

CONCEPTUALISATION OF UNIVERSITY STUDENTS' CIVIC TRANSVERSAL COMPETENCE

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ABSTRACT

Education plays a key role in promoting fundamental values, citizens' rights and responsibilities as well as social inclusion, in particularly so by reducing hostility towards vulnerable social groups. Therefore, all stages of education, including higher education, are important in the development of civic transversal competence. To ensure sustainable, qualitative, modern, and competitive higher education, the education facilitating the productive involvement of students in civil society and, consequently, their competitiveness in the labour market is a topical issue in the context of Latvia too. In keeping with this rationale, in January 2020, the University of Latvia started the implementation of the first round of the research "Assessment of Competences of Higher Education Students and Dynamics of Their Development in the Study Period" with the study of students' civic transversal competence as its part. The paper aims to conceptualize students' civic transversal competence, to determine its criteria and their indicators at different levels of higher education. Using the qualitative data processing program NVivo 12.0, there was carried out an analysis of 20 recent studies and higher education documents (2014-2020), as well as examples of good practice. The result is a descriptive matrix for civic transversal competence assessment, which can be used as a basis for the development of assessment tools.

Keywords: *civic transversal competence, conceptualisation, higher education, pedagogical process in higher education, students, qualitative data analysis.*

Introduction

Citizenship and related issues have remained relevant in discussions in various disciplines for the past fifteen years. The focus of the discussion is both on issues of involvement at different levels of public processes, which in turn promotes democracy and economic growth, and on issues of content and implementation of civic education at different levels of education. In the context of education, the focus of the discussion involves examining the nature and scope of civic transversal competences (CTC) at different

levels. This focus in the field of education is supported by the argument that civic education includes the potential to promote CTC. Muleya (2019) emphasizes that civic education is considered to be an important part of the development of CTC both in the context of this and future generations. These discussions have raised many questions about the content and form of civic education. However, in all the concepts of the discussion, the learning results are formulated in the form of a CTC as part of professional autonomy. Civic education in the current situation is seen as a potential solution to many societal challenges (Mouritsen & Jaeger, 2018). It should therefore be emphasized that the education system as a whole is recognized as one of the driving forces of civil society and the developer of CTC. The European Commission Education and Training Monitor (ECETM, 2018) identifies education as an essential resource for the internalisation of fundamental civic values, the acquisition of citizens' rights and responsibilities, and the promotion of social inclusion, with a particular focus on reducing hostility towards vulnerable groups. This issue is important at all levels of education, including higher education. Because higher education is a stage of education that simultaneously implements training of highly qualified specialists in the necessary sectors of the labour market, development and renewal of research human capital, knowledge base, which is a basic condition for creating new knowledge, technologies and innovations and creating a sustainable economic system. Thus, the goal of sustainable education is a person who lives not only in harmony with nature and other cultures, but also knows how to fully realize himself in society and the economy, ensuring the long-term and prudent use of resources. Such a person understands local problems, as well as is able to see them in a global context, understands and respects other cultures, as well as maintains healthy relationships at all levels of society, promotes economic development, thus promoting social sustainability (Medne & Jansone-Ratinika, 2019).

This is a topical subject of discussion in the Latvian context as well, as its position is still partly maintained by the context of the post-Soviet educational space, where misunderstanding of critical thinking, democratic consciousness and partial or misunderstanding of active citizenship is still identifiable (Rubene et al., 2019; Rubene & Svece, 2019). Therefore, in order to provide the population of Latvia with modern, high-quality and competitive higher education that promotes professional development of everyone, healthy progress of development content, research and innovation capacity, as well as competitiveness in the labour market resulting in professional autonomy, review of content and form is necessary. According to this justification, the Ministry of Education and Science (MES) and the University of Latvia (UL) signed a cooperation agreement on ESF project. The aim of the research is to study the transversal competences of students – innovation,

research, digital, entrepreneurship, global and CTC, in order to identify the dynamics of their development in certain fields of study: RIS 3 (Research and Innovation strategy for smart specialization) areas. Thus, one of the research dimensions of the project includes the theoretical framework of the content of CTC and the determination of its indicators in the behavioural manifestations at different levels of higher education. The analysed situation characterizes the research problem, according to which the aim of the research is determined: to conceptualize CTC.

Substantiation of the content of civic transversal competence, challenges for its conceptualization in the discourse of higher education

CTC is identified as a necessary component for the existence of a democratic society at European, national and local community level. However, research emphasizes the lack of a harmonized definition, which is also recognized as a common problem (Muleya, 2017). There are also a number of problems associated with measuring CTC: both in defining common criteria and indicators for this competence and in identifying the degree of involvement (Torney-Purta et al., 2015). Defining criteria and indicators for CTC at the behavioural level, as well as identifying the dynamics of behavioural criteria and indicators at three levels of education (bachelor's, master's, and doctoral), can increase understanding of the role of the education system in developing CTC and formulate recommendations for democratic processes. In all identified and analysed literature units, it is emphasized that CTC at the behavioural level includes indicators of knowledge, skills, attitudes, as well as aspects of promoting civic action experience. In order to formulate the definition of CTC, identify criteria and indicators, as well as determine the description of indicators at the behavioural level at the bachelor's, master's and doctoral education levels, the conceptual content of criteria and indicators was initially analysed.

Knowledge is identified as the first content component of CTC. There is an active discussion in publications about a typical problem: on the one hand, focusing on factual knowledge of democratic institutions, processes, and issues of national history, on the other hand, understanding such knowledge is challenged by the growing consensus that CTC includes knowledge and understanding of ambiguous issues, intergroup relations, local processes, and community affairs (Carretero et al., 2015). There is a growing consensus that promoting an active and responsible civil society requires different levels of knowledge, as an active civil society also needs an understanding of concepts and principles, practices (experiences) for responsible action, a willingness to engage and a commitment to democratic values (Haste et al., 2017).

In parallel with the concept of knowledge, it is determined that effective civic participation requires a variety of skills. Civic skills are divided into intellectual skills, participatory skills and socio-emotional skills (Fine et al., 2007). Conceptual understanding of knowledge includes the idea: *to know what*, while the understanding of civic knowledge skills is procedural – *to know as*. Cognitive skills allow to analyse and synthesize information and arguments, as well as to evaluate, conclude, take and defend a position in solving issues of public importance (Kirlin, 2003). The concept of knowledge in terms of skills involves considering different perspectives, interpreting political communication and formulating a supportive position that is based on evidence. Participatory skills, in turn, include the ability to cooperate, form coalitions, seek consensus, negotiate, and manage conflicts. Communication skills are also included in this group: public speaking, petitioning, culture of protest, organization (mobilization, provision of funding, meetings) and joint decision-making, both in terms of matching perspectives and evaluating alternatives. Respectively, skills in the content of CTC are what a citizen can do to participate effectively and include:

- a) critical thinking skills: gathering and evaluating information, clarifying and prioritizing, identifying and evaluating consequences, reflecting,
- b) participatory skills: to communicate, to negotiate, to cooperate, to manage conflicts, to seek conformism.

The third criterion includes those aspects of values, motives, and identity that underpin effective engagement in democratic practice (Youniss & Levine, 2009). Values are important motives for civic action, as they make citizenship a personal issue, giving meaning to civic action. As certain issues are often considered morally and ethically charged, they are internalized directly in the learning process, thus promoting a sense of personal responsibility. Analysing the identified literature, it can be concluded that attitudes in the content of CTC include:

- 1) personal dimension: moral responsibility, self-discipline, respect for diversity of opinion (empathy),
- 2) public dimension: observance of laws, desire to engage in public affairs, the balance between self-interest and common prosperity,
- 3) a culture of protest.

Also, civic attitudes include: courtesy, respect for the rights of others, respect for the law, honesty and open-mindedness, critical thinking, the search for compromise, perseverance, compassion, patriotism, courage, tolerance for uncertainty (Bennett & Soule, 2005).

Civic action experience is the fourth component of CTC content. Its interpretation in the content of CTC includes an idea that substantiates and

allows to realize the understanding of CTC knowledge, skills, and attitudes. For a long time before becoming formal citizens, children and young people interact in different civic settings. It is important to implement age-appropriate and meaningful civic learning opportunities in these environments. This form of civic engagement involves purposeful cooperation in solving problems related to issues of common interest. Social activity is characterized by social responsibility and commitment to cooperate with others, understanding the problems, as well as openness in the development and implementation of solutions. Such a simulation of the experience of civic action promotes social activism, reciprocity and a strong sense of belonging (at local, national and European Union (EU)) level.

Research Methodology and process

The conceptualization of CTC has been implemented in three steps:

- Step 1. Formulation of the definition of CTC.
- Step 2. Identification of criteria and indicators of CTC.
- Step 3. Development of a matrix of criteria and indicators of levels of CTC at different levels of higher education.

Within this publication, a detailed focus will be placed on the third conceptualization step, briefly describing the first and second conceptualization steps.

In order to implement the three steps of conceptualization of CTC, an analysis of the latest research and educational documents was performed. In total, 20 studies and policy documents from 2014-2020 met the inclusion criteria. Various types of research were included – empirical research, reviews of systemic literature, articles in scientific journals, policy documents and technical reports, in which CTC was identified as the subject of research. Boolean search operators were used to select literature items: “Citizenship competence” “civic competence” “higher education” “civic education” “global civic education”. Criteria for inclusion: (a) published between 1 January 2014 and 31 January 2020, (b) the analysis of the content and form of CTC relates to the higher education area. Exclusion criterion: no access to the full text.

For the conceptualization of CTC, the design of a concept mapping review was chosen, the aim of which is to structure the literature items included in the study, allowing to create a classification scheme and structure the field of interest, to identify the coverage of criteria in the field.

The results of the research reviews were analysed using qualitative and quantitative context analysis in the qualitative data processing program QSR NVivo 12. The linguistic processing and analysis of the literature items included in the analysis was implemented in the following order:

- 1) importing the text of the definitions identified in the content of the publications into the NVivo file;
- 2) quantitative and qualitative context analysis (identification of the most frequently used words, contexts of their use);
- 3) imports of the full text of publications into the NVivo file;
- 4) quantitative and qualitative context analysis (identification of the most frequently used words, contexts of their use);
- 5) open and hierarchical coding in the NVivo file (to identify criteria and indicators);
- 6) open coding in the NVivo file (identifying behavioural indicators at different levels of education).

Results

Defining civic transversal competence

Defining CTC was identified as the first step in conceptualization. To define CTC, definitions were identified in all publications included in the study, then all definition text items were imported into the qualitative data processing program QSR NVivo 12. The most frequently used words in the definitions are identified by numerical values: the frequency of each code (the number of times it is mentioned in the text) and the weighted percentage of the word, which indicates the frequency of the code in relation to the total amount of text. In order to define CTC, the program carried out the next step, which identified the distribution and succession of the most frequently used words, showing the sequence of words in the thematic blocks, the sequence of which is shown in the program according to their subordination. Analysing the obtained data, it can be concluded that the words included in the definitions form four levels of mutual subordination, where the arrangement of words indicates their connection, subordination, and succession. Analysing the distribution of the most common interrelationships of words, it can be concluded that the distribution of interrelationships of words included in the definitions shows that they complement each other by marking succession in the definition and clarifying the understanding and implementation steps of CTC. The division of word interrelationships allows the identification of four levels of interrelationship and succession in the wording of the common definition.

The first level of the definition is general, it consists of the concept of the object to be defined (*lat. definiendum*). It includes *knowledge*, *skills*, and *values* (values are the basis of attitudes), namely the three components of any competence.

The second level – modes, which is denoted by adjectives: *effective*, *active*, *meaningful*, and *responsible*, they describe the quality of content

implementation; as well as the type of involvement: *for participation* and the social direction of involvement: *in civic and social life*. The third level includes the objective: *contributes to the healthy social and political well-being and sustainability of communities, democratic communication and economic growth*. The fourth level defines the territorial boundaries: *at the community, national, European Union and global level*.

The analysis of the most commonly used words in the definitions of publications and their interrelationships resulted in the definition of CTC: CTC is a set of values, knowledge and skills for effective, active, meaningful and responsible participation in civic and social life, sustainability, democratic communication and economic growth at Community, national, European Union and global levels. It can be concluded that the formulated definition corresponds to the understanding of the classical definition, i. e., it includes an indication of belonging to a certain class of objects and its difference from all other objects of this class.

Identification of criteria and indicators of civic transversal competence

The identification of criteria and indicators of CTC formed the second step of conceptualization. In order to understand the content of CTC in essence, its criteria and indicators were identified by importing full texts of publications into the NVIVO program, which included both theoretical outlines and already identified criteria and indicators. The next step was open coding (identifying topics and contexts by assigning a code to the relevant part of the text of the publication), open codes were identified as indicators of CTC. During open coding, nine codes were identified and defined: Implementation of sustainable goals at different levels (implementation) (18); Involvement at the local level (16); Involvement at the level of the global community (15); Characteristic issues of local and international cooperation (12); Characteristic aspects of civil rights and duties (20); Political system's governance (20); Management of binding regulations (20); Social justice management (20); Capacity for social and political change (20).

At a later stage of coding, they were combined in meaningful broader codes (criteria). Respectively, open coding was followed by hierarchical coding, which was necessary to combine meaningful related codes, which were defined as indicators of CTC. Thus, the relationship between interconnected open and hierarchical codes was obtained. During the coding, three hierarchical codes of CTC criteria were identified. The relationship between open and hierarchical codes, which form the relationship between criteria and their indicators, is shown in Table 1.

Table 1. Criteria for civic transversal competence (hierarchical codes) and indicators (open codes)

Hierarchical code (criterion)	Open code (indicator)
1. Management of civil rights and responsibilities (understanding and implementation in one's social life)	1.1. Characteristic aspects of civil rights and duties
	1.2. Social justice management
2. Knowledge of the principles of a democratic society and their use (realisation) in one's social life	2.1. Management of binding regulations
	2.2. Characteristic issues of local and international cooperation
	2.3. Political system's governance
	2.4. Implementation of sustainable goals at different levels (implementation)
3. Dimension of community life	3.1. Involvement at the local level
	3.2. Involvement at the level of the global community
	3.3. Capacity for social and political change

Development of a matrix of criteria and indicators of levels of civic transversal competence at different levels of higher education

The third conceptualization step was to develop a matrix of descriptions of behavioural indicators to determine how CTC manifests itself at the level of student behaviour and how it dynamically changes at three levels of education (bachelor's, master's and doctoral). In this step of the research, the description matrix is chosen as the method because it demonstrates the hierarchical relationship within the topic.

The matrix of each indicator of CTC consists of two dimensions:

gradation of the cumulative content of the indicator at different levels of education (basic, medium, high) (horizontal),

description of the content of CTC (vertical).

The first criterion of CTC is the management of civil rights and responsibilities (understanding and implementation in one's social life), for which two indicators have been identified. First indicator *Aspects characterizing the commitment of civil rights and obligations*, which content at the bachelor's level (BL) consists of the following behavioural indicators: discusses the possibilities of exercising one's civil rights and obligations in a local and global context (10); demonstrates a tolerant attitude towards the civil rights and obligations of fellow human beings (11); exercises his/her civil rights and obligations (12). Master's level (ML): evaluates the connection between civil rights and obligations in the local and global context (12);

able to develop and model effective strategies for the exercise of civil rights and obligations in a local and global context (12); involvement is deliberate and reasoned (9). Doctoral level (DL) regularly engages in advocacy for civil rights and obligations in the local and global context (9); offers ideas and/or solutions for the implementation of civil rights and responsibilities in a local and global context (10).

Second indicator of the first criterion of CTC: Management of civil rights and obligations (understanding and implementation in one's social life) *Social justice management*, the content of which BL consists of the following behavioural indicators: understands the essence, basic concepts of social justice (13); knows how to argue the essence of his decisions in the context of social justice (11); recognizes social injustice in different social contexts (9); observes the principles of social justice in communication (10); shows empathy in cases of discrimination and/or inequality (8). ML: understands the relationship between social justice and social responsibility (10); how to address ethical dilemmas in a tolerant way (8); uses effective strategies to reduce social injustice in communication (11). DL: knows how to reduce discrimination and/or inequality or promote social justice (10); implements effective strategies to promote/support social justice (12); demonstrates responsibility for maintaining social justice ideas in the social environment (12), initiates social campaigns to promote the idea of justice (9); demonstrates socially acceptable intolerance of discrimination and/or inequality (11).

The second criterion of CTC is the knowledge and use (realisation) of the principles of a democratic society in their social life, for which four indicators have been identified: the first indicator, *The Management of Binding Regulations*, the content of which BL consists of the following behavioural indicators: knows the local, national and EU political and legal framework (10); is able to identify problems in local, national and EU political and legal frameworks (9); researches them and is aware of his/her co-responsibility in solving them (11); communication implements the civic morals and democratic principles specified in the binding regulations (9). ML: identifies important issues in the context of local, national and EU political and legal frameworks (11); participates in discussions on the impact of the principles and ideas included in the founding documents of the Republic of Latvia on the social and political system and problem issues (9). DL: actively expands its knowledge of the local, national and EU political and legal frameworks (12); able to raise a discussion using topical issues included in local, national, EU and global political and legal frameworks (9); participates in reasoned discussions and/or organizes discussions on local, national and EU political and legal frameworks (10).

The second criterion of CTC Knowledge of the principles of a democratic society and their application (realization) in one's social life, the second indicator is *Issues Characterizing Local and International Cooperation*, the content of which BL consists of the following behavioural indicators: knows the principles and conditions of cooperation at the local level (9); identifies the causes of non-cooperation problems; knows the specifics of identities in the context of cooperation (10); identifies controversial social, political and historical issues (13); identifies different perspectives at the local, national and global level (12) ML: generalizes the principles and conditions of cooperation at the local, national and EU and global levels (11); understands various controversial social, political and historical issues (11); understands different perspectives at local, national and global levels (9). DL: models cooperation at local, national and EU and global levels, promoting peer involvement (12); develops proposals for resolving various controversial social, political and historical issues (9); develops effective strategies to promote cooperation based on different perspectives at local, national and global levels (8); demonstrates responsibility for organizing the form, content and quality of cooperation at the local, national and global levels (11); takes the initiative in cooperation at all levels (13).

The second criterion of CTC Knowledge of the principles of a democratic society and their application (realization) in one's social life, the third indicator is *Governance of the Political System*, the content of which BL consists of the following behavioural indicators: recognizes and identifies in information sources and practice the main components of democracy and political systems, the principles of democracy implementation, civic virtues that determine the functioning of government, society and community (11); recognizes the potential of democracy as an organization at all levels (9); participates in various activities for the promotion of democracy and the improvement of the political system (12); participates in elections as a voter at all levels (8). ML: observes and implements civic virtues and democratic principles in local, national, EU and global level cooperation (10); involved in social movements at local, national, EU, and global level (7); if necessary (if problems are identified) contacts (in writing/orally), officials of various institutions, bodies and organizations (10). DL: implements the principles of democracy at local, national, EU, and global levels (9); develops recommendations for the improvement of the social and political system that promotes civic virtues at the local, national, EU and global levels (10); develops recommendations for the implementation of democracy (in accordance with the main components of democracy and political systems, principles of democracy implementation) (12); generates ideas of social movements (organizes social movements) (12).

The second criterion of CTC Knowledge of the principles of a democratic society and their application (realization) in one's social life, the fourth indicator is *Implementation of sustainability objectives at different levels*, the content of which BL consists of the following behavioural indicators: recognizes and identifies sustainable choices in information sources and practices at local, national, EU and global levels (11); understands sustainable decision-making procedures and principles at local, national, EU and global levels (12); sees its potential for sustainable decision-making at local, national, EU and global levels (9); evaluates the capacity of local, national, EU and global levels to ensure sustainability (10). ML: evaluates the information available in different sources on the different dimensions of sustainability at local, national, EU and global levels (11); maintains the idea of implementing sustainability content in all areas of life (11); performs sustainability performance evaluation (11); participates in sustainable decision-making in the context of local, national, and EU levels (9). DL: sustainability goals and their fulfilment are continuously improved (11); performs sustainability assessment in the investment/resource selection assessment process (12); provides open communication and regular reflection on its sustainability performance (9); promotes people's understanding of sustainable decision-making at local, national, EU and global levels (11); involves partners/peers in an active dialogue on sustainability issues (8).

The third criterion for CTC is the Community dimension of life, for which three indicators have been identified: the first indicator is *Involvement at local level*, the content of which BL consists of the following behavioral indicators: knows the principles and structure of local and national level governance (9); knows how to search for information about local and national level NGOs (Non-governmental organization) (9); knows the types and tools of participation/involvement in local and national level NGOs (10); knows which NGOs are registered and operate at local and/or national level (11); participates voluntarily in announced social initiative activities (11). ML: analyses the principles of operation of local non-governmental organizations and local government in relation to each other (11); voluntarily, using various involvement tools, gets involved in the activities of local NGOs and improves the management system (9); initiates social initiative activities (9). DL: develops recommendations for the operation of local non-governmental organizations to improve local governance (10); develops and submits to appropriate institutions ideas for forms of activities and activities of local non-governmental organizations for community sustainability (12); participates in the advisory councils of local non-governmental organizations (9); participates as an expert in various local non-governmental organizations (9).

The second indicator of the third dimension of CTC, the Community dimension of life, is *Involvement at Global Community Level*, the content of which BL consists of the following behavioural indicators: knows his/her right to participate in the EU and global level Evaluates the possibilities of participation in the activities of the EU and global non-governmental organizations (11); participates in informative seminars on the activities of the EU and global non-governmental organizations (12); if the opportunity is offered to participate in the activities of the EU and global non-governmental organizations, this opportunity is used (9). ML: knows current issues in the activities of the EU and global non-governmental organizations (10); knows about the existence of non-governmental organizations and their activities at EU and global level (8); uses a variety of sources of information to identify their opportunities to participate in the workings of the EU and global NGOs (8); voluntarily engages in the activities of EU and global non-governmental organisations (10); voluntary engages and actively participates (including monetary donations and volunteering) in EU and global NGOs, including through the e-participation form (11). DL: gains a wide range of experience in EU and global NGOs (e. g., expert work, advisory councils) (10); generates ideas for effective implementation of EU and global NGOs (10); supports the involvement of colleagues (initiatives) in the activities of EU and global non-governmental organizations (10).

The third indicator of the third dimension of CTC, the Community dimension of life, is the *Capacity for Social and Political Change*, the content of which BL consists of the following behavioural indicators: able to identify legal and illegal types of protest in different literature sources and practice (11); is aware of protests in terms of his civil rights (9); understands the nature of protests (that protest is a way to change political and/or social direction) (11); demonstrates an interest in engaging and/or occasionally engaging in legal protests (8); participates in protest campaigns organized by young people on a topic of interest to them (10). ML: understands the connection between legal and illegal protests (10); identifies and differentiates the causes and consequences of legal and illegal protests (11); demonstrates rejection of illegal protests gains a variety of experience willingly by volunteering and actively participating in the various legal forms of protest or organising it (10). DL: offers new effective strategies/ways to implement legal protests (10); demonstrates ethically responsible action against various protests (11).

Conclusion and discussion

Publications of various discourses, the publication time of which is 2014–2020 – The analysis of scientific journal articles, empirical studies,

reviews of systemic literature, technical reports and policy documents allowed for a more multidimensional interpretation and interpretation of CTC in the context of higher education. As a result of the analysis, aspects of civic life and system context that are important in the pedagogical process at the level of higher education are highlighted, providing education organizers with a wide range of informative material that allows understanding the conditions for CTC development. Namely, the results of this study suggest that CTC is related to civic education, which can be effectively implemented if the learner is involved in a social context. The social context, social resources, and their dialectic are an essential condition and resource for the development of all criteria of CTC. Respectively, CTC is a component with which the social context (cultural, nation, community, state) can be explained. This focus of the clarification of CTC highlights the teacher as the key human resource in the implementation of civic education and in the development of civil rights for students. It is important for the development of CTC, as well as for community / national development, that teachers are effectively trained, therefore it is important to encourage them with appropriate teaching competencies both during the teacher education program and during postgraduate professional development. Therefore, one of the focuses of further research the teacher can be identified as a provider of civic education.

As a result of theoretical findings and qualitative and quantitative context analysis, it can be concluded that the content framework of CTC consists of four components: knowledge, skills, attitudes and Civic action experience; CTC is a multidimensional construct that connects the subjective with the objective, the individual with the social and the present with the future, so it can be concluded that it goes beyond the personal (subjective) perspective and is a search for balance between the subjective and the social. Therefore, its acquisition and implementation takes place at different levels: micro, meso and macro, where the development of civic transversal competences can be promoted and hindered, and that PCL can be applied to face-to-face, virtual and mediated meetings with people with different ideas. As a result, a CTC multidimensional construct (Figure 1) was developed using the Reflective first-order, reflective second-order principle (Polites et al. 2012).

The CTC multidimensional construct allows mapping of variables at all levels of involvement, therefore it will be used in the development of competency maps in each of the Latvian RIS3 specialization areas, as well as the identified behavioural indicators are defined as basic variables for the survey tool development.



Figure 1. Multidimensional construction of civic transversal competence

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