



# TRACK-VET project:

"Developing, assessing and validating transversal key competences in the formal initial and continuing VET"

# and METHODOLOGY OF PREPARING COUNTRY REPORTS

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## 1 Information about the TRACK-VET project

## 1.1 General context of the work on the TRACK-VET project

EU strategic documents related to Vocational Education and Training (VET) (Europe 2020, ET 2020, New Skills Agenda for Europe) indicate the importance of developing transversal key (TKC) competences within VET.

TRACK-VET project defines TKC as a subgroup of the 8 key competences defined in the Council Recommendation from 2006<sup>1</sup>, namely: learning to learn, social and civic competences, initiative-taking and entrepreneurship, and cultural awareness and expression.

In Riga Conclusions (2015) Ministers in charge of VET stated that one of the key actions to be taken by the EU member states is to "further strengthen key competences in VET curricula and provide more effective opportunities to acquire or develop those skills through IVET and CVET (...) Concrete actions could, for example, include assessing the place of key competences in VET curricula (...)."

The importance of key competences is also strongly indicated in the recently adopted New Skills Agenda for Europe (2016). New Skills Agenda also mentions that further works on developing and assessing key competences and incorporating them in the curricula should be supported by the Erasmus+ projects.

At the same time EU policy documents and reports point out that it remains a challenge to modernize assessment (...) and that efforts should continue to develop tools for individual assessment of skills, particularly in the areas of problem solving, critical thinking, collaboration and entrepreneurial initiative.

Assessing key competences might be especially a challenge within the countries in which VET qualifications are awarded to learners based on the external, state exams. In relation to external summative assessment, Eurydice (2009) found that, of the eight key competences: '...only three, namely communication in the mother tongue, communication in foreign languages, and mathematical competences and basic competences in science and technology, can be directly linked to individual subjects... these three competences are the ones most commonly assessed in national tests. By contrast, in many European

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<sup>&</sup>lt;sup>1</sup> RECOMMENDATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 18 December 2006 on key competences for lifelong learning (2006/962/EC)

countries the remaining key competences such as 'learning to learn' or social and civic competences, which usually relate to more than one subject, are not at present generally assessed in national tests'.

For the above reasons we decided to focus the analysis of TRACK-VET project on:

- transversal key competences, i.e.: learning to learn, social and civic competences, initiative-taking and entrepreneurship, and cultural awareness and expression. Because these competences are the most difficult to develop and assess.
- countries that have state external system of examination. We aim to analyze solutions and develop recommendations for countries in which IVET and CVET qualifications are being awarded based on the external state examinations.
- the formal IVET and CVET sectors only. We do not aim to analyze solutions adopted in the non-formal adult education, although these systems might benefit from the outcomes of TRACK-VET analysis.

By fulfilling the objectives of our project, we aim to stimulate and improve the development, assessment, and validation of transversal key competences - competences in high-demand by both the labour market and the wider society.

## 1.2 The problems solved by the project

Despite a range of publications and reports on key competences (see e.g. Pepper 2012), and issues related to developing, assessing and validating transversal key competences in the formal initial and continuing vocational education and training, we claim that more in-depth treatment is needed.

Cedefop (2016) indicates that more work is needed regarding developing TKC and more work to exchange experiences among countries in a more detailed and systematic way. In our view, the TRACK-VET project responds to these needs. We found no evidence of EU projects implemented so far, which raises the same problem or similar approach.

#### Justification by the literature

The importance of TKC in IVET & CVET has been raised in many EU and national strategic documents. This is expressed also in reports and statistics of Cedefop, Eurydice and different international organizations. The "Reference Framework of Key Competences for Lifelong Learning" (2006) and the work carried out within the Open Method of Coordination, as well as by European research bodies have had a significant impact on Member States' curriculum reforms (Halász et al. 2011).

In the literature, the problem of defining and measuring learning outcomes, including key competences in VET has been discussed for many years. For example, it has been discussed in 28 reports on key competences in Vocational Education & Training (Cedefop, 2016). In the academic literature, interesting analysis and interpretations are presented particularly on the role of key competences in external exams systems. Gordon (2009), who provided analysis of differences and convergences in policy formulation and implementation strategies among the EU Member States, state that cross-curricular competences require the most significant innovations in teaching and learning practices, on assessment tools and procedures, and school organization. Other contributions, such as Pepper (2011) undertake attempts to assess key competences in the curriculum across Europe, from different angles.

#### Complementarity with other projects

Many Lifelong Learning Programmes have been developed focusing on transversal competences in VET, however they lack evidence-based solutions, accounting for the complexity, allowing to develop useful models helping to define, teach, measure and validate such competences in IVET and CVET. Furthermore, no projects similar to the TRACK-VET project has been found which would provide thorough, comparative analysis of different approaches of EU countries to transversal competences in VET.

However, exemplary undertakings which add value to our project are:

- 1) NTNC-NEW TEACHERS FOR NEW COMPETENCES, providing tools supporting teachers with developing, mobilizing & valorizing the transversal competences,
- 2) TRAINVET4JOBS which provided desk research and surveys at UE level on VET trainers & guidance professionals' needs regarding transversal competences,
- 3) TRECVET which developed an analytic software making qualifications transparent & comparable,
- 4) EQF meets ECVET which offered a new model for recognition of all learning to ease access to and progress in VET, especially for disadvantaged learners,
- 5) R-ERF which developed the QA procedure for recognition of the ERF key competences on the European level through common assessment tool.

As for Erasmus+, we consider it worth investigating projects suchs as "Metode de predare centrate pe elev in context European" aimed at improving basic transversal digital & linguistic skills of pupils when using a foreign language and improving the pedagogical & psychosocial skills of teachers.

TRACK-VET also builds on results of the systemic project carried out by the Educational Research Institute in Poland, aimed to systematize qualifications and to develop the basic foundation of the Integrated Qualifications System, including quality assurance standards for the qualifications and the validation of competences.

## 1.3 Aims of the project

The main aim of the TRACK-VET project is to provide evidence-based support to national governments and agencies, EU agencies and key stakeholders involved in designing policies on developing, assessing and validating TKC.

The TRACK-VET project will produce detailed analysis of the systemic solutions, practices, and techniques in six countries. Based on this analysis, model solutions will be developed including recommendations for: (1) EU level policy makers, (2) national authorities, and (3) institutions responsible for developing and assessing competences at the system level.

By implementation of the TRACK-VET, we aim to support the process of developing and assessing TKC in the systems where qualifications are awarded based on external summative assessment. We also aim to place greater emphasis on the social dimension of TKC, namely: social and civic competences and cultural awareness and expression. In the longer term we seek to contribute to better VET qualifications and improved adjusted methods of teaching and assessment of the TKC in VET.

Consequently, we envisage that the overarching and long term desired impact of the project will be graduates of formal IVET and CVET better equipped with competences needed in the changing labour markets of the 21st century, but also to play an active role in the society and local communities. One aim is that VET graduates will responsibly and autonomously (to a much larger extent then currently) contribute to social cohesion and development of civic societies. We desire that graduates of VET will be more involved in initiating and conducting dialogue on important issues in the area of public policy and multicultural environments.

TKC are highly demanded by the labour market, therefore we seek that better TKC will be utilised in the professional careers of VET graduates contributing to increased employment-rates, and productivity of national and European economies, and in the long run, to sustainable European economic growth.

## 1.4 Intellectual outputs

Eight intellectual outputs will be produced within the TRACK-VET project:

IO1: Methodology of preparing country reports

The basic concept and terms used in the reports will be defined. The format of the data and information will be defined and potential data sources indicated. The template of a country report is being designed: its structure, scope, list of problems to be addressed, approximate length of each main chapter.

IO2 – IO7: Country reports of 6 EU countries in the TRACK-VET partnership

Each prepared country report will include a description of:

#### A: TKC in the VET qualifications:

- How TKCare defined and specified (explicitly and implicitly) in the VET curricula are they 'attached' to professional tasks or are they grouped into separate unit(s)? How are the learning outcomes defined with regards to TKC?
- Who is responsible for developing the descriptions of TKC, what are the competencies of experts taking part in designing transversal key competences, which stakeholders are involved, how long does it take to develop new VET curriculum with particular attention to the process of designing transversal key competences?

## B: assessment methods, techniques, solutions:

- How are the TKC assessed and validated? Which solutions, methods and techniques are used in the national systems (examinations, portfolios, etc.). Do the methods of assessment and validation of transversal key competences differ between the formal IVET and CVET sectors?
- Who is responsible for designing assessment methods and techniques, what are the competences of experts taking part in designing TKC, which stakeholders are involved?

C: current debate on further development of TKC in the national system:

- What are the opinions of different groups of stakeholders and institutions with regards to further development of TKC, what are the recommendations for change?

The content of the country reports will be consulted with the project partners associated partners, and key stakeholders,

 IO8: Models of solutions regarding developing, assessing and validating TKC in the formal IVET and CVET. Based on a synthesis of the country reports, models of solutions will be developed.

Each Developed Model will include a description of:

- 'types' of TKC which might be introduced in the formal IVET and CVET qualifications
- location of transversal key competences in the VET qualifications
- level of specificity of description of learning outcomes regarding transversal key competences
- systemic solutions regarding assessment and validation of transversal key competences
- methodologies, techniques, tools used to assess and validate different types of transversal key competences
- cost intensity how cost intensive are different systemic solutions envisaged by the model
- requirements for successful implementation

The models of solutions of developing and assessing TKC will be complemented by three types of recommendations:

- 1) Recommendations for agencies responsible for developing and assessing TKC in the formal VET. These recommendations will provide guidelines and practical advice on how to efficiently design the process of implementation of TKC, how to structure VET qualifications and shape the process of assessment and validation.
- 2) Recommendations for national authorities: How national authorities may enhance the process of developing TKC in VET (e.g., ministerial decrees, legislation, guidelines, regulations), which instruments they might use (e.g., qualification frameworks level descriptors, standards for quality assurance).
- 3) Recommendations for EU policy makers: How EU policy makers might support the process of introduction of TKC to the formal IVET/CVET, which policy instruments might be used and how. IO8 will also include description of the proposal of fields for further research regarding developing and assessing key competences in higher education (HE).

When developing model solutions for VET, we envisage using the outcomes of the project: DASCHE "Developing, assessing and validating social competences in HE", which was awarded to SGH within KA2 HE grant. The logic of DASCHE project is very similar to TRACK-VET but it relates to the HE sector of education. Relations between both projects are shown in Annex 1.

## 1.5 Target groups

There are three groups of participants (beneficiaries) of the project - two direct beneficiaries and one indirect.

#### **DIRECT BENEFICIARIES:**

Group 1 – Project TARGET GROUPS: policy-makers at the regional, national and EU levels, national agencies and key stakeholders (VET schools and other formal VET providers, employer organizations, trade unions, branch organizations,) involved in developing, assessing TKC competences in the formal IVET and CVET. The TRACK-VET project will target dissemination activities and multiplier events particularly to this group.

Group 2 - researchers, academicians, learners and other groups interested in VET policies nationally and in Europe. They <u>are not</u> TRACK-VET target groups, but can benefit from the project directly.

#### INDIRECT BENEFICIARIES:

Group 3 – There is a vast group of IVET and CVET learners who could benefit indirectly from better VET and LLL policies.

Project target groups will be involved in the outputs production stage (IO2-IO8) and later in discussing final project results and outcomes. Each Output report O2-O8 will be discussed during seminars and individual meetings, and will also be published on the project's web site, prior to the version is finalized. Associated partners will support reaching the TARGET GROUPS, and will support dissemination of project activities.

With regard to Group 2 and Group 3, the TRACK-VET project will focus on informing these groups about the project activities and results via the project website, newsletters, conferences and other dissemination channels/activities. These groups might provide comments to produced intellectual outputs via project web site and participate in the project multiplayer events.

#### 1.6 Partners

There are seven members of the partnership:

P1: Warsaw School of Economics (Poland) - SGH

P2: Austrian Institute for Research on Vocational Training (Austria) - Oeibf

P3: Fafo Institute for Labour and Social Research (Norway) - Fafo

- P4: French Centre for Research on Qualifications (France) Cereq
- P5: National Institute for Certified Educational Measurements (Slovakia) NUCEM
- P6: Matej Bel University Banska Bystrica (Slovakia) UMB
- P7: National Centre for Education (Latvia) VISC

and six Associated Partners (AP) - 'silent partner' - organizations who will support the project by providing information on national higher education systems and by reviewing project outcomes:

There are six APs of the TRACK-VET project:

- AP1: Austrian Federal Ministry of Education
- AP2: Ministry of Education, Science, Research and Sport in Slovakia department responsible for IVET
- AP3: Ministry of Education, Science, Research and Sport in Slovakia department responsible for lifelong learning
- AP4: Ministry of National Education, Higher Education and Research in France
- AP5: Central Examination Commission in Poland responsible for designing assessment and validation of IVET and CVET formal qualifications in Poland
- AP6: NETINVET network (association composed of 72 vocational education and training schools and centers in 8 Member States of the European Union)

## 2 Proposed methodology of preparing country reports

The TRACK-VET project partners will prepare country reports on the development, assessment and validation of transversal key competences in the formal IVET and CVET. Each country report should refer to the same set of themes in a comparable way. For this reason, we have developed a methodology of preparing country reports consisting of:

- basic terms and concepts (section 2.1),
- descriptive categories for Transversal Key Competences in the TRACK-VET project (2.2)
- structure of the country report (2.3),
- comments to the proposed structure of the country report (2.4)
- research methods (2.5)
- model solutions basic assumptions (2.6)

## 2.1 Defining the object of research, scope and relevant terms

Object of research: Development, assessment and validation of transversal key competences (TKC) in the formal initial and continuous VET.

In the country reports we aim to present detailed descriptions of the solutions regarding transversal key competences in the formal VET. We also aim and to present opinions of different stakeholders (including policy makers, researchers, teachers, employers, trade unions) on how to improve development of TKC in the VET systems (see more sections 2.3 - 2.4 below).

To operationalise the scope of research, the TRACK-VET partnership needs to develop a common understanding of the key following terms and concepts to be applied:

- transversal key competences (TKC),
- development (of TKC)
- assessment (of TKC)
- validation (of TKC)
- formal initial and continuous VET

## 1) Transversal key competences

In the TRACK-VET project proposal we decided to use the term transversal key competences (TKC), which is defined as a subgroup of the 8 key competences defined in the Council Recommendation (2006), namely:

- learning to learn,

- social and civic competences,
- initiative-taking and entrepreneurship,
- cultural awareness and expression.

On 17 January 2018 European Commission issued *Proposal for a Council Recommendation on Key Competences for LifeLong Learning* in which the modifications to the key competences reference framework were introduced. In the below table

Annex 2 and Annex 3 provides definitions competences form the Council Recommendation (2006).

The Reference Framework for eight key competences. Transversal key competences are indicated in <b>bold</b>			
Council Recommendation on Key Competences for lifelong learning (2006)	Proposal for a Council Recommendation (2018) on Key Competences for Lifelong Learning		
Communication in the mother tongue;	Literacy competence		
Communication in foreign languages	Languages competences		
Mathematical competence and basic competences in science and technology	Mathematical competence and competence in science, technology and engineering		
Digital competence	Digital competence		
Learning to learn	Personal, Social and learning competence		
Social and civic competences	Civic competence		
Sense of initiative and entrepreneurship	Entrepreneurship competence		
Cultural awareness and expression	Cultural awareness and expression competence		

## 2) "Development" of TKC

Within the TRACK-VET project, development of TKC is understood as *the intentional process of forming competences*. This process might be defined in the curricula, programmes or other documents [other options?], In many instances VET systems develop competences "unintentionally" we do not aim to investigate these aspects in detail, because of the systemic focus of the project.

#### 3) "Assessment" of TKC

We adopt the approach and definition of "assessment" from the ECVET Recommendation 2009. Assessment "means, methods and processes used to establish the extent to which a learner has in fact attained particular knowledge, skills and competence". In this sense assessment is similar concept to the concept of "examination".

We distinguish between using assessment results for formative and summative purposes. The country reports should pay attention to this distinction, and provide information on different forms of assessment, however, the focus should be on summative assessment, leading to a qualification. The distinction between formative and summative assessment refers mainly to time and purpose (after Harlen & James 1997; DES/WO 1988):

- formative assessment, so that the positive achievements of a learner may be recognised and discussed and the appropriate next steps may be planned;
- summative assessment, for the recording of the overall achievement of a learner in a systematic way

In line with Boud (1988) and other researchers we consider that "assessment methods and requirements probably have a greater influence on how and what students learn than any other factor. This influence may well be of greater importance than the impact of teaching materials". See also Gordon et al. (2009), Sainsbury and Walker (2007), Psifidou (2014).

Therefore, the approach in the TRACK-VET corresponds to validation of non-formal and informal learning initiatives promoted at the EU level – if the qualifications are being awarded based on the validation of non-formal and informal (VFNIL), then in the assessment and validation procedures, the formative assessment methods cannot be taken into considerations and the fact of achieving transversal key competences need to be verified by other means then formative assessment.

#### 4) "Validation" of TKC

We take the approach and definition of validation from the Cedefop Terminology of European Education and Training Policy (2014) and ECVET Recommendation (2009). In the Cedefop Terminology, validation means: "confirmation by a competent body that learning outcomes learning outcomes (knowledge, skills and/or competences) acquired by an individual in a formal, non-formal or informal setting have been assessed against predefined criteria and are compliant with the requirements of a validation standard. Validation typically leads to certification."

## 5) Formal initial and continuous VET system

We recognize that there is great diversity of what might be categorized as formal VET in different European countries. By formal VET we understand that it is by the education and training system set up or sponsored by *the state* (after Groombridge, 1983; Tight 2002). Public formal VET often overlaps with school and tertiary education systems, and ministries of education often share responsibility for VET policy with ministries of labour and/or employment (Cedefop 2017).

We propose to define formal initial and continuous VET, as systems that have some or all of the below characteristics:

- based on core-curriculum or national qualification (standard);
- lead to state recognised (and very often state examined and quality assured) qualifications;
- be funded by the state (at least partially);
- is not part of 1<sup>st</sup> or 2<sup>nd</sup> cycle in higher education;

## 2.2 Descriptive categories for Transversal Key Competences in the TRAC-KVET project

The need for providing a more detailed categorisations of the competences has been stated at the project kick-off meeting in Warsaw. It has also been stated that the competences definitions/descriptions in the Council Recommendation on key competences should be used.

The descriptive categories have been selected in order to provide common understanding of transversal key competences in the TRACK-VET project, especially at the stages of analysis of documents (curricula, strategies, qualifications standards etc.) and conducting interviews. It is not aimed to limit the research conducted in each partner country. Rather to structure and organize findings in a common framework, which will enable easier comparisons.

Table below presents the list of descriptive categories with reference to transversal key competences from the Council Recommendation. A full table, with commentary and examples can be found in Annex 4.

DESCRIPTIVE CATEGORIES	TRANSVERSAL KEY COMPETENCES
Methods and strategies of learning	

Motivation and autonomy of learning  Maintaining well-being  Social and interpersonal relations	PERSONAL, SOCIAL COMPETENCES AND LEARNING COMPETENCE	
Understanding of society  Participation in public affairs  Values and identity	CIVIC COMPETENCES	
Taking action and making decisions  Realization of initiatives	ENTREPRENEURSHIP COMPETENCE	
Understanding and appreciation of culture  Cultural expression	CULTURAL AWARENESS AND EXPRESSION COMPETENCE	
Problem solving  Modia literacy	DESCRIPTIVE CATEGORIES RELATED TO MORE THAN ONE TRANSVERSAL KEY	
Media literacy  Creativity and innovation	COMPETENCE	

Main sources used for developing descriptive categories:

- RECOMMENDATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 18 December 2006 on key competences for lifelong learning (2006/962/EC);
- KEY COMPETENCES FOR LIFELONG LEARNING, European Reference Framework – annex of a Recommendation of the European Parliament and of the Council of 18 December 2006 on key competences for lifelong learning;
- Recommendation on Key Competences for Lifelong learning on 17 January 2018;
- COMMISSION STAFF WORKING DOCUMENT Accompanying the document Proposal for a COUNCIL RECOMMENDATION on Key Competences for LifeLong Learning Brussels, 17.1.2018.

Supplementary sources used for developing the indicators:

- Sylvest J., Kwaw E. (2017), Support of the stakeholder consultation in the context of the Key Competences Review, Report 1: Comparative Analysis;
- Facione, Peter A. 2006. "Critical Thinking: What it is and why it counts" Insight Publishing. and "Critical Thinking: A Statement of Expert Consensus for Purposes

- of Educational Assessment and Instruction: Executive Summary" from the American Philosophical Association's Delphi Process;
- COMPETENCES FOR DEMOCRATIC CULTURE Living together as equals in culturally diverse democratic societies, Council of Europe, March 2016;
- EntreComp: The Entrepreneurship Competence Framework, European Union 2016
- Reeff, J. P. (ed.) (1999): New Assessment Tools for Cross-Curricular Competencies in the Domain of Problem Solving.

The descriptive categories have been derived in the following way:

STEP 1. Analysis of the text of recommendation of 2006 on Key Competences and identifying certain aspects in each definition. Verifying the categories in light of 2018 proposal of recommendation on key competences.

STEP 2. Discussing the categories in IO1 team and during second project partners meeting in Oslo.

STEP 3. Expanding and explaining the categories with reference to selected documents.

Next steps should include short pilot of using these categories should be conducted at the beginning of country analysis. The descriptive categories should also be reviewed after the full analysis is carried out by partners.

## 2.3 Proposed structure of the country reports [IO2-IO7]

No	CHAPTER OF COUNTRY REPORT	SIZE (in pages)	SIZE Together (in pages)
	Foreword	1	1
	Abbreviations and acronyms	1	2
	Preparation of the report	1	3
	Basic terms	2	5
1	Overview of the formal initial and continuous VET [NO, FR, LV, PL, SK]	3-5 [it can be more]	8
2	Overview of transversal key competences in formal VET	2	10
3	Formulation of transversal key competences and their location in curricula	10	20
4	Assessment and validation of transversal key competences	10	30
5	Opinions of key stakeholders regarding development, assessment and validation of TKC	15 [it can be less]	45
6	Recommendations	10	55
	Appendices	15	70

Comment: according to the project application, reports should consist of approx. 60-70 pages

## 2.4 Comments to the proposed structure of the country report

Introductory comment no.1: The country report should deepen information provided in the Cedefop/Refernet Reports, in particular country reports on key competences and VET systems.

Introductory comment no.2: Authors of national reports have to refer set of questions/problems as describe below but in the order which in the opinion of national teams is the most appropriate for explaining the national system. Check-list will be developed to guide the authors and to assess whether all topics indicated in the methodology report are included in the national report.

#### **Foreword**

The foreword to each country report should have a common "core" in which the reader is informed that the country report is the result of an TRACK-VET project, which aims to support policy learning between countries and VET institutions in development, assessment and validation of transversal key competences in the formal VET. Each country report can also serve national needs and, if so, indicate this within the foreword.

SGH will provide input / proposal for this part, for voluntary use.

#### Abbreviations and acronyms

A list of country specific abbreviations and acronyms used in the country report.

#### Preparation of the report

This part should present how the country report was prepared, i.e. who worked on the report, with whom it was consulted, which institutions provided contributions (and what kind), when it was prepared, the approach(es) adopted by the authors in collecting data and the sources used.

#### Basic terms

Basic terms used in the country report.

#### Chapter 1. Overview of the formal initial and continuous VET

How is the formal initial and continuous VET is defined in the country report?

What types of formal IVET and CVET programmes were included in the analysis in the country report and what programmes were not included, and why?

Which institutions deliver formal initial and continuous VET? What is the school autonomy regarding the content of the delivered programme?

How qualifications are being awarded, e.g. based on summative external assessment, mix of summative and formative, only formative assessment? What are the awarding and validating (examining) bodies/institutions? What is the relation between general core curriculum and VET core curriculum?

How is the quality assurance system organised? Which institutions are responsible for assessment, validation and certification?

## Chapter 2. Overview of the transversal key competences in formal VET

To which extent is TKC in the formal VET system on the current public agenda? What is the general approach towards development of transversal key competences in the formal VET in a country? Is the topic of developing TKC approached in national and education strategies any other documents? Are there any national projects targeted at development of TKC?

Are national authorities promoting, recognising and rewarding schools which are introducing innovation with regards to teaching methods including teaching TKC?

## Chapter 3. Formulation of TKC and their location in curricula

To which extent, and how is TKC formulated in national and school curricula and/or in other documents?

Are they grouped in separate units of learning outcomes/modules/subjects, or are they dispersed through different units/modules/subjects?

This chapter should provide concrete examples of formulation of learning outcomes or requirements regarding all types of TKC depending on the content of curricula in a country.

Who is responsible for the formulation of TKC in the national and school curricula? Involvement of central agencies?

To which extent is special expert working groups formed, which are developing these competences at the national level?

Are there any other transversal competences formulated in the national curricula which are not covered within the 4 transversal key competences defined in the Council Recommendation (2006)?

When developing TKC in the national curricula, are the NQF level descriptors taken into account? Is the formal obligation to include level descriptors in the formal VET curricula?

## Chapter 4. Assessment and validation of TKC

How is the process of assessment organized in the national system? Which TKC competences are being assessed? How are these competences being assessed (which assessment methods and which criteria are being used)? What is the relation between summative and formative assessment? Are the TKC assessed explicitly in formative and summative assessment? Are assessment criteria related to TKC? How are TKC operationalised for assessment?

This chapter should provide concrete examples of formulation of assessment criteria, concrete examples how TKC are being assessed in a national system of all types of TKC depending on the content of curricula in a country.

Validation of non-formal and informal learning: Is it possible to obtain formal VET qualifications by VNFIL procedure, if yes how are the assessment and validation processes organised? Does assessment differ for regular full-time VET students?

In structuring information in this chapter the table below might be helpful.

Information to be provided in chapter 4: assessment and validation of TKC					
	Assessment forms				
	External Continuous Other forms of assessment assessment occurred teacher				
Transversal key competences	(summative)	(formative)	(e.g.portfolio, assessment center)		
Personal, Social and learning competence	Concrete examples how this type of competence is being assessed (via practical exam, test, etc.)	Description of one example of a good practice of assessing this type of competence	Description of other forms of assessment of this type of competence (e.g. portfolio, conducting project, e-assessment etc.)		
Civic competence	as above	as above	as above		

Entrepreneurship competence	as above	as above	as above
Cultural awareness and expression.	as above	as above	as above
Other competences related to TKC important in the national context	as above	as above	as above

Chapter 5. Opinions of key stakeholders regarding development, assessment and validation of TKC

Chapter 5 should provide information regarding opinions of key stakeholders on how the development, assessment and validation of TKC are functioning in the country and which additional measures could be introduced to improve the situation.

The relevant stakeholders identified so far are: employers, teachers / school staff, policy makers

We propose that the stakeholders will give their opinions on the following topics:

- 1. To which extent should each type of TKC (learning to learn, social and civic competences, initiative-taking and entrepreneurship, cultural awareness and expression) be developed in the formal IVET and CVET system? Which TKC are perceived as most relevant, and why?
- 2. Are there any "21st century competences" that is missing within TKC concept?
- 3. Are the TKC sufficiently developed in the national formal VET system?

Are the TKC sufficiently develop/ed in the formal IVET and CVET system			
Transversal key competences Opinions of stakeholders			
Learning to learn	,		

	if not what should be changed, what additional measures should be implemented?
Social and civic competences	 as above
linitiative-taking and entrepreneurship	 as above
Cultural awareness and expression.	 as above

- 4. Is assessment of TKC a good approach to spur the development of these competences? What could be alternative ways?
- 5. Are TKC assessed to a sufficient degree in the formal VET and CVET system?

Are TKC assessed to a sufficient degree in a formal VET and CVET system?					
Transversal key competences	External standardised assessment (summative)	Continuous teacher assessment (formative)	Other forms of assessment (e.g. portfolio)		
Personal, Social and learning competence	Opinions of stakeholders  If the external standardised assessment does not sufficiently verify this type of TKC, should it be changed, how to improve this situation? what	Opinions of stakeholders  If the continuous teacher assessment does not sufficiently verify this type of TKC, should it be changed, how to improve this situation? what	Opinions of stakeholders  Should other forms of assessment be introduced to assess this type of TKC?		

	measures should be introduced?	measures should be introduced?	
Civic competence	as above	as above	as above
Entrepreneurship competence	as above	as above	as above
Cultural awareness and expression	as above	as above	as above

6. Do NQF level descriptors provide guidance to formulate learning outcomes regarding TKC and to formulate assessment criteria?

#### **Chapter 6. Recommendations**

Based on the research conducted and input provided for chapters 1-5, each country team should prepare the following recommendations:

- 1) Recommendations for agencies responsible for developing and assessing TKC in the formal VET. These recommendations should provide guidelines and practical advises how to efficiently design the process of implementation of TKC, how to structure VET qualifications and shape the process of assessment and validation.
- 2) Recommendations for national authorities and agencies: how national authorities may enhance the process of developing, assessing and validating TKC in VET (ministerial decrees, legislation, guidelines, regulations, consultations, etc.?), which instruments they might use (qualification frameworks level descriptors, standards for quality assurance)

#### 2.5 Research methods / data collection methods

Chapters 3 and 4 should provide a "snap shot" of the national state of art. It is assumed that a significant part of the information to produce these chapters can be derived from the analysis of documents, i.e. national strategies, legislation, curricula.

Chapter 5 should provide information regarding opinions of key stakeholders on how the development, assessment and validation of TKC is functioning in the country and what measures could be introduced to improve the current situation. Therefore, to prepare chapter 5 of the country report, we propose to conduct a number of individual in-depth interviews (IDI) and focus group interviews (FGI).

This section is intended for the preparation and production of chapter 5 of the country report (chapters 1-4 of the country report will describe national solutions, current state of art regarding development of TKC in each country). The aim of chapter 5 is two-fold: (a) evaluate the solutions, programmes, and initiatives adopted in each country, and (b) to generate knowledge of opinions of decision makers, teachers, curricula developers and other relevant actors on policies aiming to develop TKC in an adequate fashion. The overall aim is to use the data and analysis of the country reports to prepare valuable recommendations both for the national and European level.

The purpose of this section is to assure that the qualitative data collection is reliable and comparable, ensuring a common understanding of the aims of the data collection and the concepts used in the interviews. The guide provides a framework within which the interviewer could develop questions, sequence those questions, and make decisions about which information to pursue in greater depth. Thus, the guide allows for adjustments and flexibility. The interviewer remains free to build a conversation, to word questions spontaneously, and to pose nation-specific relevant questions in addition to the questions proposed in the interview guide.

#### 2.5.1 Aim of the data collection

The data collection is to provide information on:

- The opinions of stakeholders regarding the development, assessment and validation of TKC in the formal IVET and CVET system, especially with regards to:
  - General approach towards development of TKC in the national system –
    is the national system promoting, supporting, forcing or whether it is
    ambivalent towards development of TKC within the formal I/CVET
  - National or regional strategies, programmes, initiatives being implemented and assessment of their impact
  - Inclusion of TKC in the assessment standards

- The opinions of stakeholders regarding additional measures that could be introduced to improve the ways TKC are developed, assessed and validated in the formal IVET and CVET system:
  - How decision makers at central level may enhance the development of TKC within the IVET and CVET system
  - What can be done at the school level to enhance the development of TKC, and how the national/regional level can support this process
  - Whether TKC should be part of the national assessment standards, and if yes which solutions, methods and techniques might be introduced/applied
  - Whether it is possible to assess TKC (differentiate between the four TKCs) within national summative assessment

## 2.5.2 Sampling strategy and sample size

The main sampling strategy is to purposively recruit participants holding an expert role related to how the development, assessment and validation of TCK is functioning in your country, and which additional measures could be introduced to improve the ways TCK are developed, assessed and validated. Relevant stakeholder/expert groups are policy-makers, representatives of trade unions, employer organisations, and school staff. Experts (national level), might be decision makers, curricula developers, employers, and others who possess very good knowledge and experiences in how the system works. Please sample teachers who highly knowledgeable about the national system and different practices in different schools).

Nonprobability sampling techniques where existing participants recruit future participants from among their personal network may be useful. The participants of the FGI should be decision makers contributing with their opinions on the development, assessment and validation of TKC.

IDI sample size: approximately 10-12

FGI sample size: 2 group interviews, each comprised of approximately 4-5 participants

Overview participants and sample size:

Participant	IDI	FGI	Number
Representatives of agencies responsible for VET and the development of TKC	Х		3-4
Teachers/representatives of teacher associations	Х		3-4
Experts involved in designing curricula and assessment	Х		2-3

Representatives of employer associations involved	Х		1-2
in the design of VET policies			
Representatives of trade union associations involved in the design of VET policies	Х		1-2
Decision-/policy makers		Х	2

## 2.5.3 Interview guide - IDI

#### Guiding introductory script:

We are carrying out research on the development, assessment and validation of transversal key competences in the formal IVET and CVET. This is part of an Erasmus+project, comprised of seven European partners, which are conducting the same interviews with key experts in their country. Relevant experts and stakeholders vary along a range of professional backgrounds.

We are largely interested in your opinion on various aspects of transversal key competences in the I/CVET system. The main focus will be on competences such as learning to learn, social and civic competences, sense of initiative and entrepreneurship, and cultural awareness and expression – defined by EU-level in 2006, and frequently referred to as the 21st century competences. [Note to interviewer: a. Please align with section 2.2 on descriptive categories for TKC in the TRAC-KVET project on descriptive categories, b. Please include both IVET and CVET in the questions for those interviewees involved in both, c. Please make sure that the interviewee understands the TKC as the same 4 key competences defined in the project; in any case please make sure each of them is taken into account when answering the questions]

We will use the information from this interview as the basis for a country report. We will list the organization/institution of the experts that we conducted interviews with, but we will not mention your name nor attribute any views contained in the report to any individual. This interview will be recorded on tape as long as you are comfortable with that. This is only for purpose of the research; the information will not be given to any third parties. Thank you for taking the time to participate in this interview.

General introductory questions	Probe/follow-up	Aim
		Make the interviewee feel at ease, establish a
		trustful relation, and

(Optional if this information is already known)		obtain contextual information
What is your current job position?		
Please tell me about the scope of your organization?		
What characterizes the work you do?		
What experiences have you had related to curriculum development/assessment/teaching etc.?		
Focal questions: Experts		
What is your familiarity/knowledge of TKC?	(Please see conceptualization of TKC)	Map the interviewee's knowledge of TKC
How is TKC positioned within larger curriculum developments in VET/IVET?	If TKC is weakly positioned, why is it so?	
<ul> <li>Personal, Social and learning competence</li> <li>Civic competence</li> <li>Entrepreneurship competence</li> <li>Cultural awareness and expression.</li> </ul>		
To which extent should the TKC be developed in the formal IVET and CVET system?	Please elaborate	
Are there any recently implemented policies regarding TKC?	If yes what is their effectiveness, what works well, and what does not work well	
What kind of strategies is used to promote TKC at national level?	Would you characterize it as promoting/supporting/'forcing'?	

	E.g., funding schemes, school competitions? Or a state of ambiguity or passivity?	
Are there any of the TKC you consider more relevant than others?	If yes, why?	
<ul> <li>Personal, Social and learning competence</li> <li>Civic competence</li> <li>Entrepreneurship competence</li> <li>Cultural awareness and expression.</li> </ul>		
Which additional measures could be introduced so that TKC are	What could be done at the national level?	
developed within the national IVET and CVET system?	What could be done at the school level?	
To what extent EU education and skill policies had an impact on the design and development of national policies regarding transversal key competences in VET?		
Are National Qualification Framework level descriptions taken into account when formulating curricula and assessment standards?	Do they provide guidance to formulate learning outcomes regarding TKC and to formulate assessment criteria?	(Question only to curricula and assessment standards developers)
Focal questions: Representatives of teacher union(s)/teachers		
How would you operationalize TKC?	<ul> <li>Personal, Social and learning competence</li> <li>Civic competence</li> <li>Entrepreneurship competence</li> <li>Cultural awareness and expression.</li> </ul>	

How do you perceive the TKC as stated in the curriculum?	In a broad/vague/specific manner?	
Is TKC a topic in your school? in what ways?	Personal, Social and learning competence     Civic competence     Entrepreneurship competence     Cultural awareness and expression.  If yes, in what ways? E.g., addressed in school documents? A topic of discussion between	
How would you characterize the level of engagement (among colleagues/school management) concerning development and assessment of TKC?	colleagues?	
How is TKC assessed in VET?	Summative, formative?  How do you think this is working?	
Do you think the current way to assess TKC is a good approach to spur the development of these competences?	How does this differ between:  - Personal, Social and learning competence - Civic competence - Entrepreneurship competence Cultural awareness and expression.  How to improve this situation? Which measures should be introduced?	
Do you think TKC be part of the national assessment standards?	If yes, which solutions might be introduced, what methods and techniques might be applied?	

Do you think it is at all possible to assess TKC within national summative assessment?	Are there differences between:  - Personal, Social and learning competence - Civic competence - Entrepreneurship competence - Cultural awareness and expression.	
How may decision makers at central level enhance the development of TKC within the IVET and CVET system?	How would you assess the current policy and national initiatives regarding the development of TKC?  Do you find it efficient?  Would you characterize it as promoting/supporting/'forcing'?  E.g., funding schemes, school competitions? Or a state of ambiguity or passivity?	
Do you think there is need for an intervention to enhance the development of TKC within the IVET and CVET system?	If yes, what could be suited?	
What can be done at the school level to enhance the development of TKC?	How may the national/regional level support this process?	
Any additional questions which are important for a national context and country reports?		

## Guiding close script:

(Perhaps recap/clarify how you have understood the information provided by the interviewee). Thank you very much for your time. Is there anything you would like to add? If you want more information on the EU-project, there is a website (<u>track-vet.eu</u>) which will be continuously updated (and/or offer to send key documents).

## 2.5.4 List of questions FGI

## Suggested introductory script:

We/I have invited you to discuss the development, assessment and validation of transversal key competences in the formal national I/CVET system. In this focus group discussion, we/ I will ask you several open questions. Your personal opinions and view are very important for us. Please feel welcome to express yourself freely during the discussion. You can address each other when expressing your opinion, I/we are only here to assist in the discussion.

We are going to be sharing our opinions on various aspects of transversal key competences in the I/CVET system. The main focus will be on competences such as learning to learn, social and civic competences, sense of initiative and entrepreneurship, and cultural awareness and expression – defined by EU-level in 2006, and frequently referred to as the 21st century competences.

This is part of an Erasmus+ project, comprised of seven European partners, which are conducting the same interviews with key experts in their country. Relevant experts and stakeholders vary along a range of professional backgrounds. We will use the information from this interview as the basis for a country report. We will list the organization/institution of the experts that we conducted interviews with, but we will not mention your name nor attribute any views contained in the report to any individual. This focus group discussion will be recorded on tape as long as you are comfortable with that. This is only for purpose of the research; the information will not be given to any third parties. Thank you for taking the time to participate in this focus group.

## Introductory question:

Please share your name and the place you work.

#### **Transition question:**

 When you think of the transversal key competences such as learning to learn, social and civic competences, initiative taking and entrepreneurship, and cultural awareness and expression, what comes to mind?

#### **Focal questions:**

- To which extent should the TKC be developed in the formal IVET and CVET system?
- Are there any of these TKC you consider more relevant than others?
- Or are there any of these TKC that you think is missing?
- Do you think the TKC (each TKC, Personal, Social and learning competence, Civic competence, Entrepreneurship competence, Cultural awareness and expression) are sufficiently *developed* in the current national formal IVET and CVET system?

- Do you think the TKC assessed to a sufficient degree in the formal IVET and CVET system?
- Do you think the current way to assess TKC is a good approach to spur the development of these competences?
- Do National Qualification Framework level descriptions provide sufficient guidance to formulate learning outcomes regarding TKC and to formulate assessment criteria?

## Generic probing questions (if necessary):

- Does anyone else consider this in the same/a different way?
- which additional measures should be implemented?

#### **Ending questions:**

- What advice would you give to the people designing VET-policies?
- What advice would you give people designing VET curricula?
- What advice would you give people teaching and assessing TKC?

## Guiding close script:

(Perhaps recap/clarify how you have understood the discussions)

Thank you very much for your time. Is there anything you would like to add? If you want more information on the EU-project, there is a website (<u>track-vet.eu</u>) which will be continuously updated (and/or offer to send key documents).

## 2.6 Model solutions - basic assumptions

2.6.1 How do we understand the term "model" within the TRACK-VET project?

The term model has many different uses and meanings. According to the Collins dictionary "a model of a system or process is a theoretical description that can help you understand how the system or process works, or how it might work" (Collins Dictionary, nd).

As Turner et al. (2001) state: "Models can be formulated in many different ways. Physical models are material replicas of the object or system under study, but at a reduced size (...). In contrast, abstract models use symbols rather than physical devices to represent the system being studied. For example, verbal models are constructed out of words, graphical models are pictorial representations, and mathematical models use symbolic notation to define relationships describing the system of interest".

A working definition of a model applied in this document refers to a conceptual model. We define a model as "a representation of the most crucial aspects of a system of interest for extracting usable information", after Hamarat, Kwakkel, Pruyt (2013). Conceptual or qualitative models are typically drawn as diagrams with boxes and arrows that show the main elements and flows of material, information, and causation that define a system. Heemskerk, Wilson, Pavao-Zuckerman (2003).

Within the TRACK-VET project we took an approach that developing models will be an efficient way in supporting all relevant parties involved in designing policies on development and assessment key competences. This approach is in line with and public policy theorists and practitioners working not only in the education field.

As indicated, among others, by Heemskerk, Wilson, Pavao-Zuckerman (2003), Exworthy (2008), Raffee (2009), conceptual models can be useful in policy design. Using models fosters understanding of a system that is being studied Mayer (1989), Greca, & Moreira, (2010) but also support policy learning. As indicated by Exworthy (2008) "exporting policies within or between countries is often discounted on the basis that the 'context' is different and hence lessons from host countries cannot be learnt. However, a focus on conceptual models can obviate some of these problems by focusing on the key elements of the system that is being studied. By applying concepts related to the functioning of the system, it is thus possible to discern similarities and differences in patterns and practices across context". Raffee (2009) indicates the importance of developing models in designing public policy making: "a conceptual model can encourage greater national self-awareness among policy analysts and policy-makers by helping them to see their own system in comparative context; it can 'make the familiar strange' (Broadfoot 2000, p. 357) by drawing attention to features of one's own system that would otherwise be taken for granted."

#### 2.6.2 How do we plan to develop models of solutions?

We intend to develop TRACK-VET models of solutions based on an 'abductive' approach. This implies a middle position between theoretically driven deduction on the one hand, and inductively empirically grounded reasoning on the other hand. Thus, the generating of models is based on analysis of the six country reports and discussions within the TRACK-VET partnership but also based on the literature review and reasoning to abstract from the experience of six countries to develop general models.

We envisage that we will develop a few models of solutions regarding different aspects of the development and assessment of transversal key competences such as:

- 'types' of transversal key competences which might be introduced in the formal I-VET and C-VET qualifications
- location of transversal key competences in the VET qualifications

- level of specificity of description of learning outcomes regarding transversal key competences
- systemic solutions regarding assessment and validation of transversal key competences
- methodologies, techniques, tools used to assess and validate different types of transversal key competences
- cost intensity how cost intensive are different systemic solutions envisaged by the model
- requirements for successful implementation.

One of the examples of models found in the literature relates to the types of assessment relation to curriculum (see Gordon et al. 2009). Gordon et al. 2009 distinguishes four types assessment relations to curriculum:

- Type1: Assessing cross-curricular competences explicitly;
- Type 2: Assessing cross-curricular competences implicitly;
- Type 3: Assessing subject-specific competences;
- Type 4: Assessing knowledge rather than competences

As indicated in the TRACK-VET project application models of solutions of developing and assessing TKC will be complemented by three types of recommendations:

- 1) Recommendations for agencies responsible for developing and assessing TKC in the formal VET. These recommendations will provide guidelines and practical advises how to design efficiently the process of implementation of TKC, how to structure VET qualifications and shape the process of assessment and validation
- 2) Recommendations for national authorities and agencies: how national authorities may enhance the process of developing TKC in VET (ministerial decrees, legislation, guidelines, regulations), what instruments they might use (qualification frameworks level descriptors, standards for quality assurance)
- 3) Recommendations for EU policy makers: how EU policy makers might support the process of introduction TKC in the formal IVET/CVET, what policy instruments might be used and how. IO8 will also include description of the proposal of fields for further research regarding developing and assessing key competences in HE

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## Annex 1. Definition of transversal key competences

 quotations from the RECOMMENDATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 18 December 2006 on key competences for lifelong learning

#### 5. Learning to learn

Definition: 'Learning to learn' is the ability to pursue and persist in learning, to organise one's own learning, including through effective management of time and information, both individually and in groups. This competence includes awareness of one's learning process and needs, identifying available opportunities, and the ability to overcome obstacles in order to learn successfully. This competence means gaining, processing and assimilating new knowledge and skills as well as seeking and making use of guidance. Learning to learn engages learners to build on prior learning and life experiences in order to use and apply knowledge and skills in a variety of contexts: at home, at work, in education and training. Motivation and confidence are crucial to an individual's competence.

Essential knowledge, skills and attitudes related to this competence:

Where learning is directed towards particular work or career goals, an individual should have knowledge of the competences, knowledge, skills and qualifications required. In all cases, learning to learn requires an individual to know and understand his/her preferred learning strategies, the strengths and weaknesses of his/her skills and qualifications, and to be able to search for the education and training opportunities and guidance and/or support available.

Learning to learn skills require firstly the acquisition of the fundamental basic skills such as literacy, numeracy and ICT skills that are necessary for further learning. Building on these skills, an individual should be able to access, gain, process and assimilate new knowledge and skills. This requires effective management of one's learning, career and work patterns, and, in particular, the ability to persevere with learning, to concentrate for extended periods and to reflect critically on the purposes and aims of learning. Individuals should be able to dedicate time to learning autonomously and with self-discipline, but also to work collaboratively as part of the learning process, draw the benefits from a heterogeneous group, and to share what they have learnt. Individuals should be able to organise their own learning, evaluate their own work, and to seek advice, information and support when appropriate.

A positive attitude includes the motivation and confidence to pursue and succeed at learning throughout one's life. A problem-solving attitude supports both the learning process itself and an individual's ability to handle obstacles and change. The desire to apply prior learning and life experiences and the curiosity to look for opportunities to learn and apply learning in a variety of life contexts are essential elements of a positive attitude.

#### 6. Social and civic competences

Definition: These include personal, interpersonal and intercultural competence and cover all forms of behaviour that equip individuals to participate in an effective and constructive way in social and working life, and particularly in increasingly diverse societies, and to resolve conflict where necessary. Civic competence equips individuals to fully participate in civic life, based on knowledge of social and political concepts and structures and a commitment to active and democratic participation.

Essential knowledge, skills and attitudes related to this competence:

A. Social competence is linked to personal and social well-being which requires an understanding of how individuals can ensure optimum physical and mental health, including as a resource for oneself and one's family and one's immediate social environment, and knowledge of how a healthy lifestyle can contribute to this. For successful interpersonal and social participation, it is essential to understand the codes of conduct and manners generally accepted in different societies and environments (e.g. at work). It is equally important to be aware of basic concepts relating to individuals, groups, work organisations, gender equality and non-discrimination, society and culture. Understanding the multi-cultural and socio-economic dimensions of European societies and how national cultural identity interacts with the European identity is essential.

The core skills of this competence include the ability to communicate constructively in different environments, to show tolerance, express and understand different viewpoints, to negotiate with the ability to create confidence, and to feel empathy. Individuals should be capable of coping with stress and frustration and expressing them in a constructive way and should also distinguish between the personal and professional spheres.

The competence is based on an attitude of collaboration, assertiveness and integrity. Individuals should have an interest in socio-economic developments and intercultural communication and should value diversity and respect others, and be prepared both to overcome prejudices and to compromise.

B. Civic competence is based on knowledge of the concepts of democracy, justice, equality, citizenship, and civil rights, including how they are expressed in the Charter of

Fundamental Rights of the European Union and international declarations and how they are applied by various institutions at the local, regional, national, European and international levels. It includes knowledge of contemporary events, as well as the main events and trends in national, European and world history. In addition, an awareness of the aims, values and policies of social and political movements should be developed. Knowledge of European integration and of the EU's structures, main objectives and values is also essential, as well as an awareness of diversity and cultural identities in Europe.

Skills for civic competence relate to the ability to engage effectively with others in the public domain, and to display solidarity and interest in solving problems affecting the local and wider community. This involves critical and creative reflection and constructive participation in community or neighbourhood activities as well as decision-making at all levels, from local to national and European level, in particular through voting.

Full respect for human rights including equality as a basis for democracy, appreciation and understanding of differences between value systems of different religious or ethnic groups lay the foundations for a positive attitude. This means displaying both a sense of belonging to one's locality, country, the EU and Europe in general and to the world, and a willingness to participate in democratic decision-making at all levels. It also includes demonstrating a sense of responsibility, as well as showing understanding of and respect for the shared values that are necessary to ensure community cohesion, such as respect for democratic principles. Constructive participation also involves civic activities, support for social diversity and cohesion and sustainable development, and a readiness to respect the values and privacy of others.

#### 7. Sense of initiative and entrepreneurship

Definition: Sense of initiative and entrepreneurship refers to an individual's ability to turn ideas into action. It includes creativity, innovation and risk-taking, as well as the ability to plan and manage projects in order to achieve objectives. This supports individuals, not only in their everyday lives at home and in society, but also in the workplace in being aware of the context of their work and being able to seize opportunities, and is a foundation for more specific skills and knowledge needed by those establishing or contributing to social or commercial activity. This should include awareness of ethical values and promote good governance.

Essential knowledge, skills and attitudes related to this competence:

Necessary knowledge includes the ability to identify available opportunities for personal, professional and/or business activities, including 'bigger picture' issues that provide the context in which people live and work, such as a broad understanding of the workings of the economy, and the opportunities and challenges facing an employer or organisation.

Individuals should also be aware of the ethical position of enterprises, and how they can be a force for good, for example through fair trade or through social enterprise.

Skills relate to proactive project management (involving, for example the ability to plan, organise, manage, lead and delegate, analyse, communicate, de-brief, evaluate and record), effective representation and negotiation, and the ability to work both as an individual and collaboratively in teams. The ability to judge and identify one's strengths and weaknesses, and to assess and take risks as and when warranted, is essential.

An entrepreneurial attitude is characterised by initiative, pro-activity, independence and innovation in personal and social life, as much as at work. It also includes motivation and determination to meet objectives, whether personal goals, or aims held in common with others, including at work.

#### 8. Cultural awareness and expression

Definition: Appreciation of the importance of the creative expression of ideas, experiences and emotions in a range of media, including music, performing arts, literature, and the visual arts.

Essential knowledge, skills and attitudes related to this competence:

Cultural knowledge includes an awareness of local, national and European cultural heritage and their place in the world. It covers a basic knowledge of major cultural works, including popular contemporary culture. It is essential to understand the cultural and linguistic diversity in Europe and other regions of the world, the need to preserve it and the importance of aesthetic factors in daily life.

Skills relate to both appreciation and expression: the appreciation and enjoyment of works of art and performances as well as self-expression through a variety of media using one's innate capacities. Skills include also the ability to relate one's own creative and expressive points of view to the opinions of others and to identify and realise social and economic opportunities in cultural activity. Cultural expression is essential to the development of creative skills, which can be transferred to a variety of professional contexts.

A solid understanding of one's own culture and a sense of identity can be the basis for an open attitude towards and respect for diversity of cultural expression. A positive attitude also covers creativity, and the willingness to cultivate aesthetic capacity through artistic self-expression and participation in cultural life.

Annex 2. Definition of transversal key competences –quotations from the Proposal for a Council Recommendation on Key Competences for Lifelong Learning, published on 17.01.2018

#### 5. Personal, social and learning competence

Personal, social and learning competence is the ability to reflect upon oneself, effectively manage time and information, work with others in a constructive way, remain resilient and manage one's own learning and career. It includes the ability to cope with uncertainty and complexity, learn to learn, support one's physical and emotional well-being, empathize and manage conflict.

Essential knowledge, skills and attitudes related to this competence

For successful interpersonal relations and social participation it is essential to understand the codes of conduct and rules of communication generally accepted in different societies and environments. Personal, social and learning competence requires also knowledge of the components of a healthy mind, body and lifestyle. It involves knowing one's preferred learning strategies, knowing one's competence development needs and various ways to develop competences and search for the education, training and career opportunities and guidance or support available.

Skills include the ability to identify one's capacities, focus, deal with complexity, critically reflect and make decisions. This includes the ability to learn and work both collaboratively and autonomously and to organise and persevere with one's learning, evaluate and share it, seek support when appropriate and effectively manage one's career and social interactions. Individuals should be resilient and able to cope with uncertainty and stress. They should be able to communicate constructively in different environments, collaborate in teams and negotiate. This includes showing tolerance, expressing and understanding different viewpoints, as well as the ability to create confidence and feel empathy.

The competence is based on a positive attitude toward one's personal, social and physical well-being and learning throughout one's life. It is based on an attitude of collaboration, assertiveness and integrity. This includes respecting others and being prepared both to overcome prejudices and to compromise. Individuals should be able to identify and set goals, motivate themselves, and develop resilience and confidence to pursue and succeed at learning throughout their lives. A problem-solving attitude supports both the learning process and the individual's ability to handle obstacles and change. It includes

the desire to apply prior learning and life experiences and the curiosity to look for opportunities to learn and develop in a variety of life contexts.

#### 6. Civic competence

Civic competence is the ability to act as responsible citizens and to fully participate in civic and social life, based on understanding of social, economic and political concepts and structures, as well as global developments and sustainability.

Essential knowledge, skills and attitudes related to this competence

Civic competence is based on knowledge of basic concepts relating to individuals, groups, work organisations, society, economy and culture. This involves an understanding of the European common values, as expressed in Article 2 of the Treaty on the European Union and the Charter of Fundamental Rights of the European Union. It includes knowledge of contemporary events, as well as a critical understanding of the main developments in national, European and world history. In addition, it includes an awareness of the aims, values and policies of social and political movements, as well as of sustainable systems, in particular climate and demographic change at the global level and their underlying causes. Knowledge of European integration as well as an awareness of diversity and cultural identities in Europe and the world is essential.

This includes an understanding of the multi-cultural and socio-economic dimensions of European societies, and how national cultural identity contributes to the European identity.

Skills for civic competence relate to the ability to engage effectively with others in common or public interest, including the sustainable development of society. This involves critical thinking skills and constructive participation in community activities, as well as in decision-making at all levels, from local and national to the European and international level. This also involves the ability to access, have a critical understanding of, and interact with both traditional and new forms of media.

Respect for human rights as a basis for democracy lays the foundations for a responsible and constructive attitude. Constructive participation involves willingness to participate in democratic decision-making at all levels and civic activities. It includes support for social and cultural diversity, gender equality and social cohesion, a readiness to respect the privacy of others, and to take responsibility for the environment. Interest in political and socio-economic developments and intercultural communication is needed to be prepared both to overcome prejudices and to compromise where necessary and to ensure social justice and fairness.

### 7. Entrepreneurship competence

Entrepreneurship competence refers to the capacity to act upon opportunities and ideas, and to transform them into values for others. It is founded upon creativity, critical thinking and problem solving, taking initiative and perseverance and the ability to work collaboratively in order to plan and manage projects that are of cultural, social or commercial value.

Essential knowledge, skills and attitudes related to this competence

Entrepreneurship competence requires knowing that there are different contexts and opportunities for turning ideas into action in personal, social and professional activities, and an understanding of how these arise. Individuals should know and understand approaches to planning and management of projects, which include both processes and resources. They should have an understanding of economics and the social and economic opportunities and challenges facing an employer, organisation or society. They should also be aware of ethical principles, and have self-awareness of their own strengths and weaknesses.

Entrepreneurial skills are founded on creativity which includes imagination, strategic thinking and problem-solving, and critical and constructive reflection within evolving creative processes and innovation. They include the ability to work both as an individual and collaboratively in teams, to mobilize resources (people and things) and to sustain activity. This includes the ability to make financial decisions relating to cost and value. The ability to effectively communicate and negotiate with others, and to cope with uncertainty, ambiguity and risk as part of making informed decisions is essential.

An entrepreneurial attitude is characterised by a sense of initiative and agency, proactivity, being forward-looking, courage and perseverance in achieving objectives. It includes a desire to motivate others and value their ideas, empathy and taking care of people and the world, and accepting responsibility taking ethical approaches throughout the process.

#### 8. Cultural awareness and expression competence

Competence in cultural awareness and expression involves having an understanding of and respect for how ideas and meaning are creatively expressed and communicated in different cultures and through a range of arts and other cultural forms. It involves being engaged in understanding, developing and expressing one's own ideas and sense of place or role in society in a variety of ways and contexts.

Essential knowledge, skills and attitudes related to this competence

This competence requires knowledge of local, national, European and global cultures and expressions, including their languages, heritage and traditions, and cultural products, and an understanding of how these expressions can influence each other as well as the ideas of the individual. It includes understanding the different ways of communicating ideas between creator, participant and audience within written, printed and digital texts, theatre, film, dance, games, art and design, music, rituals, and architecture, as well as hybrid forms. It requires an understanding of one's own developing identity within a world of cultural diversity and how arts and other cultural forms can be a way to both view and shape the world.

Skills include the ability to express and interpret figurative and abstract ideas, experiences and emotions with empathy, and the ability to do so in a range of arts and other cultural forms. Skills also include the ability to identify and realise opportunities for personal, social or commercial value through the arts and other cultural forms and the ability to engage in creative processes, both as an individual and collectively.

It is important to have an open attitude towards, and respect for, diversity of cultural expression together with an ethical and responsible approach to intellectual and cultural ownership. A positive attitude also includes a curiosity about the world, an openness to imagine new possibilities, and a willingness to participate in cultural experiences.

# Annex 3. Descriptive categories for transversal key competences with commentary and examples

DESCRIPTIVE CATEGORIES	COMMENTARY / EXAMPLES	TRANSVERSAL KEY COMPETENCES
Methods and	The category 'Methods and strategies of learning' is linked with domains of	
strategies of	knowledge and skills, it refers to specific 'tools' (i.e. strategies and methods) for	
learning	enhancing one's learning. It could be observed as for example:	
	- the ability to set learning objectives and plan learning,	
	- the ability organize and manage learning activities,	
	- the ability choose learning paths, sources, guidance.	
Motivation and	Motivation and autonomy of learning is closely linked to the domain of attitudes	
autonomy of	and values. It could be observed as for example:	
learning	- pursuing and persisting in learning (autonomy and self-discipline);	
	- presenting a positive attitude towards learning and willingness to learn;	
	- awareness (identification) of one's learning process and needs;	PERSONAL, SOCIAL
	- reflecting on one's learning activities and outcomes, self-assessment;	COMPETENCES AND
Maintaining well-	Maintaining well-being can be observed as for example:	LEARNING
being	- understanding of the components of a healthy mind, body and lifestyle, with	COMPETENCE
	awareness of the environment and oneself;	
	- coping with stress and uncertainty;	
	- distinguishing between personal and professional spheres;	
	- presenting assertiveness and integrity (with respect to others).	
Social and	Social and interpersonal relations could be observed as for example:	
interpersonal	- Understanding codes of conduct and manners accepted in different societies and	
relations	environments;	
	- awareness of basic concepts relating to individuals, groups, work organization,	
	gender equality and non-discrimination, society and culture, national and European identities;	

DESCRIPTIVE CATEGORIES	COMMENTARY / EXAMPLES	TRANSVERSAL KEY COMPETENCES
	<ul> <li>communicating in different environments, express and understand different viewpoints;</li> <li>valuing diversity and showing tolerance;</li> <li>respecting others and being prepared both to overcome prejudices and to compromise;</li> </ul>	
Understanding of society	Understanding society is linked to knowledge domain. It could be observed as for example:  - understanding of basic concepts relating to individuals, groups, work organisations, society, economy and culture, including European common values; - knowledge of contemporary events and understanding of the main developments in national, European and world history (including European integration, awareness of diversity and cultural identities in Europe and the world); - awareness of the aims, values and policies of social and political movements, as well as of sustainable systems, in particular climate and demographic change at the global level and their underlying causes.	
Participation in public affairs	Participation in public affairs is linked to skills domain. It could be observed as for example:  - the ability to engage effectively with others in the public domain  - to display solidarity and interest in solving problems affecting the local and wider community.  - critical and creative reflection and constructive participation in community or neighbourhood activities, as well as decision-making at all levels, from local to national and European level, in particular through voting  - critical understanding of and ability to interact with both traditional and new forms of media.	CIVIC COMPETENCES
Values and identity	Values and identity for civic competences is closely linked to the domain of attitudes and values. It could be observed as for example: - respect for human rights and democracy;	

DESCRIPTIVE CATEGORIES	COMMENTARY / EXAMPLES	TRANSVERSAL KEY COMPETENCES
	- responsible and constructive attitude to society and civic participation	
	willingness to participate in civic activities and democratic decision-making at all levels, as well as supporting social and cultural diversity, gender equality and	
	social cohesion,	
	- readiness to respect the privacy of others	
	- responsibility for the environment.	
Taking action and	Taking action and making decisions could be observed as for example:	
making decisions	- understanding the contexts and identifying opportunities for turning ideas into	
	actions, including ethical aspect;	
	- the ability to act upon opportunities and ideas and to transform them into values	
	for others;	
	- mobilising resources and preparing budgets;	
	- the ability to take risks;	
	- the ability to make financial decisions relating to cost and value.	
Realization of	Realization of initiatives could be observed as for example:	ENTREPRENEURSHIP
initiatives	- understanding and using different approaches to planning and management of projects;	COMPETENCE
	- working individually and collaboratively;	
	- mobilizing resources (people and things);	
	- the ability to plan, organise, manage, lead and delegate, analyse, communicate, de-brief, evaluate and record;	
	- sustain own involvement and activities of others;	
	- presenting the attitude of innovativeness, pro-activity, courage, agency and	
	forward-looking.	
Understanding and	Understanding and appreciation of culture is linked to knowledge domain. It could	CULTURAL
appreciation of	be observed as for example:	AWARENESS AND
culture	- understanding of local, national, European and global cultures and expressions,	EXPRESSION
	including their languages, heritage and traditions, and cultural products, and an	COMPETENCE

DESCRIPTIVE CATEGORIES	COMMENTARY / EXAMPLES	TRANSVERSAL KEY COMPETENCES
	understanding of how these expressions can influence each other as well as the ideas of the individual.  - understanding the different ways of communicating ideas between creator, participant and audience within written, printed and digital texts, theatre, film, dance, games, art and design, music, rituals, and architecture, as well as hybrid forms.	
	- understanding of one's own developing identity within a world of cultural diversity and how arts and other cultural forms can be a way to both view and shape the world.	
Cultural expression	Cultural expression is closely linked to the domains of skills, attitudes and values. It could be observed as for example:  - the ability to express and interpret figurative and abstract ideas, experiences and emotions with empathy, and the ability to do so in a range of arts and other cultural forms.  - the ability to identify and realise opportunities for personal, social or commercial value through the arts and other cultural forms and the ability to engage in creative processes, both as an individual and collectively.  - creativity, and the willingness to cultivate aesthetic capacity through artistic self-expression and participation in cultural life;  - open attitude towards, and respect for, diversity of cultural expression together with an ethical and responsible approach to intellectual and cultural ownership.	
Critical thinking	Critical thinking can be observed as for example:  - the ability to analyse, evaluate and make judgments about materials of any kind (e.g. texts, arguments, interpretations, issues, events, experiences, etc.) in a systematic and logical manner;  - the ability to identify good and bad reasoning in a variety of fields with differing assumptions, contents and methods;  - the ability to identify the intended and actual inferential relationships among statements, questions, concepts, descriptions or other forms of representation;	DESCRIPTIVE CATEGORIES RELATED TO MORE THAN ONE TRANSVERSAL KEY COMPETENCE

DESCRIPTIVE CATEGORIES	COMMENTARY / EXAMPLES	TRANSVERSAL KEY COMPETENCES
	- the	
Problem solving	Problem solving is (goal directed) thinking and action in situations for which no routine solution procedure is available. The incongruence of goals and admissible operators constitutes a problem. The understanding of the problem situation and its step-by-step transformation, based on planning and reasoning, constitute the process of problem solving.  Problem solving can be observed as for example:  - identification of the problem;  - identification and evaluation of possible causes for a problem;  - formulating meaningful and relevant questions to understand problems and potential causes;  - breaking down complex problems into smaller parts;  - evaluating potential solutions, which can include analysis of costs, benefits, risks, and chances for success;  - using logical, systematic approaches to analyse and solve problems.	
Media literacy	Media literacy can be observed as for example:  - exchange of news and current affairs and evaluating the quality (accuracy, relevance, currency, reliability, and completeness) of information,  - distinguishing facts from opinion,  - assessing the timing of media content (new/obsolete).  - understanding of underlining ideologies and values, and of how social, economic, political, professional, and technological forces can shape media content - both what is produced and how it reaches us;  - media production – the creating of written, drawn, audio- or video-recorded and other content;  - sharing and/or creating media content an ethical and responsible manner and with respect for the intellectual property of others.	

DESCRIPTIVE CATEGORIES	COMMENTARY / EXAMPLES	TRANSVERSAL KEY COMPETENCES
Creativity and	Creativity and innovation can be observed as for example:	
innovation	<ul> <li>- creating something new, and reflecting upon and modifying what is being created;</li> <li>- striving towards a goal in a new way;</li> <li>- reflecting upon the impact that the new artefact or approach;</li> </ul>	

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