

---

KEY COMPETENCES  
IN VOCATIONAL  
EDUCATION AND TRAINING

CROATIA

---





Agency for Vocational  
Education and Training  
and Adult Education

Please cite this publication as:

Agency for Vocational Education and Training and Adult Education (2016). *Key competences in vocational education and training – Croatia*. Cedefop ReferNet thematic perspectives series.

[http://libserver.cedefop.europa.eu/vetelib/2016/ReferNet\\_HR\\_KC.pdf](http://libserver.cedefop.europa.eu/vetelib/2016/ReferNet_HR_KC.pdf)

Authors: Nino Buić, Irena Ištvančić, Ivo Tunjić and Tamara Hudolin

Contributors: Danijela Pustahija Musulin, Elisabetta Fortunato, Gordana Paškvan Budiselić, Jadranka Herceg, Ksenija Banović, Marina Režek Cvetko

Reviewed by Cedefop

© Agency for Vocational Education and Training and Adult Education (Cedefop ReferNet Croatia), 2016

Reproduction is authorised, provided the source is acknowledged.

The thematic perspectives series complements the general information on vocational education and training (VET) systems provided in '[VET in Europe](#)' reports. The themes presented in the series feature high on the European agenda.

Thematic perspectives provide national overviews of specific themes in a common format and offer comparative dimension across the EU Member States, Iceland and Norway. They are available at:

<http://www.cedefop.europa.eu/en/events-and-projects/networks/refernet/thematic-perspectives>

This thematic perspective was prepared based on data/information from 2015.

The opinions expressed here do not necessarily reflect those of Cedefop.

Thematic perspectives are co-financed by the European Union and ReferNet national partners.

ReferNet is a network of institutions across Europe representing the 28 Member States, plus Iceland and Norway. The network provides Cedefop with information and analysis on national vocational education and training (VET). ReferNet also disseminates information on European VET and Cedefop's work to stakeholders in the EU Member States, Iceland and Norway.

<http://www.cedefop.europa.eu/en/events-and-projects/networks/refernet>



/cedefop



@cedefop

#refernet

## Table of contents

Introduction .....	4
1. Key competence: communication in the mother tongue .....	6
2. Key competence: communication in foreign languages.....	7
3. Key competence: competences in maths, science and technology .....	9
4. Key competence: digital competence.....	10
5. Key competence: learning to learn .....	12
6. Key competence: interpersonal, intercultural and social competences, and civic competence.....	13
7. Key competence: entrepreneurship.....	15
8. Key competence: cultural expression.....	17
Conclusions .....	18
Bibliography.....	19

## Introduction

In 2014, 70.7% of the secondary education students were in vocational education and training (VET). VET prepares for the labour market, enables progression to tertiary education and supports personal development of learners, as they enrol at young age (14 or 15).

According to the Primary and secondary education act<sup>(1)</sup> and VET act<sup>(2)</sup>, VET curricula comprises general education part (offered by teachers of general subjects) and vocational part (offered by teachers of vocational subjects). The share of general and vocational subjects varies by VET qualification. For example, there are around 50% of general subjects in four-year VET programmes and 20% in three-year apprenticeship programmes for crafts. The VET act also defines the share of basic competences<sup>(3)</sup> by qualification and year of studies. In the first year at least 60% are basic competences, in the second – at least 40%.

VET curricula promote eight key competences, defined in the 2006 EU recommendation on key competences for lifelong learning, through stand-alone subjects or integrated in other subjects.

Four-year VET programmes (ISCED-P 354) devote approximately half of learning time to general competences. Almost 80% of the graduates take State matura exams that externally assess their achievements in general education subjects; around 60% of VET graduates progress to tertiary education.

In 2011, the Ministry of Education, Science and Sports (hereinafter – Education Ministry) adopted national curriculum framework for pre-school, general (compulsory) and secondary education. The framework provides for the acquisition of key and professional competences. It defines core educational values, educational goals, and evaluation principles of achievements and the implementation of the national curriculum. The framework comprises language and communication, mathematics, science, technical and informatics, social sciences and humanities, art, and physical and health areas. It also defines objective of interdisciplinary themes<sup>(4)</sup> and promotes key competences of the 2006 EU recommendation. The national curriculum

---

<sup>(1)</sup> Act on education in primary and secondary schools. *Official Gazette* No 87/2008, 86/2909, 92/2010, 105/2010, 90/2011, 5/2012, 16/2012, 86/2012, 126/2012, 94/2013.

<sup>(2)</sup> Vocational education and training Act, *Official Gazette* No 30/2009, 24/2010

<sup>(3)</sup> Which are acquired through general subjects study, e.g. language, mathematical competence, competences in science and technology, etc.

<sup>(4)</sup> Personal and social development, health, safety, and environmental protection, learning to learn, entrepreneurship, use of information and communication technology, and civil education.

framework's educational areas list and define key competences of learners in each specific area. Key competences are reflected in the expected learning outcomes. The national curriculum framework, determines generic competences, principles of organisation of education (including VET) process, learning and teaching as well as assessment, grading and reporting.

Educational areas and interdisciplinary themes (based on occupational standards and unit- and credit-based VET qualifications) were introduced in VET by developing 30 modularised curricula in 2012-14. Twenty three curricula have been piloted in schools and four have been fully implemented since 2013/14. Key competences are integral part of these curricula both in general education and vocational modules of VET. The 2016 draft national VET curriculum defines purpose, principles, goals, values, contents and forms of teaching and learning and elements of curricula for attainment of VET qualifications.

Croatian qualifications framework (2013) promotes the role of key competences for lifelong learning by stating so in its legal framework and operational guidelines.

Education, science and technology strategy (2014) aims to improve the skills and competences of citizens and its economic competitiveness, also through VET. The strategy reiterated key competences as defined in the 2006 EU recommendation and promoted comprehensive curricular reform that further elaborates educational areas and cross-curricular themes through subject curricula in general education and vocational modules of VET. The 2014 strategy defines principles for development of national VET curriculum. It supports ensuring general and basic competences as a base for lifelong learning, defines shares of general, vocational and key competences in VET and defines framework for modular VET <sup>(5)</sup>. In addition, the strategy states that within process of adoption and development of some of the sets of key competences it is necessary to nurture: critical thinking, aesthetic assessment, responsibility towards ones-self, others and surrounding, team work, direction towards problem solving, basic ethical values, parenting skills, civil activity, media, financial and consumer literacy, etc.

---

<sup>(5)</sup> *Nove boje znanja, Strategija obrazovanja, znanosti i tehnologije* (New colours of education, Strategy for Education, Science and Technology), MoSES, 2015 (date of publication).

## 1. Key competence: communication in the mother tongue

The title(s) in the national context	Education area of the national curriculum framework: language-communication. Teaching subject: the Croatian language, other languages of national minorities (e.g. Italian, Serbian, Hungarian).
The acquisition of the key competence at upper secondary VET is promoted at national/regional level	Yes
How is it promoted?	
<ul style="list-style-type: none"> <li>national/regional policy document(s)</li> </ul>	<p>The national curriculum framework (2011) defines transition to system of competences and students achievements. It emphasises importance of the Croatian language to preserve cultural heritage and development of national identity as well for national minorities, also in VET.</p> <p>Strategy of education, science and technology (2014) foresees introduction of competence and learning outcomes oriented curricula. It foresees ensuring new contents in the forthcoming curricular documents that will develop competences of communication in mother tongue in VET.</p>
<ul style="list-style-type: none"> <li>national/regional law(s), regulation(s)</li> </ul>	<p>The vocational education and training Act (<i>Official Gazette</i>, No 30/2009, 24/2010) in its goals defines mastery of the Croatian language as a need for development of basic competences for attainment of qualifications, further education and lifelong learning. Croatian is one a compulsory general subject in all VET programmes.</p> <p>The Act on education in primary and secondary schools (<i>Official Gazette</i>, No 87/2008, 86/2909, 92/2010, 105/2010, 90/2011, 5/2012, 16/2012, 86/2012, 126/2012, 94/2013) under goals and principles of education defines attainment of basic and vocational competences. In addition it regulates programmes in national minorities' languages.</p> <p>Act on Croatian qualifications framework (<i>Official Gazette</i>, No 22/2013) supports enhancing the role of key competences for lifelong learning. The framework defines all levels and types of education, including upper secondary VET.</p>
<ul style="list-style-type: none"> <li>national/regional curricula, standards and qualifications</li> </ul>	Competence is compulsory and is promoted and developed through all VET curricula for attainment of VET qualifications. Competence is developed through modern teaching methods in school and implementation of new technologies in teaching and learning.
<ul style="list-style-type: none"> <li>training VET teachers trainers</li> </ul>	In-service teacher (including those teaching languages) training is implemented at national level by the Education and Teacher Training Agency.
<ul style="list-style-type: none"> <li>centralised assessment of the key competence in VET</li> </ul>	State matura exams (including Croatian language) are compulsory for VET students who wish to continue to tertiary education. National minorities have possibilities of taking State matura exams in their mother tongue.
<ul style="list-style-type: none"> <li>other instruments (e.g. ways of working, teaching/learning methods)</li> </ul>	Education and Teacher Training Agency organises annually (VET) student competitions (in the Croatian language, from 7th grade of elementary school to 4th grade of secondary school) to increase an ability to communicate in different situations

	and to develop an understanding of interest, respect and care for own language, culture and literature.
<b>The progress of improving key competence levels/learning outcomes among upper secondary VET students is monitored</b>	Yes, partially
<b>How is it monitored?</b>	
• through international or national statistical data	No
• survey(s)	The programme for international student assessment (PISA) survey; reading literacy
• benchmark(s)	No
• other instrument(s)	Yes, periodical reports of State matura examinations carried out by National Centre for External Evaluation of Education
<b>Key competence level improved among upper secondary VET students since (+/-) 2010</b>	No data

## 2. Key competence: communication in foreign languages

The title(s) in the national context	Education area of the national curriculum framework: language-communication. Teaching subject: foreign language
<b>The acquisition of the key competence at upper secondary VET is promoted at national/regional level</b>	Yes
<b>How is it promoted?</b>	
• national/regional policy document(s)	<p>The national curriculum framework (2011) defines transition to system of competences and students achievements, encourages development of communication in different situations, and encourages interest, respect and care for culture, literature and languages of other nations, development of creativity in foreign language.</p> <p>The strategy of education, science and technology (2014) foresees introduction of competence and learning outcomes oriented curricula. It foresees ensuring new contents in new curricular documents that will also develop competences of communication in foreign language. This means that content of curriculum for foreign language (and other subjects) will be updated in the process of development of new foreign language curriculum (syllabus).</p>
• national/regional law(s), regulation(s)	<p>The vocational education and training Act (<i>Official Gazette</i>, No 30/2009, 24/2010) in its goals defines development of basic competences for attainment of qualifications, further education and lifelong learning, including communication in foreign languages.</p> <p>The Act on education in primary and secondary schools (<i>Official Gazette</i>, No 87/2008, 86/2909, 92/2010, 105/2010, 90/2011, 5/2012, 16/2012, 86/2012, 126/2012, 94/2013) under goals and principles of education defines attainment of basic (including foreign language) and vocational competences.</p>

	The Act on Croatian qualifications framework ( <i>Official Gazette</i> , No 22/2013) supports enhancing the role of key competences for lifelong learning.	
• national/regional curricula, standards and qualifications	Competence is compulsory and promoted/developed through all VET curricula for attainment of VET qualifications, i.e. competence is developed through modern teaching methods in school and implementation of new technologies in teaching and learning.	
• training VET teachers trainers	In-service teacher trainings are implemented on national level by Education and Teacher Training Agency.	
• centralised assessment of the key competence in VET	State matura exams are compulsory for VET students that wish to continue to tertiary education. Foreign language exam is compulsory for the 4th-year VET students only if they wish to enrol in higher level education.	
• other instruments	Education and Teacher Training Agency organises and implements annual student (including VET) competitions with the aim of increasing level of successful communication in foreign languages. VET students can also apply and participate in students' competitions organised by Education and Teacher Training Agency.	
The progress of improving key competence levels/learning outcomes among upper secondary VET students is monitored		Yes, partially
How is it monitored?		
• through international or national statistical data	No	
• survey(s)	No	
• benchmark(s)	No	
• other instrument(s)	Yes, periodical reports of State matura examinations carried out by the National Centre for External Evaluation of Education	
Key competence level improved among upper secondary VET students since (+/-) 2010		No data

### Example of a VET programme at upper secondary level that ensures acquisition of foreign languages

Communication in foreign languages is present in all VET curricula in Croatia, with one and in some curricula two or more languages (Hotel-tourism technician, Commercialist, Technician for yachts and marines, Technician for postal and financial services, Naval deck cadet, etc.). It is introduced as a general subject but also as foreign language related to qualifications. Acquisition takes place mainly in a school-based environment but in some qualifications (Hotel-tourism technician) also in work-based learning. Foreign languages are usually stand-alone subjects and are one of three compulsory



exams of State matura. Second foreign language can be elective State matura exam depending on requirements of study programmes of higher education institutions.

### 3. Key competence: competences in maths, science and technology

The title(s) in the national context:	Education area of the national curriculum framework: mathematics area, natural sciences. Teaching subject: mathematics, physics, chemistry and biology
The acquisition of the key competence at upper secondary VET is promoted at national/regional level	Yes
How is it promoted?	
<ul style="list-style-type: none"> <li>national/regional policy document(s)</li> </ul>	<p>The national curriculum framework (2011) defines transition to system of competences and students achievements and emphasises that mathematical education enables students to set up and solve mathematical problems, encouraging them to be systematic, creative, adventurous, distinctive, persistent, and research-savvy. It states that students need to acquire basic scientific skills and literacy to adapt to the rapid pace of scientific and technological development, cultivate responsible attitudes towards nature, health, and the environment, and contribute to sustainable development.</p> <p>The strategy of education, science and technology (2014) foresees introduction of competence and learning outcomes oriented curricula. It foresees ensuring new contents in new curricular documents including competences in maths, science and technology. This means that content of curriculum for mathematics, biology, chemistry (and other subjects) will be updated in the process of development of new foreign language curriculum (syllabus).</p>
<ul style="list-style-type: none"> <li>national/regional law(s), regulation(s)</li> </ul>	<p>The vocational education and training Act (<i>Official Gazette</i>, No 30/2009, 24/2010) in its goals defines development of basic competences, including competences in maths, science and technology for attainment of qualifications, further education and lifelong learning</p> <p>The Act on education in primary and secondary schools (<i>Official Gazette</i>, No 87/2008, 86/2909, 92/2010, 105/2010, 90/2011, 5/2012, 16/2012, 86/2012, 126/2012, 94/2013) under goals and principles of education defines attainment of basic and vocational competences (maths, biology, chemistry, physics (science) and technology (for example, informatics)).</p> <p>The Act on Croatian qualifications framework (<i>Official Gazette</i>, No 22/2013.) supports enhancing the role of key competences for lifelong learning.</p>
<ul style="list-style-type: none"> <li>national/regional curricula, standards and qualifications</li> </ul>	<p>Math competence is compulsory and promoted and developed through all VET curricula for attainment of VET qualifications, while science and technology is present in most four year VET curricula, i.e. it is developed through modern teaching methods in school and implementation of new technologies in teaching and learning in almost every vocational subject, also in work</p>

	based learning.	
• training VET teachers trainers	In-service teacher trainings are implemented on national level by Agency for VET and Adult Education and Education and Teacher Training Agency.	
• centralised assessment of the key competence in VET	Mathematics is a compulsory State matura exam. Other subjects (biology, chemistry, physics, informatics, etc.) are optional for VET learners who wish to enrol in tertiary education.	
• other instruments	<p>The Education and Teacher Training Agency organises and implements student competitions with the aim of development and promotion of competences in maths, science and technology.</p> <p>Croatian schools, including VET schools, participate in the global learning and observations to benefit the environment (GLOBE) programme that promotes teaching and learning of science, enhances environmental literacy and stewardship, and promotes scientific discovery.</p>	
The progress of improving key competence levels/learning outcomes among upper secondary VET students is monitored		Yes, partially
How is it monitored?		
• through international or national statistical data	No	
• survey(s)	The programme for international student assessment (PISA) survey; scientific literacy	
• benchmark(s)	No	
• other instrument(s)	Yes, periodical reports of State matura examinations carried out by National Centre for External Evaluation of Education	
Key competence level improved among upper secondary VET students since (+/-) 2010		No data

#### 4. Key competence: digital competence

The title(s) in the national context	Education area of the national curriculum framework: technical and informatics. Interdisciplinary theme: use of information and communication technology. Teaching subject: computing/informatics	
The acquisition of the key competence at upper secondary VET is promoted at national/regional level		Yes
How is it promoted?		
• national/regional policy document(s)	The national curriculum framework (2011) defines transition to system of competences and students achievements and emphasises the use of information and communication technology in various situations for understanding of fundamental concepts in the area of engineering and ICT. The strategy of education, science and technology (2014)	

	foresees introduction of competence and learning outcomes oriented curricula. It foresees ensuring new contents in new curricular documents according to the needs of modern technology and online communication.	
• national/regional law(s), regulation(s)	<p>The vocational education and training Act (<i>Official Gazette</i>, No 30/2009, 24/2010) in its goals defines development of basic competences, including digital competence, for attainment of qualifications, further education and lifelong learning.</p> <p>The Act on education in primary and secondary schools (<i>Official Gazette</i>, No 87/2008, 86/2909, 92/2010, 105/2010, 90/2011, 5/2012, 16/2012, 86/2012, 126/2012, 94/2013) under goals and principles of education defines attainment of basic and vocational competences.</p> <p>The Act on Croatian qualifications framework (<i>Official Gazette</i>, No 22/2013.) stated as one of its principles and objective enhancing the role of key competences for lifelong learning.</p>	
• national/regional curricula, standards and qualifications	Digital competence is compulsory in most VET curricula for attainment of VET qualifications. The competence is developed through modern teaching methods and using new technologies in teaching and learning in almost every vocational subject. Competence is acquired as general education subject as well as vocational subject. For example, Informatics or Computing are general subjects. In some VET curricula there are also vocational subjects that are related to profession for example: Databases, Web programming, etc.	
• training VET teachers trainers	In-service teacher trainings are implemented on national level by Education and Teacher Training Agency.	
• centralised assessment of the key competence in VET	Optional State matura exams in subject Informatics (ICT) are available for VET students that wish to continue to tertiary education.	
• other instruments	Education and Teacher Training Agency organises and implements student competitions with the aim of development a critical attitude about the issues related to information validity and reliability, and about legal and ethical principles of interactive ICT use. For more than 10 years, the Agency for VET and Adult Education organises annual student skills competitions in functional application of digital competences related to specific qualification.	
The progress of improving key competence levels/learning outcomes among upper secondary VET students is monitored		Yes, partially
How is it monitored?		
• through international or national statistical data	No	
• survey(s)	No	
• benchmark(s)	No	
• other instrument(s)	Periodical reports of State matura examinations carried out by the National Centre for External Evaluation of Education provide information about results of exams in general subjects, i.e. maths, Croatian language, etc.	

Key competence level improved among upper secondary VET students since (+/-) 2010

No data

## Example of a VET programme at upper secondary level that ensures acquisition of the key competence

Digital competences are acquired in all three- and four-year VET programmes, including apprenticeships (e.g., hairdresser, pedicure specialist, waiter, etc.). It is usually a stand-alone general subject (rarely vocational in four-year programmes) or cross-curricular topic. Acquisition takes place in a school-based environment and sometimes in work-based learning. Informatics is optional State matura exam depending on requirements of study programmes of higher education institutions. In some VET sectors, such as electro-technics and ICT, digital competences are present in stand-alone subjects (i.e. basics of computing, use of ICT in office, etc.) or as a part of subjects (operational systems, etc.). In addition, there are various extracurricular activities available (e.g. robotics, etc.) and projects that promote digital competences (e.g. LLP GRASS project that develops innovative pedagogical approaches and ICT tools and services to support: continuous development, measurement, assessment, grading and recognition of learners' soft skills, based on the idea of digital badges (digital credentials, etc.).

## 5. Key competence: learning to learn

The title(s) in the national context	Interdisciplinary theme of the National curriculum framework: learning to learn
The acquisition of the key competence at upper secondary VET is promoted at national/regional level	Yes
How is it promoted?	
<ul style="list-style-type: none"> <li>national/regional policy document(s)</li> </ul>	<p>The national curriculum framework (2011) defines transition to system of competences and students achievements and emphasises the interdisciplinary theme learning to learn which has the purpose to make students (including VET) capable of efficiently organising and managing their own education, and to develop a positive attitude towards learning.</p> <p>The strategy of education, science and technology (2014) foresees introduction of competence and learning outcomes oriented curricula. It emphasises necessity of learners (including VET) acquiring meta-cognitive (learning to learn), social and emotional skills.</p>
<ul style="list-style-type: none"> <li>national/regional law(s), regulation(s)</li> </ul>	<p>The vocational education and training Act (<i>Official Gazette</i>, No 30/2009, 24/2010) in its goals defines development of basic competences, including cross-curricular learning-to-learn competence, for attainment of qualifications, further education and lifelong learning.</p>

	<p>The Act on education in primary and secondary schools (<i>Official Gazette</i>, No 87/2008, 86/2909, 92/2010, 105/2010, 90/2011, 5/2012, 16/2012, 86/2012, 126/2012, 94/2013) under goals and principles of education defines attainment of basic (including learning-to-learn) and vocational competences.</p> <p>The Act on Croatian qualifications framework (<i>Official Gazette</i>, No 22/2013.) stated as one of its principles and objective enhancing the role of key competences for lifelong learning.</p>	
<ul style="list-style-type: none"><li>• national/regional curricula, standards and qualifications</li></ul>	Learners learn how to learn through all subjects in VET curricula to make students capable of efficiently organising and managing their own education, and to develop a positive attitude towards learning. The competence of learning to learn is the basis for lifelong learning. It is significant for students' further education and professional development. It includes the ability to organise and monitor the absorption, processing, and evaluation and application of new knowledge, skills, abilities and attitudes. It also entails imparting familiarity with the strategies and methods of learning, training students for the assessment and selection of learning strategies and methods, and enabling students to assume responsibility for their own learning and decision-making about their own educational path.	
<ul style="list-style-type: none"><li>• training VET teachers trainers</li></ul>	In-service teacher trainings are implemented on national level by Education and Teacher Training Agency.	
<ul style="list-style-type: none"><li>• centralised assessment of the key competence in VET</li></ul>	No	
<ul style="list-style-type: none"><li>• other instruments</li></ul>	No	
<b>The progress of improving key competence levels/learning outcomes among upper secondary VET students is monitored</b>		No
<b>How is it monitored?</b>		
<ul style="list-style-type: none"><li>• through international or national statistical data</li></ul>	No	
<ul style="list-style-type: none"><li>• survey(s)</li></ul>	No	
<ul style="list-style-type: none"><li>• benchmark(s)</li></ul>	No	
<ul style="list-style-type: none"><li>• other instrument(s)</li></ul>	No	
<b>Key competence level improved among upper secondary VET students since (+/-) 2010</b>		No data

## 6. Key competence: interpersonal, intercultural and social competences, and civic competence

<p>The title(s) in the national context</p>	<p>Education area of the National curriculum framework: social sciences and humanities. Interdisciplinary themes: personal and social development, civil education. Teaching subject: politics and economy, ethics.</p> <p>Programme of cross-subject and interdisciplinary contents of</p>
---	---

	civil education for primary and secondary schools (including VET)	
<b>The acquisition of the key competence at upper secondary VET is promoted at national/regional level</b>		Yes
<b>How is it promoted?</b>		
• national/regional policy document(s)	<p>The national curriculum framework (2011) defines transition to system of competences and students achievements. Education for personal and social development enables students to develop communication, organisational, and social skills and abilities, which strengthen self-respect, facilitate intercultural collaboration capabilities, and encourage mature attitudes towards others and themselves. Social sciences and humanities area deals with personal, social, economic, political, cultural, religious, and ethical and moral issues in human life and society in various periods of time and in different place. Civil education as an interdisciplinary theme prepares students for an active and effective civic life.</p> <p>The strategy of education, science and technology (2014) foresees introduction of competence and learning outcomes oriented curricula. It foresees ensuring new contents in new curricular documents that will among others develop interpersonal, intercultural and social competences, and civic competence.</p>	
• national/regional law(s), regulation(s)	<p>The vocational education and training Act (<i>Official Gazette</i>, No 30/2009, 24/2010) in its goals defines development of basic competences for attainment of qualifications, further education and lifelong learning.</p> <p>The Act on education in primary and secondary schools (<i>Official Gazette</i>, No 87/2008, 86/2909, 92/2010, 105/2010, 90/2011, 5/2012, 16/2012, 86/2012, 126/2012, 94/2013) under goals and principles of education defines attainment of basic and vocational competences.</p> <p>The Act on Croatian qualifications framework (<i>Official Gazette</i>, No 22/2013.) stated as one of its principles and objective enhancing the role of key competences for lifelong learning.</p>	
• national/regional curricula, standards and qualifications	Competence is promoted and developed through all VET curricula for attainment of VET qualifications through stand-alone subject 'politics and economy' and hidden curricula. Since 2014/15, program of cross-subject and interdisciplinary contents of civil education for primary and secondary schools was introduced.	
• training VET teachers trainers	In-service teacher trainings are implemented on national level by Education and Teacher Training Agency.	
• centralised assessment of the key competence in VET	Optional State matura exams are available for VET students who wish to continue to tertiary education and that are relevant (e.g. politics and economy) for enrolment into specific study programmes.	
• other instruments	No	
<b>The progress of improving key competence levels/learning outcomes among upper secondary VET students is monitored</b>		No

How is it monitored?	
• through international or national statistical data	No
• survey(s)	No
• benchmark(s)	No
• other instrument(s)	Yes, periodical reports of State matura examinations carried out by National Centre for External Evaluation of Education.
<b>Key competence level improved among upper secondary VET students since (+/-) 2010</b>	No data

## 7. Key competence: entrepreneurship

The title(s) in the national context	Education area of the national curriculum framework: social sciences and humanities. Interdisciplinary themes: entrepreneurship. Teaching subject: politics and economy, entrepreneurship, marketing in agricultural production, independent business management, training firm, fashion company, etc.
<b>The acquisition of the key competence at upper secondary VET is promoted at national/regional level</b>	Yes
How is it promoted?	
• national/regional policy document(s)	<p>The national curriculum framework (2011) defines transition to system of competences and student's achievements, entrepreneurship promotes equipping students with knowledge, skills, abilities and attitudes that will help them take initiative and be successful. It includes organisational skills, creativity, and independence that empower individuals to accept changes and take risks.</p> <p>The strategy of education, science and technology (2014) foresees introduction of competence and learning outcomes oriented curricula. It foresees ensuring new contents in new curricular documents that will among others include entrepreneurship.</p>
• national/regional law(s), regulation(s)	The Act on Croatian qualifications framework ( <i>Official Gazette</i> , No 22/2013.) supports enhancing the role of key competences for lifelong learning.
• national/regional curricula, standards and qualifications	Competence is promoted and developed through all VET curricula through stand-alone subject 'politics and economy' and other subjects (e.g. organisation of work in occupation, entrepreneurship, etc.) in various study fields, for example, agriculture, food processing, economics, trade and business administration, textile and leather. In addition, 'training firm programme', developed in the economics, trade and business administration VET sectors, has expanded to tourism and catering, transport and logistics, electro-technics and ICT, and other programmes as compulsory or optional subject.



• training VET teachers trainers	In-service teacher trainings are implemented on national level by Agency for VET and Adult Education.	
• centralised assessment of the key competence in VET	Optional State matura exams are available for VET students who wish to continue to tertiary education and that are relevant (e.g. politics and economy) for enrolment into specific study programmes.	
• other instruments (e.g. ways of working, teaching/learning methods)	Currently, around 300 training firms simulate real business operations in VET schools. Since 2005, the Agency for VET and Adult Education organises annual national student skills competition that also include training firm fairs and young entrepreneur competitions promoting entrepreneurship competence. VET learners participate in these competitions.	
<b>The progress of improving key competence levels/learning outcomes among upper secondary VET students is monitored</b>		No
<b>How is it monitored?</b>		
• through international or national statistical data	No	
• survey(s)	No	
• benchmark(s)	No	
• other instrument(s)	Yes, periodical reports of State matura examinations carried out by National Centre for External Evaluation of Education.	
<b>Key competence level improved among upper secondary VET students since (+/-) 2010</b>		No data

### Example of a VET programme at upper secondary level that ensures acquisition of the entrepreneurship competence for agro technician and fashion technician qualifications

Entrepreneurship competence is offered in many VET curricula, as a stand-alone vocational subject, compulsory or optional. Initially it was developed in VET sector <sup>(6)</sup> of economy, trade and business administration but has expanded to other VET sectors, like agriculture, food processing and veterinary, and textile and leather. Agro-technician programme comprises stand-alone compulsory agro-entrepreneurship and optional entrepreneurship subjects. Fashion technician programme comprises compulsory stand-alone subject 'fashion company' and optional 'marketing' subject. Training firm functioning is assessed as an indicator of VET quality during the self-assessment

---

<sup>(6)</sup> There are 13 VET sectors in total with different curricula.



process. Acquisition of entrepreneurship competence takes place in a school-based but also in work-based learning environment.

## 8. Key competence: cultural expression

The title(s) in the national context:	Education area of the national curriculum framework: art. Subjects: art, music art.
The acquisition of the key competence at upper secondary VET is promoted at national/regional level	Yes
How is it promoted?	
<ul style="list-style-type: none"> <li>national/regional policy document(s)</li> </ul>	<p>The national curriculum framework (2011) defines transition to system of competences and students achievements, encourages expression of learners through various types of media. Students (including VET) are educated to evaluate and protect natural, material, spiritual, historical and cultural heritage of the Republic of Croatia and the national identity, as well as to evaluate and protect the European and world's cultural heritage. Students develop an interest in visual arts, music, film, media art, rhetoric, drama, and dance; gain an aesthetic experience and sensitivity; and form a critical attitude to art; and develop a positive attitude to and appreciation for aesthetics and culture of living and participate actively in the cultural life of the community.</p> <p>The strategy of education, science and technology (2014) foresees introduction of competence and learning outcomes oriented curricula. It reaffirms nurturing of cultural awareness and national identity and art expression. It foresees ensuring new contents in new curricular documents that will among others develop media literacy and art area.</p>
<ul style="list-style-type: none"> <li>national/regional law(s), regulation(s)</li> </ul>	<p>The vocational education and training Act (<i>Official Gazette</i>, No 30/2009, 24/2010) in its goals defines development of basic competences for attainment of qualifications, further education and lifelong learning, including cultural expression.</p> <p>The Act on education in primary and secondary schools (<i>Official Gazette</i>, No 87/2008, 86/2909, 92/2010, 105/2010, 90/2011, 5/2012, 16/2012, 86/2012, 126/2012, 94/2013) under goals and principles of education defines attainment of basic and vocational competences, which will enable students for life and work in changeable social-cultural context in line with the requirements of market economy.</p> <p>The Act on Croatian qualifications framework (<i>Official Gazette</i>, No 22/2013.) stated as one of its principles and objective enhancing the role of key competences for lifelong learning.</p>
<ul style="list-style-type: none"> <li>national/regional curricula, standards and qualifications</li> </ul>	<p>With the introduction of modular VET curricula in 2012 and transition to competence system necessary attentions was given to development of cultural expression competence through teaching subjects of music art, art, shaping and designing products, equipping and designing spaces, designer drawing, aesthetics shaping, forming fashion additions, fashion design, costume projects, fashion styles, traditional fashion and textile hand work, traditional projects, media projects, creative</p>

	photography, applied drawing, styles in architecture, TV and theatre make-up, etc.	
• training VET teachers trainers	In-service teacher training in VET sectors relevant for this competence are implemented at national level by the Agency for VET and Adult Education and the Education and Teacher Training Agency (e.g. in the following areas: graphics technology and audio-visual formatting, textile and leather, construction and surveying, forestry, wood processing, personal services, other services and protection services).	
• centralised assessment of the key competence in VET	Optional State matura exams are available for VET students who wish to continue to tertiary education and that are relevant (e.g. Art) for enrolment into specific study programmes.	
• other instruments (e.g. ways of working, teaching/learning methods)	The Agency for VET and Adult Education and the Education and Teacher Training Agency organise annually, students skills competitions and fairs to promote students creativity (skills and knowledge competitions and fairs in certain education sectors relevant for development of competence).	
<b>The progress of improving key competence levels/learning outcomes among upper secondary VET students is monitored</b>		No
<b>How is it monitored?</b>		
• through international or national statistical data	No	
• survey(s)	No	
• benchmark(s)	No	
• other instrument(s)	No	
<b>Key competence level improved among upper secondary VET students since (+/-) 2010</b>		No data

## Conclusions

All VET curricula traditionally include general subjects allowing acquisition of key competences. Matura exams enable progression to tertiary education in four- and five-year VET programmes. Learners in these programmes acquire general subjects half of their learning time.

Major progress of promoting key competences in VET curricula took place since 2011, when the national curriculum framework for pre-school education and general compulsory and secondary education (including VET) was adopted. The framework became operational in 2014 with the development of modular and outcome-based VET curricula. Key competences are now more visible in VET curricula and linked with vocational competences, also in work-based learning environment. Some key competences have been promoted in VET with innovative teaching and learning

methods, for example, training firms for entrepreneurship competence. Extracurricular activities and projects, often organised by NGOs, and skills competitions also promote key competences. In 2014/15, 'programme of cross-subject and interdisciplinary contents of civil education for primary and secondary schools' was introduced following its pilot implementation.

The strategy of education, science and technology (2014) launched a comprehensive curricular reform. It promotes the development of key competences for lifelong learning, raising the functional literacy of learners, linking education with interests, life experiences, needs and capabilities of learners, with needs of society and economy, clearly defining learning outcomes and not only cognitive ones. The reform will also help to develop attitudes, skills, creativity, innovation, critical thinking, aesthetic evaluation, initiatives, entrepreneurship and responsibility of VET learners through new curricula. The main challenge is to develop comprehensive curricula that are based on learning outcomes.

## Bibliography

Act on education in primary and secondary schools. *Official Gazette*, No 87/2008, 86/2909, 92/2010, 105/2010, 90/2011, 5/2012, 16/2012, 86/2012, 126/2012, 94/2013

Act on vocational education and training. *Official Gazette*, No 30/2009, 24/2010

National curriculum framework for pre-school education and general compulsory and secondary education, Ministry of Science, Education and Sports, Zagreb, Croatia 2011

Nove boje znanja, Strategija obrazovanja, znanosti i tehnologije (New colours of education, Strategy for Education, Science and Technology), Ministry of Science, Education and Sports, Zagreb, Croatia, 2015.