Global and Citizenship Competence Conceptualization Through Sustainability Paradigm

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ABSTRACT

Nowadays, the ideological focus of sustainable development is leading in all industries worldwide. Sustainable education enriches the understanding of the link between social, ecological, and economic needs; develops the ability to take responsibility for their own daily choices and contribute to a fairer future for present and future generations. All levels and areas of education invest in sustainable development, including higher education programs, which play a crucial role in putting sustainability ideas into practice.

Therefore, in April 2022, the University of Latvia implemented the second round of the study, “Assessment of Competences of Higher Education Students and Dynamics of Their Development in the Study Period”, within which multidimensional research of students’ transversal competencies is continued.

The first round of the study identified that the theoretical approaches to the distinction and consolidation of global and civic transversal competencies are contrasting. For that reason, this study aims to analyze civic and global transversal competencies’ common, diverse, and unifying aspects. The design of a cartographic review was chosen for conceptualization. The aim is to structure the literature items included in the study, based on which a classification scheme was created, and the field of aspect coverage was identified.

The study data were analyzed using the qualitative data processing program NVivo 12.0. As a result, the various aspects of the two transversal competencies have been identified. The theoretical framework of global civic competence is formulated based on the aspects identified in the coverage field.

Keywords: Citizenship Competence, Civic Transversal Competence, Conceptualization, Higher education, Global Civic Transversal Competence, Nvivo
Introduction

Over the past 30 years, the concepts of global and civic transversal competences have established themselves at all levels of education worldwide. Global and civic competence are regularly used in political, social, cultural, economic, and educational contexts. However, the conceptual use of these competencies in educational policy documents and research is inconsistent.

In April 2022, the implementation of the second round of the national-level study “Assessment of the competencies of students in higher education and the dynamics of their development during the study period” has been started, within the framework of which the multidimensional research of the transversal competencies of the students is being continued.

Inside the first-round range, it has been identified that the theoretical approaches to the distinctions and consolidation of global and civic competences are different (Rubene et al., 2021, Medne et al., 2021). Therefore, one of the tasks of the second round of the study is determined to identify the rationale for the division or combination of global and civic transversal competences in the framework of transversal competences in the context of sustainable higher education. Global or civic transversal competence, together with the need to give it meaning in the context of sustainable education for stakeholders, makes these concepts attractive from an educational perspective, as they require shared meaning-making and understanding.

This is because the content of all these concepts closely overlaps, as the mentioned transversal competences and sustainability can be included in the study process. On the other hand, sustainable higher education is the acquisition of specific competencies and qualifications and the development of human talents, emotional intelligence, and personality (Medne & Jansone-Ratinika, 2019). The European higher education space’s quality assurance standards and guidelines formulate the idea that higher education institutions are responsible for creating a sustainable culture by developing certain principles focused on student-centered learning, teaching, and assessment (Cirlan & Loukkola, 2021, ESG, 2015).

Therefore, all levels and fields of education invest resources in implementing sustainable development, including higher education programs, which play a vital role in the transition to implementing sustainability ideas in practice as one of the solutions of valuable practice in the context of sustainability for ensuring quality education in the long term, which allows universities to ensure the sustainability of education itself, remote learning opportunities and digitization of the study process are emphasized (Baranova et al., 2021). In the context of distance learning, the issue of learning global or civic competences at the level of practice expands its boundaries: how to promote their learning in a remote format. As another pedagogical solution for effective search, simulation is offered, one of the teaching methods considered adequate because it best connects theory and
practice and promotes the acquisition of specific professional and general skills (Medne, 2022).

Additionally, conceptualizing notions of global competence or civic transversal competence and their integration in the learning process becomes an intrinsic part of the study. Research data show that the conceptual and practical issues related to the concepts of civic and global transversal competence for students at the higher education level are complex both conceptually and practically. On the other hand, their contextual issues are: the position of higher education institutions in the acquisition of these competencies, the ambiguity of terms, the issues of values related to them, the position and ideas of the students themselves, the interest of employers and the social and political situation (IEAA, 2014).

However, Global competence, less historically rooted in an educational context than civic competence, has influenced the current focus in education on educating for global competence (Evans et al., 2009). The formulated project tasks and the analyzed problem settled the purpose of this study – to determine the stability criteria of global competence in the identified literature units.

**Methodology**

A selection of studies, reports and international education policy documents were initially carried out to implement the research. Overall, studies ($n = 16$), reports ($n = 2$) and policy papers ($n = 3$) met the inclusion criteria. The study included studies whose time frame is 2017–2022 and educational documents from 2014-2022. Various studies were included – systemic literature reviews, empirical studies, policy documents, scientific journal articles, and technical and project final reports. The subject of research was defined as civic development and global civic competence. Boolean search operators were used in the selection of literature units: “Citizenship Competence,” “Civic Competence,” “Global Competence,” “Higher Education,” “Global Civic Competence,” and “Global Citizenship Competence.”

A cartographic review strategy (mapping review) was chosen for the study, the purpose of which is to structure the literature units included in the study, create a classification scheme and structure the field of interest to identify the coverage of criteria in the research field. By choosing mapping methodology, topics, and the context in literature units, the study’s authors try to introduce a new and productive way to analyze and discuss the concept of competence in education, considering the diversity of competences.

Data analysis and synthesis – performed according to the narrative synthesis type, which included three consecutive steps:

1) defined logical categories (codes),
2) analyzed data from each obtained category (the content of codes),
3) synthesized questions about all included logical categories (Petticrew & Roberts, 2006).

The SPIDER (Sample-Phenomenon) strategy was used for a structured qualitative systematic selection of publications (Cooke et al., 2012; Booth, 2016). Inclusion criteria:

a) published between 2016 and 2022,

b) content and form analysis of civic and global civic cross-cutting competences conducted in the higher education space

c) published in English. Exclusion criteria: no access to the full text.

The research content was analyzed using qualitative and quantitative contextual analysis in the qualitative data processing program QSR NVivo 12. Linguistic processing and analysis of the literary units included in the analysis were carried out in the following order:

The choice of data processing program NVivo in the study was determined by the fact that it increases the validity of qualitative research (Siccama & Penna, 2008). The study was carried out from May 2022 to August 2022.

The research was carried out in four steps of group cooperation:

1) initially, research participants agreed on the criteria for inclusion of literature units and the research design,

2) identification of studies, which researchers carried out individually,

3) two participants performed double coding of the included publications, the program showed 86% codes coincidence, which is considered high,

4) the research group discussed the obtained results and their possible interpretations.

**Results**

The data search strategy was carried out using open-access databases: PubMed, ResearchGate, SciELO, Cochrane Library, Campbell Collaboration, EppiCentre, ScienceDirect, SpringerOpen, and Academia. The framework of the structural concept of Arksey and O’Malley (Arksey & O'Malley, 2005) was chosen for the design of the research protocol, which was further developed by The Joanna Briggs Institute in five stages:

1) identification of research questions;

2) identification of scientific literature;

3) selection of scientific literature according to criteria;

4) data analysis and synthesis;

5) compilation of data into tables.

In the five-step framework, the second and third steps integrated the four-step data selection scheme of PRISMA (Moher et al., 2009): identification-screening-eligibility-inclusion.
After identifying the primary studies, an initial assessment was conducted to determine whether they met the inclusion criteria and the basic quality requirements: clear and precise statement of the objective, clear description of the study, method, and sufficient amount of raw data). After duplicates were excluded, eligible studies were included according to the inclusion/exclusion criteria for evaluation. At this stage, most publications were excluded from inclusion in the study because they did not meet any of the exclusion criteria for inclusion in the study (Timulak, 2014). (Table 1)

Table 1. PRISMA selection scheme

<table>
<thead>
<tr>
<th>Studies identified in databases PubMed, ResearchGate, SciELO, Cochrane Library, Campbell Collaboration, EppiCentre, ScienceDirect, SpringerOpen, and Academia (n = 32)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Observation of Duplication of studies (n = 4)</td>
</tr>
<tr>
<td>Studies after initial evaluation (n = 28) Excluded studies n = 7</td>
</tr>
<tr>
<td>Studies included qualitative synthesis (n = 21)</td>
</tr>
</tbody>
</table>

The included literature units (n = 21) were sequentially entered into the table created in .docx, the structural components of which were determined according to the purpose of the study: publication title/availability; year of issue; institution/author; nature of the content/ context; identification of competence or competence type (G, P, G/P); criteria and their indicators.

In the identified units of literature (n = 21), the following conceptual units of the competence group were placed: global competence (n = 5), civic competence (n = 5), global civic competence (n = 9), sustainability competence (n = 1), and comprehensive global competence (n = 1). When initially selecting, structuring, and reviewing the studies, it was concluded that a specific methodological choice for the name of competence in the literature units was not justified. Therefore, in the next step of the research, the full texts of the literature units in the original language were uploaded into the Nvivo 12 program, and global aspects were identified.

The global perspective in this study was determined by the fact that all the mentioned competencies included the global dimension, and the aspect of sustainability was revealed in their content. Thus, global competence expands the boundaries of understanding the concept of civic competence and education for sustainable development, simultaneously expanding the ambiguity in the use of these concepts. Deductive coding was chosen as the coding method. The choice is based on the basic idea of the deductive approach, which provides structure and theoretical relevance from the outset. It is a top-down approach in which the first step is to identify a set of codes, and the second step is to identify the codes within the literature units.
The set of codes for identifying the global dimension in literature units was determined according to The OECD PISA global competence framework (PISA, 2018): the four dimensions of global competence and understanding of their content:

1) knows issues of local, global and cultural importance,
2) understands and evaluates perspectives and worldviews of others,
3) engage in open, appropriate, and effective intercultural interactions, and
4) act for collective well-being and sustainable development.

This generation and application of criteria were chosen because it minimizes the risks of a highly subjective selection of literature units.

To meaningfully understand the content of the identified literature units, full texts in the original language (English) were imported into the Nvivo 12 program. The next step was deductive coding (identifying themes and contexts by assigning a code to the relevant passage of text). During deductive coding, all the codes determined by The OECD PISA global competence framework (PISA, 2018): global competence were identified following the purpose of the study. The identified codes are summarized and visualized in Table 2.

Table 2. Matrix of frequency of use of codes identified in literature units

<table>
<thead>
<tr>
<th>Code</th>
<th>The number of documents in which the code is identified</th>
<th>Total number of codes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knows issues of local, global and cultural importance</td>
<td>21</td>
<td>65</td>
</tr>
<tr>
<td>Understands and appreciates other people's perspectives and worldviews</td>
<td>20</td>
<td>71</td>
</tr>
<tr>
<td>Engages in open, appropriate, and effective intercultural interactions</td>
<td>20</td>
<td>36</td>
</tr>
<tr>
<td>Acting for collective well-being and sustainable development</td>
<td>20</td>
<td>41</td>
</tr>
</tbody>
</table>

The frequency of use of codes indicates how widely and elaborately a question is presented in the literature units, also indirectly indicating the code’s relevance. The frequency of codes obtained during coding shows that all four indicators of global competence are sufficiently detailed and widely characterized in the literature unit: knows local, global, and cultural issues identified in all literature units, a total of 65 times (n = 65), understands and evaluates other people’s perspectives and worldviews identified in 20 literary units 71 times (n = 71), engages in open, appropriate and effective intercultural interaction identified in 19 literary units, as a code identified 36 times (n = 36), acting for collective welfare and sustainable development identified in 16 literary units in total 41 times (n = 41).
In the further course of the research, the content of the global competence criteria is described in the publication according to the identified code frequencies in the NVivo program in descending order.

The most significant number of codes in the identified publications is for the criterion to understand and appreciates other people’s perspectives and worldviews ($n = 71$). The second largest number of codes was identified for the criterion: knows issues of local, global and cultural significance identified in all literature units, a total of 65 times ($n = 65$). On the other hand, the criterion acting for the benefit of collective well-being and sustainable development was identified in 16 literature units 41 times ($n = 41$). The fewest identified publications deal with the issue of engaging in open, appropriate, and effective intercultural interaction ($n = 36$).

In implementing the research idea, the distinction of codes in the thematic units of the competence group updated in the study was looked at. The following tables present the distribution of codes by thematic units of competences.

### Table 3. Frequency matrix of codes identified in literature units for global competence

<table>
<thead>
<tr>
<th>Code</th>
<th>The number of documents in which the code is identified</th>
<th>Total number of codes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knows issues of local, global and cultural importance</td>
<td>5</td>
<td>18</td>
</tr>
<tr>
<td>Understands and appreciates other people’s perspectives and worldviews</td>
<td>5</td>
<td>21</td>
</tr>
<tr>
<td>Engages in open, appropriate and effective intercultural interactions</td>
<td>5</td>
<td>10</td>
</tr>
<tr>
<td>Acting for collective well-being and sustainable development</td>
<td>5</td>
<td>10</td>
</tr>
</tbody>
</table>

### Table 4. Matrix of frequency of use of codes identified in literature units for civic competence

<table>
<thead>
<tr>
<th>Code</th>
<th>The number of documents in which the code is identified</th>
<th>Total number of codes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knows issues of local, global and cultural importance</td>
<td>5</td>
<td>19</td>
</tr>
<tr>
<td>Understands and appreciates other people’s perspectives and worldviews</td>
<td>4</td>
<td>19</td>
</tr>
<tr>
<td>Engages in open, appropriate and effective intercultural interactions</td>
<td>5</td>
<td>11</td>
</tr>
<tr>
<td>Acting for collective well-being and sustainable development</td>
<td>5</td>
<td>12</td>
</tr>
</tbody>
</table>
Table 5. Frequency matrix of codes identified in literature units for global citizenship competence

<table>
<thead>
<tr>
<th>Code</th>
<th>The number of documents in which the code is identified</th>
<th>Total number of codes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knows issues of local, global and cultural importance</td>
<td>9</td>
<td>19</td>
</tr>
<tr>
<td>Understands and appreciates other people’s perspectives and worldviews</td>
<td>9</td>
<td>24</td>
</tr>
<tr>
<td>Engages in open, appropriate and effective intercultural interactions</td>
<td>9</td>
<td>9</td>
</tr>
<tr>
<td>Acting for collective well-being and sustainable development</td>
<td>8</td>
<td>11</td>
</tr>
</tbody>
</table>

Table 6. Matrix of frequency of use of codes identified in literature units for long-term competence

<table>
<thead>
<tr>
<th>Code</th>
<th>The number of documents in which the code is identified</th>
<th>Total number of codes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knows issues of local, global and cultural importance</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>Understands and appreciates other people’s perspectives and worldviews</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Engages in open, appropriate and effective intercultural interactions</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Acting for collective well-being and sustainable development</td>
<td>1</td>
<td>4</td>
</tr>
</tbody>
</table>

Table 7. Matrix of frequency of use of codes identified in literature units for comprehensive global competence

<table>
<thead>
<tr>
<th>Code</th>
<th>The number of documents in which the code is identified</th>
<th>Total number of codes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knows issues of local, global and cultural importance</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Understands and appreciates other people’s perspectives and worldviews</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Engages in open, appropriate and effective intercultural interactions</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Acting for collective well-being and sustainable development</td>
<td>1</td>
<td>4</td>
</tr>
</tbody>
</table>
As a result of the coding, it can be concluded that the global competence criteria determined by The OECD PISA global competence framework (PISA, 2018) can be identified in all the literature units included in the study. In the next stage, a qualitative content analysis was carried out, which allowed the authors to conclude that, regardless of the name of the competence (conceptual unit), the content of all codes includes the constantly evolving social processes, cultural context (local and global), people (behavior) and sustainability positioning in them.

Discussion and Conclusions

This study has several potential limitations:
1) limited scope of analysis, as only 21 literature units were found to be relevant to the research idea
2) reviews, reflect the search for the current state of the art in a specific field, but there is a subjective abstraction, misinterpretation, and risks of oversimplification, so according to this review, a risk of this study could be that the included literature units represent multiple fields (education, policy, health care, etc.). This can be considered a limitation, but paradoxically, it is also a convincing argument at the same time because it creates a wider focus,
3) only English language units of literature were identified and analyzed,
4) the methodology of the literature units included in the review was not analyzed and evaluated.

This review aimed to create a topography of the literature whose conceptual units are global competence, civic competence, global civic competence, sustainability competence, and comprehensive global competence. To implement it, 21 literary units were mapped. Mapping the research subject using the review design allows authors to conclude the following:

The literature units included and analyzed in the study reveal a high level of complexity in explaining this group of competences, both in theory and practice.

Global citizenship competence (n = 9) is mentioned as the dominant competence in the selected studies and documents, while global competence (n = 5) and civic competence (n = 5) follow in equal numbers. This conclusion reflects that the evidence base for the conceptual use of competences is not clear-cut. Authors interpret it as relatively open, unstable, and cross-sectoral. Thus, civic and global competence in research reports is also linked to the industry and its external and internal demands. Also, the interpretation differs in connection with social and political actualities, and there is no single, coherent methodological basis for their formation.
Within the framework of this study, the research subject exhibits the dominance of the English language, which probably reflects a certain decontextualized narrowness, which in turn may affect the methodological narrowness of the ideas of understanding competence, as well as the limitations of the development of education policy, therefore, within the scope of this study, it is determined as a research limitation.

Although the identified tension in the context of the explanation of the concept of competence between generalization (transversal competence) and specialization (professional competence), taking into account contextual factors such as national and cultural differences and differences in educational levels, shows that such research is underutilized due to unsystematic review in the context of sustainability. The identified units of literature also show the diversification of competence definitions: sustainability competence \( (n = 1) \) (2022) and comprehensive global competence \( (n = 1) \) (2018). During the research, it was concluded that they include the same content units, this suggests that the stability of the content of these competences remains, but there is a tendency for the name (conceptual unit) to change.

Analyzing the texts of literary units, it can be concluded that citizenship is rarely associated with a specific territory. Today, in the context of globalization, this concept has been expanded by emphasizing that citizenship simultaneously means both status and social role. The first refers to the civil, political, and social rights the state guarantees its citizens (objective dimension). The second aspect includes the identity, values, and mental representations that each person formulates in relation to social life and the political-economic situation (subjective dimension). This subjective dimension can be attached to a particular region and nation but can also be an organization, a social network, or a supranational entity (Europe, the World). Already Habermas (1995) formulates a similar idea, calling this phenomenon institutional patriotism, which is a way of identifying with democracy and its institutions, not with a certain geographical space.

The dynamics of the understanding of civic competence and global competence as multidimensional concepts show that their nature is related to constantly evolving social processes and people’s actions in them, which determines that the explanation of these categories is never final but can be qualitatively different depending on the context. Contextual aspects define the global dimension in understanding this set of competencies and present unique challenges in its precise formulation.

Both sustainability competence and global citizenship competence are based on solving world problems and developing the connection between the local and the global (home – local community – global world) in the social, economic, and environmental fields, thus essentially including/including the multidimensional aspects of citizenship competence.
Mapping global and civic competence reveals the theoretical possibility of their conceptual combination – global – civic competence.

The analysis of the content of all identified competencies allows us to conclude that all competencies, regardless of the name, include behavioral indicators that ensure sustainable development and sustainability. To a certain extent, the evolution of concepts can be identified: civic competence – global competence – global – civic competence – sustainability competence, determined by the context of society and education policy, or the United Nations (UN) Sustainable Development Goals (SDG).

The purpose of this review was not to conceptualize any of the conceptual units of the research focus group of competencies, but to substantiate the breadth and depth of the global dimension conceptually and objectively in the twenties of the 21st century.

Acknowledgments

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