modern and advanced practical lessons, as well as teacher trainings for the implementation of innovations from curricula into the teaching practice.

### 9.2.1. Modernisation of the in-service VET teacher training system (ESF, 2013)

Agency has prepared ESF project, valued at 1 million euro, which is completely aimed at improvement of existing system of in-service teacher training as well as CPD of VET teachers. Purpose of the project is analysis, development and implementation of enhanced system of VET teacher's in-service trainings. It envisages series of activities like development of recommendations for improvement of CPD for period 2015 - 2020, ensuring enlargement of teacher's participation on in-service training through development and use of new internet portal for in-service training of teachers of vocational subject and development of relevant contents. Through project, Agency's capacities as a key stakeholder in issues related to VET teacher's in-service training swould be strengthened. Project begun with first phase of implementation in 2014 and it is expected to be continued in 2016.

## 10. Conclusion

All strategic documents in Republic of Croatia promote the importance of VET teachers and importance of modernising knowledge, skills and competences of teachers, as well as the need for their better links with labour market is emphasised.

Agency for Vocational Education and Training and Adult Education, as well as other national agencies currently systematically implement professional development of teachers. In-service teacher training is performed individually, organised in the individuals' field of expertise in areas of pedagogy, didactics, educational psychology, methodics, information and communications technologies, advisory work, management, educational policies and other areas relevant for efficient and high-quality performing of educational activities in educational institutions.

Within the framework of in-service teacher training administered by Agency, various forms of trainings are organised (e.g. conferences, visitations, tours of business organisations, as well as workshops and lectures). However, there is no systematic way that ensures continuous cooperation and partnership between world of education and world of work, with the goal of continuous professional development of teachers. In addition, it is necessary to develop comprehensive strategic framework of CPD of VET teachers. Closely linked with it is necessity of strengthening QA mechanisms of in-service VET teacher training system. Increasing the number of VET teacher participating in the in-service teacher trainings can be ensured with use of ICT as well as ensuring incentives for trainings of teachers in the world of work.

It is expected that implementation of Strategy of education, science and technology and VET system Development program with the use of ESI funds will be significant impetus for further development and improvement of CPD of VET teachers.