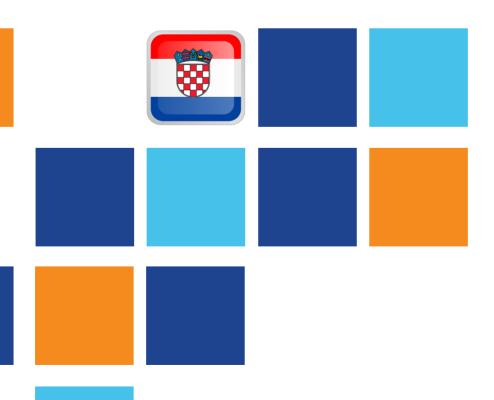


SUPPORTING TEACHERS AND TRAINERS FOR SUCCESSFUL REFORMS AND QUALITY OF VET

CROATIA

Mapping their professional development in the EU





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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 vocational education and training (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 four-year VET programmes (ISCED 354), based on the equal share of general and vocational competences and implemented mostly at schools that 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 three-year VET programmes (ISCED 353), based more on vocational and practical competences, which have a higher share of practical lessons and apprenticeship.

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

In the implementation of high quality VET, teachers have a crucial role. Therefore, their initial education and training and continuous professional development (CPD) is of great importance. VET curriculum in Croatia consists of a general education part taught by teachers of general subjects and a vocational part taught by teachers of vocational subjects; the latter are the focus of this article.

2. Vocational teachers in the national policy documents

A strategic objective of the national policy and practice in the past ten years has been the enhancement of quality and relevance of VET, particularly underlined in following documents:

- (a) the VET System Development Strategy 2008-2013 (Ministry of science, education and sports of Croatia, 2008);
- (b) Vocational Education and Training Act (Croatian Parliament, 2009);
- (c) the Croatian Qualifications Framework Act (Croatian Parliament, 2013);
- (d) the Strategy of Education, Science and Technology (Croatian Parliament, 2014).

For VET, the Strategy of Education, Science and Technology (Croatian Parliament, 2014) clearly emphasizes the importance of better links between education and the labour market as well as the improvement of the learning outcomes and skills. Regarding teachers, the strategy foresees the modernisation of the teacher education

and training programmes and the development of a CPD model and its monitoring based on the teachers' competence standards.

In addition, the VET System Development Programme 2015-2020 is being prepared. The Programme foresees measures and activities aimed at the improvement of teachers' in-service training, creation of new VET curricula, promotion and improvement of work-based learning (WBL), further development of the VET quality assurance system, 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, the teacher competences and their social reputation. Within the quality system, it is proposed to license teachers for work in educational institutions in accordance with the competence standards for teachers. The same standards should also serve for the periodical relicensing of 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 the modernisation of their knowledge, skills and competences as well as the need for their better connection with labour market.

Challenges for the VET teacher in-service training system

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

- (a) increasing the number of teachers who participate in in-service teacher training;
- (b) availability and relevance of contents and materials of teacher training;
- (c) quality assurance of the in-service teacher training process;
- (d) combining national priorities and the in-service teacher training based on teachers'/schools' needs;
- (e) ensuring strengthening of teachers' competences and motivation for professional development;
- (f) creating a comprehensive in-service teacher training strategy at the national level;
- (g) improvement of teachers' progression system;
- (h) enhancement of vocational teachers' participation in international mobility programmes to reinforce their competences.

With the demographical indicators of Croatia (a long-term trend of demographic decline and ageing of the population) and the economic situation (a significant number of unemployed young professionals with profiles suitable for teaching), in VET system does not seem to face a lack of teachers. On the contrary, due to the reduction of the number of students in the last period, many of the teachers are becoming surplus. Therefore, renewal of the teaching staff with young teachers who 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 CPD model. In doing that, it is necessary to turn towards new technologies and, besides classical seminars, create training models based on e-learning and the use of ICT, which should increase the number of teachers participating in the in-service teacher training.

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

Most of the teachers are not sufficiently trained to 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 who work with these groups and with their parents.

It is necessary to strengthen the teachers' capacity for participating in the international mobility projects.

4. VET development and practices in the last five years

According to The VET System Development Strategy 2008-2013 (Ministry of Education, Science and Sports of Croatia, 2008), VET in Croatia is crucial for accumulating the human capital as a precondition for achieving economic growth, higher quality employment and social objectives.

In that period, within a whole range of activities and measures implemented by the Agency for Vocational Education and Training and Adult Education (1), great attention has been given to the reinforcement of the VET teachers' competences.

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.

⁽¹⁾ These measures and activities included linking VET with the labour market, establishment of Sector councils, development of modular and learning outcome based VET curricula,

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 more than 280 representatives of employers, VET teachers and HE lecturers and more than 250 members of Sector councils took part.

As of the school year 2013/14, 22 VET curricula are in the process of experimental implementation in 54 VET schools (with one more curriculum as of school year 2015/16). The evaluation of contents and the implementation of these VET curricula from 2014 have shown that teachers evaluate 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 2012/13 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 and requirements to 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.

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 methods of teaching certain subjects (Zrno, 2012).

According to the Vocational Education and Training Act (Croatian Parliament, 2009), teaching and training in vocational areas are performed by:

(a) teachers of professional-theoretical contents:

Work of a teacher of professional-theoretical contents can be performed by a person who finished corresponding higher education (a minimum of 180 ECTS

points or higher), if so regulated by curriculum, and has a required 60-ECTS-point pedagogical-psychological-didactical-methodical education (hereafter, pedagogical competences), and meets all other criteria regulated by curriculum (²).

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.

It is often the 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, e.g. this applies for educational programmes considering the fields of personal services, such as hairdressing, pedicure, hospitality, tourism and other.

(b) teachers of practical lessons and exercise:

work of a teacher of practical lessons and exercise can be performed by a person who has finished undergraduate university study or undergraduate professional study of corresponding type (a minimum of 180 ECTS points) and has pedagogical competences alongside with the qualification in the corresponding field.

(c) vocational trainers:

Work of a vocational trainer can be performed by a person who has a level of education regulated by curriculum, and has at least secondary VET education of corresponding profile, pedagogical competences and at least five-year work experience in the profession/occupation.

Vocational trainers teach practical lessons in schools. 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.

(d) teaching associates:

A teaching associate can be a person who has finished corresponding secondary education (a four-year technical or three-year craft secondary education), acquired pedagogical competences and has work experience in the profession of at least five years, unless regulated differently by VET curricula.

Teaching associates usually work in pair with the vocational trainer, but they also acquire pedagogical-psychological and didactical-methodological education

⁽²⁾ Teachers' qualifications needed for a work in a certain field are prescribed not only by the VET act, but also by curricula. There are 13 sectors of VET education and 250 different curricula.

subsequently. Their role is to assist in practical classes in workshops or laboratories by preparing the equipment, machines and tools. They follow the work of learners, repair damage, help to ensure safety at work, but they do not perform the classes by themselves.

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.

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 to work in VET schools, and they acquire their teaching competences during their traineeships (see Section 6.3) 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 an expert in-service exam (Zrno, 2012). This exam allows trainees to obtain their licence and start working as teachers.

6. Teachers and other experts in school-based settings

Legal framework regulating teachers professional development

The Primary and Secondary Education Act (Croatian Parliament, 2008-14) defines inservice teacher training, development, progression and licensing of teachers. Teachers in institutions have the right and obligation of in-service training through programmes, which have been approved by the Ministry of Education, Science and Sports.

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

According to the Education Act (Croatian Parliament, 2008-14), an 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 and costs of the programme.

At the beginning of a school year, every teacher develops an individual in-service teacher training plan. The plan is a basis for continuous professional training of a teacher in different forms (individual or in groups, within a VET institution or outside)

and is meant to encourage educators to work primarily on themselves through individual, but also organised in-service teacher training. The plan defines fields (professional contents, especially new insights in a certain professional area, current theoretical and practical issues, pedagogical, psychological and methodological development), providers of in-service teacher training, contents, literature, the duration of activities and number of hours for every form of training. The planned CPD should be balanced among the defined fields and all forms of CPD.

Teachers deliver their plans to the professional-pedagogical service of the school that ensures and maintains records that teachers are taking course of their professional development according to that plan.

6.2. Institutional framework of in-service training and CPD

Competent authorities of in-service teacher training are the Ministry of Education, Science and Sports and relevant Agencies. The Agency for Vocational Education and Training and Adult Education provides greatest support to professional development of VET teachers. Vocational Education and Training Act (Croatian Parliament, 2009) defined the CDP of teachers for a modern approach to the educational process as one of the cornerstones of the development of VET. Provided with the possibilities of development in their field of expertise through teacher training events, study visits, visits to business organisations 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 and traineeship

The Primary and Secondary Education Act (Croatian Parliament, 2008-14) (³) defines the conditions of employment of teachers, vocational trainers and teaching process.

Teachers in VET do not acquire the basic profession of a teacher, but they are experienced professionals from various sectors who bring in the expertise and skills to students. Therefore, the professional development of VET teachers primarily implies the acquisition of pedagogical competences that should help them transfer their professional knowledge and skills. It should be noted that the majority of teachers of vocational subjects have not had pedagogical experience before beginning their work in a VET institution and must pass an expert in-service exam which provides them with the first teaching licence.

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⁽³⁾ Article 105, paragraph 7, 8 and 9.

The Regulation on taking the first-license examination for teachers and expert associates in the primary and secondary education system (Ministry of science, education and sports of Croatia, 2003) prescribes the manner and conditions for the traineeship and for the expert in-service exam. In addition, this Regulation defines that an expert in-service exam verifies competences in pedagogy, didactics and methodology that are the basis for successful, professional and independent transfer of expertise to students. A precursor to the expert in-service exam is a programme (4) 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 their professional field are provided with the opportunity of a one-year traineeship, during which a commission (comprised of a school director, an expert associate and a mentor) (5) monitors, analyses and together with the trainee aims to achieve better results in the process of teaching students. The traineeship is performed based on the framework programme of traineeship provided by the Ministry of Education. The commission for traineeship develops an operational traineeship programme for each trainee and is responsible for its implementation. The school is required to create an operational traineeship programme at least 15 days after the beginning of the trainee's work.

The traineeship starts on the day of employment of trainees or on the date of the signing the volunteering contract; the latter applies to persons who are not formally employed and do not have a contract, but can volunteer as trainees. If the trainee during the traineeship 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, the traineeship period stops and continues when the reasons cease, and schools report that to the Ministry.

The mentor of the trainee is a licensed teacher of the same profession as the trainee (6). Trainees are required to attend their mentor's teaching classes (at least 30 hours) and the mentor is obliged to be present at trainees' lessons for 10 hours during their traineeship, which can last up to two years 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 teach 35 hours in the presence of a mentor. Obligatory

(4) Mandatory for VET teachers who did not have pedagogical education.

⁽⁵⁾ Rules of procedure of the commission for a traineeship and the commission for the expert in-service exam (Official Gazette No. 89/95) regulate the work of these two commissions.

⁽⁶⁾ If it is not possible to find a mentor or expert associate in the school where the trainee attends the traineeship, he or she is appointed by the school director from another school.

demonstration classes should include all forms of work with students, equally distributed throughout the traineeship.

The commission must be present during the traineeship period at least twice for two hours on regular lessons or other forms of educational work of trainees; individual members of the commission (the school director, professional-pedagogical service and trainee's mentor) are obliged in the scope of their work to assist each trainee for a period of five hours. Official record of implementation of the traineeship programme must be kept by every member of the commission.

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, which it implements. Its senior advisers plan, organise, implement and evaluate the in-service teacher trainings. In addition, they analyse the needs for in-service teacher training through evaluation questionnaires.

At the beginning of a school year, each sector senior adviser prepares a plan of inservice teacher training for VET teachers of their education sector. The plan includes topics, goal, target groups, time and venue, duration, activity facilitators (organisers, managers, and trainers). The 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 for inservice 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 contain topics 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.

Data show that in the period from 2010 to 2015, Agency organised and implemented 380 in-service teacher training events, in which 7 934 participants and 5 794 teachers of vocational subjects from across Croatia took part.

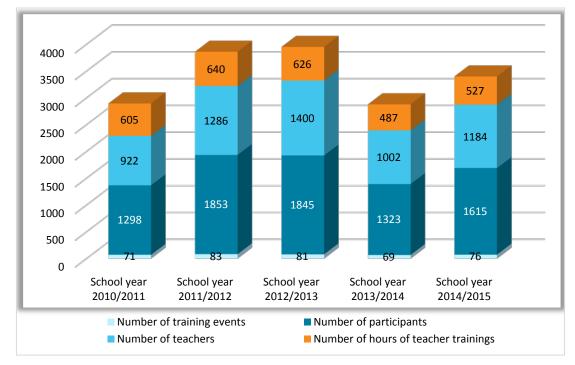


Figure 1. In-service training of VET teachers in Croatia, by year

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 in VETIS through which teachers register their participation at inservice teacher training events, and the Agency keeps records of their participation, issues participation certificates and prepares reports on in-service teacher trainings.

Lecturers at in-service teacher training events are experts from 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 in plenary sessions and workshops. Most of the trainings last six to eight 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.

The Agency for VET and Adult Education covers organisational expenses and travel costs of senior expert advisors and lecturers. Each VET institution covers the travel costs of its teachers. Due to the economic crisis and multiannual budget cuts, the Agency and VET schools have difficulties in securing required financial resources for these activities, which affects the implementation of planned and required in-service teacher training events.

6.5. Promotion in the profession

The system enables the promotion in the profession of teachers, vocational trainers and teaching associates guided by the Regulation of the Promotion of Teachers in Primary and Secondary Education (Ministry of Education, Science and Sports of Croatia, 1995). Teachers can progress to at least two levels and acquire the appropriate titles of mentors and advisors. Teachers are elected into positions of mentor and advisor for the period of five years and can be re-elected; if they are not re-elected, they lose their licence.

Teachers' expertise and work quality are evaluated based on:

- (a) successful work with students (e.g. methodological creativity in teaching, application of modern forms and working methods in teaching and use of modern sources of knowledge, etc.);
- (b) extracurricular expert work (e.g. lecturing at a teacher training event at least at the county level, mentorship of a trainee up to in-service professional exam, mentorship of students who win one of the three first places in international competitions, authorship of a textbook, etc.);
- (c) in-service teacher training.

Requirements for promotion are linked to the number of years of work experience, grade, number of points and regular in-service teacher training. The school initiates the process of a VET teacher promotion with the evaluation of the teacher's by the school director and with the consent of the teacher council while the process itself is implemented by the Agency for VET and Adult Education.

The Agency for VET and Adult Education at least once a year organises a public promotion event of teachers and trainers where they are awarded their certificates. This is done 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. In addition, teachers and trainers can be awarded for outstanding achievements in the educational activity; e.g. there is the 'Ivan Filipović' award for teachers or they can receive an acknowledgement letter for participating in learners' contests as mentors.

Mentors of apprentices or instructors in companies (work-based settings)

In VET, practical classes are partly undertaken in companies. According to Article 26 of the Vocational Education and Training Act (Croatian Parliament, 2009), 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. According to the Crafts Act (Croatian Parliament, 2013b), apprentices mentors and instructors should 'have passed the exam, which proves basic knowledge on teaching students and [have] at least three years of working experience in the occupation for which they perform practical classes and apprenticeship exercise'. A special programme to acquire basic knowledge of teaching of students and pedagogical competences is prescribed by the Ministry of Education, Science and Sports in accordance with special regulations governing VET.

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

There is no specific competence profile or professional training for mentors in companies.

Cooperation and partnerships between the world of education and the world of work to support 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 update 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, partnerships include also a wider cooperation between VET schools and companies.

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

VET schools cooperate with external organisations with the goal of continuous professional development of teachers in all VET sectors in Croatia; VET schools often initiate it, so that the educational process can be improved and ensure 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 to 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.

A draft Programme for VET Development anticipates, as a measure, investment in the professional development of teachers and mentors of practical training in companies with the goal of improving and promoting WBL. It states that informing and training 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 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 increase teacher's competences.

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

National and EU-financed projects to support 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, the Agency for VET and Adult Education also continuously improves and modernises the system of professional development for VET teachers, for which it uses resources from EU funds.

This chapter presents various forms of in-service VET teacher training , which are either implemented or in the process of implementation within the framework of national projects and projects financed from EU funds between 2010 and 2015 and where the Agency for VET and Adult Education took part.

National projects for support of the professional development of teachers

Between 2010 and 2015, several national projects have been implemented, which included the training of teachers.

9.1.1. Comprehensive curricular reform

The Strategy of Education, Science and Technology (Croatian Parliament, 2014) set as one of the goals for the early and pre-school, primary and secondary education the

implementation of comprehensive curricular reform. VET teachers participated in training events for leaders of county and inter-county teacher councils organised in collaboration with the Expert working group for the comprehensive curricular reform and the Agency for VET and Adult Education. 156 leaders of county/inter-county councils of all educational sectors in VET took part.

9.1.2. Experimental implementation of VET curricula

The experimental implementation of 22 VET curricula has commenced in the 2013/14 school year. The Agency for VET and Adult Education monitors the implementation and performs professional and pedagogical evaluation of experimental programmes. To support teachers, since 2013, the Agency has been organising in-service teacher trainings for educational workers participating in the process of experimental implementation of VET curricula. These trainings are aimed to educate teachers on the new approach to teaching and learning in learning outcomes based curricula. In addition, in-service teacher trainings are also focused on the exchange of experiences and examples of good practice in the implementation of new VET curricula as well as on learning about new technologies and practices in the labour market, which are part of 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 the involved schools took part.

9.1.3. Competences of teachers

In accordance with the VET Act (Croatian Parliament, 2009), 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, the Agency for VET and Adult Education is providing support to schools through continuous in-service VET teacher trainings. Between 2012 and October 2015, 22 in-service teacher trainings events have been implemented, with the main topic of quality assurance, during which teachers learned about the process of self-assessment and the self-assessment online tool.

9.2. Projects financed from EU funds

The 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 capacity and in-service teacher trainings for VET teachers.

The project, Strengthening Institutional Framework for the Development of the VET Occupational Standards/Qualifications and Curricula, enabled teachers to participate in trainings on the methodology of development of VET occupational standards, qualifications and curricula. Through the project, the Agency trained 250 members of work groups that develop VET occupational standards, qualifications and curricula, of which 50% were VET teachers.

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

Furthermore, the Agency prepared and implemented series of projects awarding grants to VET schools at the total value of more than 20 million euros. The projects included teacher trainings to develop the capacity of schools and teachers to prepare and implement grant schemes; VET teachers' in-service training on introduction of modern student-oriented teaching approaches and use 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)

The Agency prepared an ESF project, worth 1 million euro, which is targeted at improving the existing system of in-service teacher training and CPD of VET teachers. The purpose of the project is the analysis, development and implementation of an enhanced system of VET teachers' in-service training. It envisages a series of activities such as the development of recommendations for improving CPD for the period 2015-20 to ensure the increase of teachers' participation in in-service training through the development and use of a new internet portal for in-service training of teachers of vocational subjects and development of relevant contents. Through the project, the Agency's capacity as a key stakeholder in issues related to VET teachers' in-service training would be strengthened. The project began its first phase in 2014 and will continue in 2016.

10. Conclusions

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

The Agency for Vocational Education and Training and Adult Education and other national agencies systematically implement teachers' professional development. Inservice teacher training is performed individually, organised in the individuals' field of expertise and in areas of pedagogy, didactics, educational psychology, methodology, 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 the 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 would ensure continuous cooperation and partnership between the world of education and the world of work to support teachers' CPD. In addition, it is necessary

to develop a comprehensive strategic framework of CPD of VET teachers. Closely linked with it, there is a necessity of strengthening QA mechanisms of the in-service VET teacher training system. Increasing the number of VET teachers participating in inservice teacher training can be ensured with the use of ICT and incentives for training of teachers in enterprises.

It is expected that the implementation of the Strategy of education, science and technology (Croatian Parliament, 2014) and the VET system Development programme with the use of ESF funds will give a significant impetus for further development and improvement of CPD of VET teachers.

References

- Croatian Parliament (2008-14). 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.*
- Croatian Parliament (2009). Vocational Education and Training Act. Official Gazette, No 30/09.
 - http://www.asoo.hr/UserDocsImages/dokumenti/VET%20Act_Croatia_Official%20 Gazette%2030 2009.pdf
- Croatian Parliament (2013a). The Croatian Qualifications Framework Act. *Official Gazette,* No 22/13. http://public.mzos.hr/lgs.axd?t=16&id=17399
- Croatian Parliament (2013b). Zakon o obrtu [Law on Crafts]. *Official Gazette, No 143/13*. http://narodne-novine.nn.hr/clanci/sluzbeni/2013_12_143_3065.html
- Croatian Parliament (2014). The Strategy of Education, Science and Technology.
- Ministry of Education, Science and Sports of Croatia (1995). Regulation of the Promotion of Teachers in Primary and Secondary Education. *Official Gazette, No 89/95*.
- Ministry of Education, Science and Sports of Croatia (2003). Regulation on Taking the First-License Examination for Teachers and Expert Associates in the Primary and Secondary Education System. *Official Gazette, No 88/03*.
- Ministry of Education, Science and Sports of Croatia (2008). *The VET System Development Strategy 2008-13*. http://www.asoo.hr/UserDocsImages/dokumenti/VET%20SYSTEM%20DEVELOP
 - MENT%20STRATEGY_CROATIA_AVET.pdf
- Ministry of Education, Science and Sports of Croatia (2010). Pravilnik o načinu organiziranja i izvođenju nastave u strukovnim školama [Regulation on the organisation of teaching in VET schools].
- Zrno, J. (2012). Obrazovanje strukovnih nastavnika u hrvatskoj i europskim zemljama [VET teachers education in Croatia and European countries]. *Andragoški glasnik*, Vol. 16, No 1.