



UCLL
HOOGESCHOOL

**RESEARCH &
EXPERTISE**

Enabel 

GLOBAL CITIZENSHIP IN TVET EDUCATION

National and international literature study to strengthen global citizenship education
in technical and vocational education in Belgium

30th September, 2024

KAREL MOONS
JANA DUCHATEAU
HOOGESCHOOL LEUVEN LIMBURG (UCLL)

Literature study commissioned and funded by BeGlobal, the Expertise Centre for Global Citizenship Education of Enabel, the Belgian agency for international cooperation. Conducted by UCLL, Research & Expertise, Education and Development



This report is the result of a collaboration between the Education & Development research and expertise cell of UCLL University of Applied Sciences and BeGlobal, the Expertise Centre for Global Citizenship Education of Enabel, the Belgian agency for international cooperation. Commissioned by BeGlobal, the researchers started working with the material previously collected by the knowledge centre, and then tested the (international) literature and findings from the field (teachers and NGOs) against it. For this study, a different research design was used in the French- and Dutch-speaking part of the country, in order to answer BeGlobal's research questions, namely (simplified):

1. What are the criteria for high quality global citizenship education in technical and vocational schools (TVET) (from the BeGlobal material)?
2. What is the coherence of these criteria to foster collaboration between NGOs and technical and vocational schools?
3. In which projects from national and international literature do we find these criteria?
4. What factors reinforce or balance working with GCE in vocational education?
5. In what way do three (T)VET-teachers and three NGOs, from the French-speaking and Dutch-speaking parts of the country, view the criteria?

Concrete recommendations for a successful GCE project in technical and vocational education conclude this study.

We wish you pleasant reading,

BeGlobal & UCLL Education & Development

Table of contents

1. Introduction and context	5
1.1 Research proposal	6
1.2 Research questions	8
2. Methodology	9
Part 1 - BeGlobal documentation	9
2.1.1 What criteria for high quality GCE for VET-students can we extract from BeGlobal documentation?	9
2.1.2 What is a possible coherence of the criteria from BeGlobal documentation that promotes collaboration between NGOs and Technical & Vocational Education?	10
Part 2 - National and international literature	10
2.2.1 In which projects from (inter)national literature do we find these criteria?	10
2.2.2 What factors reinforce or balance working with GCE in VET education?	11
Part 3 - Interviews with teachers and NGOs	13
3 Results	14
Part 1 - Results from the BeGlobal Documentation	14
Part 2 - Results from national and international literature	28
Part 3 - Results from interviews	37
4 Conclusions	52
4.1 Conclusion from the third categorisation	52
4.2 Conclusion from database-analysis on good practices	53
4.3 Conclusion from the reinforcing and balancing loops in the system map	53
4.4 Conclusion from the interviews	53
5 Recommendations	55
5.1 Schools	55
5.2 NGOs	55
5.3 BeGlobal	56
5.4 Government	57
5.5 Scientific research	58
5.6 A possible model for GCE projects in TVET	58
6. Literature	60
Annexes	67

1. Introduction and context

Global citizenship education is becoming increasingly important in education as the complexity and interdependence at the global level continues to grow, with a globalised and digitalised world on one side, and on the other side problems that cross borders of countries and continents and make people around the world responsible for each other. However, recent reports highlight the fact that vocational and technical education do not receive adequate attention, and that separate attention is called for this aspect of education:

"It was only in 2022 that UNESCO added the notion of 'participatory, global citizenship' to its technical and vocational education and training strategy (Suhonen, 2024; UNESCO, 2022)."

and:

"In its recent report, Cedefop (2023) has recognised the research need to compare the extent of citizenship education and its integration into VET across Europe (Suhonen 2024)."

This shortcoming was addressed by BeGlobal and put forward as one of their action points for the period 2021-2025: (freely translated)

"The Minister for Development Cooperation, BeGlobal and the Annoncer la Couleur/Kruit programme intend to open up new fields of action for the future (2021-2025): particular emphasis will be placed on less-reached groups, such as students in vocational and artistic education [...]. (Giraud et alli, 2022)"

As a result, this report answers the question raised by BeGlobal, the Expertise Centre for Global Citizenship Education of Enabel, the Belgian agency for international cooperation, to strengthen Global Citizenship Education (GCE) in technical and vocational education in Belgium. BeGlobal's own research shows that there is less of a focus on GCE and that (T)VET-students know less about global citizenship topics in most areas than in general secondary education (l'enseignement secondaire général). BeGlobal conducted its own research on this topic in the Dutch- and French-speaking parts of Belgium, but did not use the same research design for the two sub-studies.

1.1 Research proposal

Specifically, BeGlobal formulated the assignment as follows (freely translated):

(1) Produce a summary of the knowledge BeGlobal has collected and produced in the past regarding: (1) the challenges and needs in (technical and) vocational education in Belgium (students (+ their profiles), teachers, schools); (2) the challenges and needs of NGOs/organisations active in GCE to reach a technical and vocational audience in Belgium more effectively; (3) the pedagogical and methodological practices that work to strengthen GCE in technical and vocational education in Belgium, taking into account the specificities of different areas of study and the educational structure;

(2) Conduct a literature review of knowledge, good pedagogical practices, methodologies, themes, GCE teaching tools and projects that have been implemented to strengthen GCE in (technical and) vocational education at the national and international level, between 2015 and 2024; with a special focus on what has worked/is working, as well as the prospects;

(3) On the basis of the two assignments mentioned above and interviews with Belgian organisations/NGOs active in the GCE sector and the sector of technical and vocational secondary education in French-speaking and Dutch-speaking Belgium, draw up practical and concrete recommendations to answer these two questions: (1) how to increase the number of requests for training and interventions by the GCE-actors that are active within technical and vocational schools in Belgium, and (2) what are the best pedagogical practices, methodologies and themes, and tools in GCE that organisations active in GCE can implement for the technical and vocational school context in Belgium, taking into account the specificities in terms of needs (students, teachers, schools), structure and different choice of subjects.

Based on these questions, the researchers drew up a methodological plan, even though at that point it was not clear what the BeGlobal material consisted of or how extensive it was:

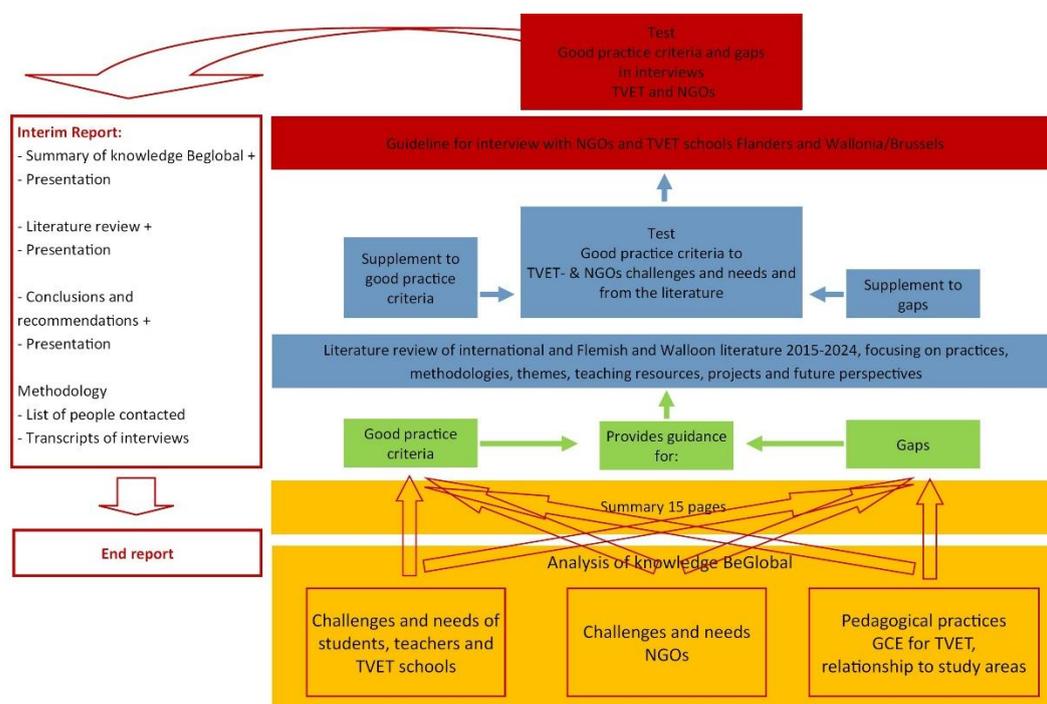


Figure 1: research design from the request for quotations

The proposal from UCLL starts from the BeGlobal material and aims to get an overview of the following from it:

- The challenges and needs of students and teachers from technical and vocational education;
- The challenges and needs of NGOs;
- Pedagogical practices for GCE for technical and vocational education and the relationship with areas of study.

The summary of the material (according to the request, covering 15 pages) will be used to come up with criteria to make GCE stronger in technical and vocational education. These criteria are gleaned from the BeGlobal material, in order to then identify good practices and gaps from the literature. Specifically, the literature, both national and international from 2015 to 2024 will be assessed against these criteria for practices, methodologies, themes, teaching resources, projects and future perspectives. In this way, the literature results in these criteria and gaps possibly being supplemented.

Based on this, a guide for interviews will be drafted so that criteria and gaps in schools and NGOs can be tested (to a limited extent).

The result is a report, of which the main elements are:

- A summary of the BeGlobal material;
- An overview of the literature review;
- A description of the methodology;
- An analysis of the interviews;
- Transcripts of the interviews and bibliography;
- Presentations on this report.

An interim report is provided with feedback by BeGlobal, after which the final report will follow.

The research design stated above (Figure 1) turned out not to be feasible after the material was provided by BeGlobal. This material was substantial, but also highly varied: photos and videos of projects, raw material from transcripts of interviews, interview guides, scientific articles, presentations, summaries of interviews, sources from the literature, material from brainstorming sessions with teachers and students, screenshots of sessions with padlets, an inspiration guide on working in vocational education, lists of tips and documents with summaries. Due to the diversity of the material, it was decided to modify the originally planned methodology, especially since it was not clear how much of the material in French was in the summary documents in Dutch. Therefore, research questions were modified, without losing sight of the questions from the original assignment.

1.2 Research questions

1. What criteria for high quality education on GCE can we glean from the BeGlobal material from technical and vocational education?
2. What is a possible coherence of the criteria that promotes insight into and development of the collaboration between NGOs and education in technical and vocational education?
3. In which projects from the national and international literature do we find these criteria?
4. What factors reinforce or balance working with GCE in TVET education.
5. In what way do three VET-teachers and three NGOs, divided between the French-speaking and Dutch-speaking parts of the country, view the criteria and trends from the criteria?

2. Methodology

Several analysis methods were used in this report. The data were collected from source research and literature research on the one hand, and from a number of interviews on the other. Three angles were used for the source and literature research: first, the available sources on global citizenship education in vocational education in the BeGlobal documentation, second, a literature review of results from international databases, and finally a literature review of results from Belgian databases. The international databases can be divided into scientific databases and project databases. We elaborate on the reason why we mention this difference in the results. Based on the literature, criteria and recurring themes were specified. The interviews focused on Belgian secondary school teachers in the labour market finality (N = 3) and non-governmental organisations (N = 3). The methodology is discussed in more detail for each research question.

Part 1 - BeGlobal documentation

2.1.1 What criteria for high quality GCE for VET-students can we extract from BeGlobal documentation?

All documents, 21 in French, 33 in Dutch and 4 in English (58 in total) were numbered by language and analysed by language. The first researcher, a native Dutch speaker, started with the French sources. This material was therefore analysed a second time by the second researcher who studied Romance philology. The literature in Dutch and English was analysed in that order by the first researcher.

The BeGlobal sources were analysed and coded according to four categories, namely criteria - conditions - opportunities - limitations.

- **Criteria:** which elements are important for GCE in (technical and) vocational education?
- **Conditions:** what are relevant elements that promote GCE in (technical and) vocational education?
- **Opportunities:** where are opportunities in the current school systems or in the work of NGOs to make GCE stronger in (technical and) vocational education?
- **Limitations:** what element should be taken into account that limits making GCE stronger in (technical and) vocational education?

2.1.2 What is a possible coherence of the criteria from BeGlobal documentation that promotes collaboration between NGOs and Technical & Vocational Education?

The initial categorisation from the previous research question was recoded based on the literature. It was decided to go for open coding of the French sources. The coding was then continued iteratively with a view to obtaining a consistent and practice-oriented framework that respected the cultural differences between the two linguistic parts of the country.

In the first iteration, the Dutch-English sources were categorised with categories from the French coding, which did not produce a coherent analysis. The choice was therefore made to recode this data openly, based on three guiding principles: 1) mutual respect and participation, 2) attention points for (T)VET-specific didactics, and 3) general principles for project development.

In the second iteration (or third categorisation), the items from the first categorisation of the French sources were therefore added to the first iteration of the Dutch-English sources and reduced to a single model. This was done by merging duplicate items and enriching the Dutch-English analysis with the French analysis.

In summary, the sources from both parts of the country went through 3 iterations, but not in the same order. This went as follows: FR - FR - NL/EN - NL/EN - FR/NL/EN. Annex 2 provides a clarifying overview of the categories.

Part 2 - National and international literature

2.2.1 In which projects from (inter)national literature do we find these criteria?

Various databases were screened for the analysis of international literature: EBSCO, SCIENCE DIRECT, BOOMportal, Springer, Wiley Online library, EPALE, UNESDOC (UNESCO), UNEVOC, Publications Office of the European Union, GCED Clearinghouse, GCED Online Campus, School Education Platform, APCEIU database and the Global Education and Learning database (GEL). The search terms used were '(global) citizenship (education)', 'GCED', 'GCE "vocational (education)', 'VET', 'VTET', 'vocational education and training', 'world citizenship (education)', 'key competences', 'project kits', 'teaching tools' and the filters used were 'publication years 2015 till 2024', 'Teacher education C training of trainers', 'Informal education including youth work', 'media C community work', 'Non-formal education', 'Informal education including youth work, media C community work', 'Formal education', 'Informal education including youth work, media C community work'.

For scientific databases:

Item 2 of the request states the following (freely translated):

Conduct a literature review of knowledge, good pedagogical practices, methodologies, themes,

GCE teaching tools and projects that have been implemented to strengthen GCE in (technical and) vocational education at the national and international level, between 2015 and 2024; with a special focus on what has worked/is working, as well as the prospects;

The 'knowledge' aspect of the request for quotations (partly) refers to the scientific literature. The formulation of the modified research questions does not seem to reflect this in the first instance. There is a good reason for this: the various scientific databases (Ebsco, Science Direct, Boomportaal, Springer and Wiley Online Library) provide almost no usable material for (T)VET education. We discuss why this is the case in the results.

For project- and teaching databases:

Because the number of results based on the search terms in certain databases was too large and it was not possible to filter more by changing search terms, a double strategy was applied: for the School Education Platform and GEL, all projects were screened. For the other databases, samples were taken. A number of sources, corresponding to 10% of the total results, were analysed at random. The sample was determined using randomisation via <https://www.random.org/>.

The search for relevant global citizenship literature for the national literature was started in the same way, namely an analysis of results from the databases of Belgian organisations. The databases subject to the research are from BeGlobal, Klascement, Caritas, Studio Globo, Gentse Inspiratiebank voor Diversiteit op School (GIDS), Iles de Paix, Acodev, CNCD-11.11.11. These databases were searched for search terms in the language of the database. For Dutch: 'WBE', 'wereldburgerschap', 'wereldburgerschapseducatie', 'beroepsfinaliteit', 'technische finaliteit', '(secundair) beroepsonderwijs', '(secundair) technisch onderwijs', 'lespakket'. For French: 'ECM', 'ECMS', 'CMS', 'citoyenneté mondial', 'qualifiant', 'technique qualifiant', 'qualifiant professionnel', 'malette pédagogique'. In addition to literature, these databases primarily offer teaching packages, which were tested against criteria based on the BeGlobal tools.

2.2.2 What factors reinforce or balance working with GCE in VET education?

'Reinforcing' and 'balancing' factors are terms that come from system design and systems thinking (Meadows, 2008, Jones C Van Ael, 2022). This methodological framework assumes that a reality (in this case, GCE in VET) consists of several feedback loops that balance the system. Reinforcing loops create an increase in a system. A system with only reinforcing loops will 'explode'. Balancing loops lead to a reduction in the system. A system with only balancing loops will disintegrate and disappear. Mapping a system's feedback loops highlights the factors that determine the status quo. The levers are important in this regard: these are the factors that occur in multiple feedback loops. If the levers can be manipulated, then the effect on the system is bigger. When criteria are collected from sources, it becomes clear, firstly, which items recur regularly and, secondly, it is obvious which items (based on the initial question) do not occur. These items and their coherence, derived from the context of the items, form the factors in the feedback loops.

Creating feedback loops was used as a method of analysis to clarify the connection between practices in education, research and the service providers of GCE, which together make up the GCE culture in (technical and) vocational education. To that end, three iterations of feedback

loops were created. In iteration 1, possible feedback loops were collected, consistent with the data. In iteration 2, these were refined so that they met the criteria to be considered as reinforcing or weakening. In iteration 3, the feedback loops are brought together and aligned to determine the levers.

Part 3 - Interviews with teachers and NGOs

In what way do three (T)VET-teachers and three NGOs, from the French-speaking and Dutch-speaking parts of the country, view the trends from the criteria?

Based on the findings from the literature study, interview guides were drawn up for (T)VET-teachers and the NGOs. A semi-structured interview with open-ended questions was opted for (van der Donk C van Lanen, 2019), which surveyed respondents' experience with GCE in vocational education, the barriers they found and good practices. The interview guide was drafted together by both researchers and translated to the plural Belgian school context. Within the available time, one teacher from a school in the Fédération Wallonie-Bruxelles, one from a school in Brussels and one from a school in Flanders were surveyed, as was a staff member of an NGO in Flanders and two from NGOs in Brussels (active in the Fédération Wallonie-Bruxelles and Brussels). The surveys were conducted and analysed in September and early October 2024.

The candidates were invited both by mail and telephone for a thematic interview. Before starting, the respondents received an informed consent and were informed that their data would be anonymised when the results were processed. The respondents could indicate if they wanted to be informed of the results of the survey. The necessary information about the study and data protection was enclosed with the invitation. All six interviews were conducted online and anonymously transcribed via Microsoft Teams. The transcripts were first manually reviewed for content, and interpretation errors (orthography, grammar, repetitions, misinterpretation of words) were then deleted using Microsoft Copilot.

The interview results were then organised by question across participants and analysed according to the criteria surveyed (van der Donk and van Lanen, 2019).

3 Results

Part 1 - Results from the BeGlobal Documentation

What criteria for high quality GCE for (T)VET-students can we extract from BeGlobal documentation?

Methodological issues arising from the analysis

In discussing the results, only 'vocational education' will be covered, for the sake of readability. For a number of technical schools, the results are clearly still applicable, and even general secondary education may adapt its view of GCE based on this report. This is left to the discretion of schools.

Screening of the international literature

Reviewing the databases that discuss impact studies (Education Endowment Foundation (s.d.), Best Evidence Encyclopedia (s.d.), Leerpunt s.d., Visible Learning (s.d.)), it was found that no search term referenced GCE, nor Vocational Education and Training. There are therefore no impact studies on GCE available. The term 'VET' or 'vocational education' does not produce any results, meaning that these are probably not envisaged as such in the structure of the database. These sites make it clear that impact studies focus almost exclusively on languages and mathematics, beginning literacy, teaching strategies, and to a lesser extent student characteristics, summer schools and covid-19. The labour market finality is not seen as a 'student characteristic' here.

The relevant information on GCE in the labour market finality in the scientific databases starting from the search terms 'global citizenship education + vocational education' is very meagre. Additional filtering was done per database to increase the relevance. Sometimes this produced almost no results. At other times substantial amounts. The table below shows this search:

Database	Search terms and filters	Number of results	Quantity usable
EBSCO	global citizenship education + vocational education	7	2*
Science Direct	global citizenship education + vocational education + secondary education	826, first 25: abstract reviewed, next 25: titles	0
Boomportaal	Burgerschapseducatie + beroepsonderwijs	0	0
Springer	global citizenship education + vocational education + secondary education Filters Article, research article, 2015 to 2014, Education	18	0

Wiley Online Library	global citizenship education + vocational education + secondary education Filters: 2015-2024, Education	457, first 60: abstract read through	1
----------------------	---	--------------------------------------	---

The question that arises is why an article is not useful. We list the criteria:

- The study is not about vocational education.
- The study is about vocational education in adult learning.
- The study is about 'global education' which concerns the relationship between globalisation, industry and the relationship with VET, but not GCE.
- The study is about general pedagogical theories or the conclusions boil down to general didactic principles.
- The study does not distinguish between vocational education and other study areas.

'Relevant' articles

'Relevant articles' means those that provide information about GCE in VET education. These articles are not necessarily useful for practice. We discuss the relevant articles in order of their occurrence in the databases. We then draw general methodological conclusions for vocational education, at the same time justifying why we chose equivalent coding.

The study by Hirtt (2019) on the knowledge and awareness of young people from the end of secondary education on climate change in Belgium shows that VET-students, with few exceptions, know less about (the causes of) climate change than young people from the general secondary or technical education. The question that can be asked here is whether knowledge questions are a fair basis for comparing knowledge about climate and climate awareness in the different finalities. All the more so since the questions on awareness are about urgency, the consequences for Belgium and how much time is left. Indeed, these themes are just as much related to knowledge as they are to specific behaviour in the students' environment. That does not change the fact that the knowledge for the entire (end of) secondary education is lamentable.

Sampermans, Claes and Janmaat (2021) study the effect of tracking or segregation on knowledge about citizenship (civic knowledge). They conclude that segregation widens the gap in knowledge of citizenship between general secondary education and vocational education. The article explicitly states that there is a positive correlation between knowledge about citizenship and engagement as citizens, and, based on a number of other studies, the authors go so far as to claim that knowledge about citizenship is 'a critical tool' for citizenship education. It is not explored whether this also applies to vocational education. Moreover, the suggestion is that there is a causal relationship for which there is no methodological evidence. Furthermore, this study states that there is evidence that the different ways in which citizenship education is provided (as a subject, in projects, on a few days in the year, etc.) have an impact on individuals' political knowledge. They do not highlight any difference in impact, not whether this applies to vocational education, and not whether there is an impact on criteria other than knowledge. It is further cited that a democratic climate in the classroom, a differentiated approach and motivating forms of work are more effective in enhancing civic knowledge.

The study by Kavadias, Hemmerechts and Spruyt (2017) is more nuanced. They also stress the importance of a warm and open classroom climate and extra-curricular activities. Their analysis of data from ICCS, 2009 (Schulz, Ainley, Fraillon, Kerr C Losito, 2010) shows that segregation has a particularly negative impact on participation in school, support for democratic values and openness to other groups. However, segregation has a moderately positive impact on participation in community activities and local social life. Furthermore, segregation does not have an impact on trust in institutions or attitudes about gender equality, but it does impact ethnic minorities and rights for immigrants. They make a link here with social cohesion and attitudes toward 'outgroups', which are negative, based in part on their own identity formation, but can quickly become positive when members of outgroups enter the classroom. Finally, the authors emphasise that segregation creates separate cultural spaces, from which (T)VET-students will react against the dominant school culture.

The above articles come from the BeGlobal documentation. The two relevant articles from EBSCO are by Suhonen (2022, 2024) and are about teachers' perceptions of global citizenship in vocational education. The research was conducted in Finland and confirms the search of this study: research into GCE in vocational education is a gap.

"More generally, the importance of contextualizing GCE to local needs and considering its implications for different populations, including students with less affluent backgrounds - such as VET students - have been identified as a research gap (Goren and Yemini 2017)."
(Suhonen 2024)

And

"Mentions of structured, planned pedagogical approaches to engage with controversial global issues, or of learning about the political decision-making around these issues were scarce in the data". (Suhonen 2024)

The latest article from the Wiley Online Library by Jerome, Hyder, Hilal, and Kisby (2024) is a systematic review of the scientific literature on the impact of citizenship education on active citizenship. The introduction also states that there are no effectiveness studies and therefore research based on other research methods has been used in order to make 'well-founded suggestions' for practice and identify relevant criteria for planning and teaching practice. A warm and open classroom climate and a diverse range of teaching strategies are recurrent elements in this article, as well as a possible impact of the school's vision, although in the research this is related to extra-curricular activities and activities in the community. When the article is screened for vocational education, only one study is referenced by Han, Hoskins and Sim (2014) which compares political self-efficacy to school self-efficacy, and voting intentions based on data from studies between 2009 and 2011. The study is mainly a comparison between young people from England and Singapore.

After analysing the databases and reading the relevant articles, the only conclusion is that **scientific research on GCE in vocational education is systemically lacking**. It is not possible to distinguish cause and effect, but at the very least it must be concluded that this situation adversely affects the implementation and dissemination of GCE in vocational education. This is discussed further in the systemic analysis based on this study.

Operationalisation of GCE

When we look at the operationalisation of GCE based on 'Citizenship Education at School in Europe'(European Commission, 2017), the following is stated:

"Knowledge, skills and attitudes related to: 1) Acting democratically, 2) Acting socially responsibly, 3) Effective & constructive interaction, [and] 4) Critical thinking."
(European Commission (2017), figure p. 24).

The report mentions that 'values' are added in this regard, or replace the concept of 'attitudes', which among other things is an explicit choice in the context of UNESCO. It also mentions that citizenship education is a fluid concept that takes on a different meaning depending on the historical or social context.

Linking back to the scientific literature, we find that both in pedagogical models and in the scientific literature this diverse or fluid interpretation of (G)CE backfires when translated into practice. This is because the order of concepts in the definition of competence is also seen as the priority in research or the order of the didactic model. Or put in more simple terms: the starting point to measure GCE in research is knowledge, or the didactic progression starts from knowledge. The consequence for research is that 'measuring' GCE goes primarily through knowledge questions. In fact, the study by Hirtt (2019) makes it clear that 'consciousness' is also based on knowledge.

Knowledge-based research

Scientific research is therefore limited to research where general secondary education still has an advantage , for two reasons. First, there is a real chance that general secondary education scores better on knowledge (and critical thinking). Second, because 'acting democratically', 'acting socially responsibly' and 'effective & constructive interaction' are measured on the basis of the living environment of the social middle and upper classes (or also measured or inferred on the basis of knowledge). Of course, this is also the most practical choice. Indeed, it requires a much more complicated research design and, likewise, budgets to measure skills or attitudes without resorting to questionnaires, which is usually the basis of impact research. Observation in the classroom practice is needed for this, and a theoretical framework that makes it possible. What this analysis shows is that GCE is scientifically researched, to the extent possible, via knowledge or perception (using questionnaires or interviews).

One consequence of this knowledge-based research is that vocational education comes out 'worse' because the specific strengths of these students, which are more practical in nature, and the strengths of their (sub-)culture, which is not that of the middle and upper class, are not investigated. Research seems to assume that conclusions can be drawn for the entire secondary education system, vocational education included, thereby reinforcing the didactic problems faced by VET-teachers. Or more concretely, scientific research also pushes GCE toward general subjects rather than practical subjects, and reinforces the didactic pathway in which knowledge is the priority.

Size of technical and vocational education compared to general secondary education

Another statistical problem arises in scientific research. What does the average of a group of secondary school students say about the 21% and 29% of students in the Fédération Wallonie-Bruxelles and in the Flemish Community, who are respectively in general secondary or technical education? If the group from vocational education is so small compared to general and technical secondary education, to what extent are conclusions based on these other groups about GCE applicable?

From a methodological perspective, the researchers felt that there was a risk of generalising conclusions about GCE from general secondary education to vocational education. Therefore, they opted to categorise all the BeGlobal documentation, scientific or not, in the same way. This gives more weight to the voice of a VET-student or VET-teacher, and it is the strands (of meaning) in the plurality that are decisive for the conclusions.

Methodological decisions arising from the analysis

The coding of the French and Dutch-English documentation from BeGlobal started from fairly general categories, namely criteria, conditions, opportunities and limitations. The coding produced 152 items for the French documentation and 258 for the Dutch and English documentation. The difference in number of items is due to the difference in number of documents per language. The French documentation were screened a second time by the second researcher, which produced 8 additional items, already included in the total number of 152.

To synthesize the documentation more effectively, the French material was re-categorised using open coding. This resulted in the following categories:

- Context young people
- Context teachers
- Context NGOs
- Growth lines
- Prior success criteria
- Possible opportunities
- Possible risks

These categories were then used to code the Dutch-English documentation. In the second categorisation, the French items were reduced from 152 to 68 and the Dutch and English items were reduced from 258 to 100, representing a reduction of 61% and 55%, respectively. This reduction was proportionately similar, indicating that the categorisation for both groups of sources was organised in a similar manner.

As this categorisation for the Dutch material still proved too incoherent and, above all, did not provide clear guidelines for NGOs and schools to work with, it was decided to re-code the data openly, based on three guiding principles: **1) mutual respect and participation, 2) attention points for VET-didactics, and 3) general principles for project development.** This new categorisation and the combining of duplicate items led to a reduction in the number of items. But it also highlighted the fact that when it comes to GCE, there is a cultural difference between the two linguistic parts of the country. Adding the French

items to the last categorisation produced a total of 47 new items, which is 68% of the total. Indeed, if the cultural difference were smaller, the expectation is that it would produce more duplicate items.

The decision to use this approach was initially prompted by the question of why GCE was not very prominent in vocational education. Or more concretely, why is it that both in the scientific literature and in practice so far no tools have been found to make sure it is prominent? In order to capitalise on the substantial information from the BeGlobal documentation, the choice was made to code all documents, scientific or otherwise, in the same way and to look for inconsistencies, false assumptions and unwarranted generalisations, by comparing the different items. Indeed, the fear was that a theoretical framework from the existing literature would repeat the reasons why GCE has not made inroads in vocational education, and conceal the blind spots.

All analyses are compiled in the same annex (Annex 2). It is not very relevant to discuss the answer to this research question separately, since these criteria are included in the final categorisation that also answers the next research question.

What is a possible coherence of the criteria from BeGlobal documentation that promote collaboration between NGOs and vocational education?

Ethical choices were also made in writing this report. These are reflected in the first guiding principle of the latter categorisation: 1) mutual respect and participation. Of course, there are a number of mechanisms that result in vocational education being disadvantaged compared to secondary TVET education, such as early tracking and segregation, students with more educational disadvantage, more students with psychosocial problems, more students from disadvantaged backgrounds, etc. Nicaise et al. (2021). But neither the schools involved, nor the NGOs, nor BeGlobal will be able to change this in the short or medium term. It therefore makes little sense to draw up a framework to introduce GCE, based on what cannot be applied positively in the collaboration in any case. Nonetheless, these are very important findings that should be continuously reiterated in the communications with governments, as the challenges are still significant, according to Nicaise et al. (2021) (freely translated):

"The gap in cognitive outcomes between the most advantaged and the most disadvantaged SES decile of fifteen-year-olds (140 points) is still equivalent to an average of 3.5 school years. These underprivileged students still feel badly in school, are six times more likely to have repeated a year than the top decile by the age of 15. Our secondary education still remains a social filter that guides privileged students to general education and underprivileged students to VET. The risk of dropping out of school among young people with low-skilled mothers is still five times higher than the others and they are not even half as likely to make the transition to higher education."

Moreover, the analyses suggest that this unfair starting position is also preserved and promoted by the GCE sector in a number of ways.

Mutual respect and participation was chosen as one of the guiding principles for the framework, and mutual respect is operationalised as: 'each person involved is a specialist of their living environment' and 'how can those involved help each other from their specialisation'? Participation is translated into promoting participation during the learning process and in a structural way in a project and/or in the school. A number of items were translated

participatively by asking the question: how should this be fleshed out with regard vocational education so that it becomes useful and clear to those involved?

The ethical choices also prompted us to retranslate 'limitations' from the first categorisation and 'possible risks' from the second categorisation into positive action points that the individuals involved can work with.

The answer to this research question is further discussed using the latter categorisation. Each category was given a brief description that attempts to convey its essence. We will discuss the main items from each category:

1. The student: each person involved is a specialist in their own living environment
2. Teachers: each person involved is a specialist in their own living environment
3. NGOs: each person involved is a specialist in their own living environment
4. Doing and experiencing: the doing component is essential to achieve learning
5. Warm classroom climate: a warm classroom climate ensures mutual respect and tolerance.
6. Participation (structural): GCE without participatory processes is a contradiction in terms.
7. Participation (process): GCE without participatory processes is a contradiction in terms.
8. Project in the short-term: what are strengths of a project in the short-term?
9. Project in the long-term: what are strengths of a project in the long-term?
10. Reflection and evaluation: ensuring that it is possible to see change and progress.
11. Support for NGOs: what do NGOs need to provide quality work?
12. Prestige of the school

1. The student: each person involved is a specialist in their own living environment

An analysis of the BeGlobal documentation finds that the conventional themes of GCE, such as climate, migration, (in)equality, peace & conflict and diversity, are also highlighted as very important in an international perspective. When students have their say, the main focus is not related to these themes, but rather to their immediate home environment (family, friends) and how they themselves can find their place in society (equality, good education, fulfilling their own ambitions). It should not be overlooked that a large proportion of these VET-students are suspicious of education and the wider society than general secondary education students, partly due to the findings of Nicaise et al. (2021) above, so partly also suspicious of a conventional approach to GCE, based on international solidarity.

The question is where the common ground lies, where VET-students and GCE can find each other? This could be done by setting up projects in the first instance in collaboration with their own neighbourhoods, which include their cultural communities. Moreover, there are many opportunities in their neighbourhoods (and their roots) to add an international dimension to projects. Participation with positive actions in and with their neighbourhood also raises the prestige of students and the school in that neighbourhood, shrinks the gap between school and home culture, and provides opportunities to develop and value their work competencies for people who are important to them. If we see students as specialists of their own living environment, we assume that they can form the necessary relationships to make this happen.

In the limited academic research, collaboration with the neighbourhood (community-based activities) and starting from the students' living environments do emerge as powerful elements (Jerome, Hyder, Hilal, Kisby, 2024, Suhonen, 2024).

2. Teachers (help NGOs): each person involved is a specialist in their own living environment.

Teachers know their classes and the subjects they teach. They are learning specialists for their subjects and the classes they teach. One of the obstacles is that teachers of practical subjects typically combine informal and formal learning and therefore do not apply a strict pedagogical framework, which in essence substantially enriches learning processes for GCE for their students. In their role, they can support NGO staff members by getting an overview of their classes and pointing out the potential difficulties before they arise. They are the figurative gateway to their specific school and school culture, and determine which doors may or may not remain hidden. Opening these doors and being present when NGO staff members are working with classes is a prerequisite for collaboration, and an improvement in quality can be the result.

3. NGOs (help teachers): each person involved is a specialist in their own living environment

NGO staff members should ideally learn to speak the language of education, even if they do not always agree with all aspects of the school system. Being a specialist in one's own living environment is not an excuse for not speaking the other's language. In a school, this is the language of education. Teachers cannot all participate at the same level of intensity, due to a variety of circumstances (organisational or personal). An NGO expands its reach by increasing opportunities for teacher participation through a range of multiple initiatives. NGO staff members have a different perspective of the network around the school, based on their specialisation. Openness to the networks around the school can enhance working with the neighbourhood through the network of traineeships, the welfare network, and the specialists active within them.

The weight of the networks around the school for students is important in this regard: all students are in a network based around their VET-subjects and their family. Far fewer students are in a network based around welfare (youth work, sports, welfare in the narrow sense). Working exclusively with actors from civil society is a trap here.

To summarise, the principle 'each person involved is a specialist in their own living environment' ensures a dynamic triangle, which links to the students' living environment. The international dimension of GCE and the themes proposed in the vision texts emerge from there and should ideally flow from it.

4. Doing and experiencing: doing component is essential to achieve learning

If we look at UNESCO's didactic diagram (Unesco.org, s.d.), knowledge comes first, followed by skills and finally attitude. In this regard, they reprise the classic definition of competencies. In global citizenship education, this is often translated as 'head (knowledge), heart (attitude) and hands (skills)'. Despite the fact that it is not explicitly stated this way, this sequence is also applied for developing lessons and projects. This is not surprising in itself, bearing in mind that this is also the prevailing model in most teacher training programmes.

Decombel and Giraud (2024) add in the most recent BeGlobal Magazine publication that (freely translated):

"In addition, many people find it difficult to teach students to be respectful of each other's opinions and to discuss sensitive topics such as unconscious racism. These findings suggest that teachers are more comfortable with a knowledge-based and normative approach than with a critical approach to GCE." (Decombel and Giraud, 2024)

On the other hand, it is explicitly stated in the interviews with teachers that the didactic model that starts from thinking does not work for vocational education. To 'start by doing' is essential, and theory is taught through doing. Teachers state that they can find virtually no material that is adapted to vocational education (and that adaptation takes too much time).

A number of elements reinforce this phenomenon:

- School systems with early tracking (or segregation) are in a significant minority internationally. As a result, vocational education does not exist in many countries for the younger years of secondary education. The student groups are therefore more heterogeneous, which makes a conventional approach more feasible. The international literature therefore does not address this issue as much, and it is thus less visible.
- When lessons are created by outside organisations, they are developed for the 'average group'. It is up to the teacher or supervisor of the organisation to adapt it to a more specific target audience. The conventional sequence (knowledge, skills, attitude) therefore does work 'on average'.
- External organisations and schools that post tools on educational platforms tend to make the age range of their tools much bigger than the group they developed them with. (e.g. this project is suitable for students from 4 to 18 years old, 'subject to adaptation', the material was developed with a first year secondary school group).
- NGOs work comparatively less with vocational education, so there is also no need to develop adapted tools, with a few exceptions.

The reason why adapting these tools takes so much time is because the existing tools are inadequate in two ways:

- Tools for a younger age may be feasible in terms of the difficulty of the assignments, but it is not developed for the living environment of VET-students, and then becomes bland or childish.
- Tools for a correct age is too difficult at the level of the assignments, but some of the content fits with the young people's living environment.

When the number of students from vocational education (25%), Okan (reception classes for newcomers who speak a different language), dual learning and Buso (special needs secondary

education) are added together, they constitute 29% of the total number of students in Flanders (ond.vlaanderen.be, s.d.) and 21% in the Fédération Wallonie-Bruxelles (statistiques.cfwb.be, 2023). That means that for one-fifth (Wallonia and Brussels) to nearly one-third (Flanders) of secondary school students (and their teachers) in Belgium, the GCE sector is systemically non-existent.

The items under 'doing and experiencing' are a collection of possibilities that VET-teachers themselves provide to make lessons and projects connect with the learning process of students. The essence is that out of doing and experience comes theory or knowledge.

5. A warm classroom climate: a warm classroom climate ensures mutual respect and tolerance.

A warm classroom climate makes students feel good in school. There is a strong interaction between GCE and the school climate: GCE will be easier if there is a warm classroom climate, but GCE can also promote a warm classroom climate. The BeGlobal documentation show that VET-students can come across as un-nuanced and radicalised. A number of them have closer ties to cultures and population groups which internationally are under pressure, and they follow social media in this regard. An open and warm classroom climate should ensure that they always feel accepted and included as an individual. This may be by taking the focus away from one's own opinion and showing multiple perspectives, without students having to voice their opinions at that point.

A number of students (like teachers) feel that they are 'only' in vocational education and that they 'only' belong to a certain culture. Negative thoughts can block openness or learning. Teaching them to think positively in this regard (and letting them experience it by working with the neighbourhood), can change this image (but not by enthusiastically asserting the opposite). This picture is partly reinforced by academic research that shows that for GCE as well, VET-students do less well than students from general secondary education. No research could be found that identified the GCE-strengths of VET-students. This can be explained by the fact that GCE systemically advantages students from general secondary education based on classical didactic thinking (which is also incorporated in the learning objectives).

A warm and open classroom climate starts with interest in the students' living environment and being aware of important elements in it. This is reinforced by making time for them outside of traditional classroom hours and giving them responsibility. When an NGO staff member has the skills to control a group using non-verbal communication, this helps to defuse unwanted behaviour without having to enter into conflict.

A warm and open classroom climate (or democratic classroom climate) is a recurring element in academic research on GCE (Kavadias, 2017, Sampermans, 2021, Jerome, 2024).

6. Participation (structural): GCE without participatory processes is a contradiction in terms.

Structural participation means that forms of or promoting participation are part of a project. It is difficult to come across as credible on GCE themes if there is no form of input and co-decision making for students. Structural participation has a number of sub aspects:

- Just as is the case for teachers, a diverse offering and different ways to participate ensures more participation. Choices increase the likelihood that students will be receptive to the offering. An offering in which students can participate voluntarily (outside of school hours) gives those already convinced the opportunity to fully invest themselves.
- Input and participation should ideally be structurally built into the project at set times. This can be reinforced by incorporating consultation structures at the level of the student into the project or initiating them via the project.
- A clear goal and end point, and the advantages in determining these, contrast in the first instance with the freedom to partly determine the end goal. The latter is necessary so as not to force students into mandatory forms of 'solidarity', 'action' or 'awareness of others'. Setting endpoints with conditions attached can avoid this dilemma. E.g. We organise an end moment in the form of a market for the other students, your material has to fit on a table of 70cm x 120cm, you have 3 minutes to win over the other students, and it must include a playful element.

In a well-constructed project, most of these elements have already been addressed or practiced.

7. Participation (process): GCE without participatory processes is a contradiction in terms.

Participation as a process explains what participation means in the courses themselves: changing groups, but also choosing their own groups, having a say in what is feasible, sharing strengths (from vocational education), being clear in what is not possible, availability, evaluation of teacher and NGO staff member, online support, and collaboration. This is more of a collection of general didactic principles in the area of learning processes to promote input. The fact that they are nevertheless frequently mentioned in the BeGlobal documentation means that they are not entirely acquired.

8. Project in the short-term: What are strengths of a project in the short-term?

If GCE is to become a strong element in vocational education, many opportunities will be lost if the basis is not practical subjects. Students choose a study area, derive part of their identity from it, and incorporate it at least implicitly into their future prospects. Being able to choose the subject, make it part of yourself and use it to achieve a long-term goal that you share with others are the basic conditions for hope. They ensure a high intrinsic motivation and positive emotions, mediated in part by self-efficacy (Franke et al., 2017).

Moreover, the practical subjects open up opportunities to actively engage with the neighbourhood and the traineeship network connected to GCE. Where there are positive examples in the literature about using practical subjects as the basis, these often have a link to the local network (e.g. a Repair Café from engineering or a day on healthy meals from Nutrition and Care). On the other hand, the fact that the same examples keep coming back indicates a failure to see the potential of using the practical subjects as the basis. This aspect is further elaborated in the section on international and national literature.

It is recommended that a culture is created immediately in which NGO staff and teachers work together and activities take place even when NGO staff are not there. Indeed, the teachers themselves are the specialists of the (practical) subjects.

GCE can clarify the strengths of students in the early years of vocational education, and have the students practise them, which can help with study choices. In both linguistic parts of the country, there are opportunities in legislation and in other projects that GCE can take advantage of, although these are not always connected to the practical subjects and are therefore also pitfalls. The list of criteria under this category is intended for a project in the first year of collaboration and includes several criteria that can initiate a collaboration when a project is not possible.

9. Project in the long-term: What are strengths of a project in the long-term?

When a long-term collaboration is possible, and there is no long-term vision, a project quickly becomes a cultural phenomenon that is repeated every year. Agreements to adjust and expand should therefore ideally be made early in the first year. Securing the project (in the digital systems of the school) and in the school's operations will ensure that it is long-term. It can also be expanded across classes and schools. The link to 'Point 1' (living environments of students and neighbourhood-oriented work) usually prompts a neighbourhood to ask the school to continue working together after a year of collaboration. This can also result in a long-term commitment around GCE.

Both growth curves are part of working with long-term projects. It is striking that both growth curves are based on BeGlobal's French sources. Growth curve 1 is based on strengthening collaboration within the school in the area of content. It starts with schools where there is little authority on the part of teachers, and there are order and respect problems. We should assume that a number of schools meet this criterion and GCE is then seen as a tool that can help install a warm and open classroom climate (point 5) and therefore help build conditions for learning. The final step in this growth curve means that the school can keep developing the project independently. NGO staff can use this growth curve to work out the steps for future years and monitor the evolutions.

Of course, the structural collaboration should also aim to involve as many students as possible.

Growth curve 2 starts from the students' perspective and keeps an eye on the safety of the learning processes in a long-term collaboration. This growth curve is developed in two columns. The first is about who the collaboration will be with. The second is about growing in democratic citizenship. The two columns do not have to run completely concurrently, but opportunities will be lost if, for example, a school focuses on collaboration in the international context and still finds it in participation at the 'engaging' level.

Regardless of the two growth curves, it is still important for a school to become increasingly self-sufficient in the area of GCE, and for the NGO to make itself surplus to requirements. This too must also be monitored by the NGO. It is very unfortunate that a project stays with the NGO staff member, and disappears along with that staff member.

Some elements of sustainable long-term approaches are further elaborated in the next section.

10. Reflection and evaluation: ensuring that it is possible to see change and progress.

The BeGlobal documentation does not have much focus on reflection and evaluation, while this is essential for getting an overview of students' learning processes and for monitoring projects. A common refrain heard from external staff in schools (not just from the GCE sector) is that they don't want to be involved in assessing students. That is a good thing. The evaluation of students should not depend (only) on the assessment of someone who does not really know the student or has not seen the student enough. That does not change the fact that reflection and evaluation are much broader than assessments.

The first goal of evaluating students in GCE is not an evaluation for the school, but for the student him or herself. Through GCE activities, students should develop an increasingly nuanced self-image of themselves with regard to GCE topics. Self-evaluation is necessary in this regard. The conditions are that it is systematic, maintained, remains available to the student and recurs in subsequent activities over years. Through self-evaluation, nuanced language develops, and vice versa, richer, nuanced language makes for deeper self-evaluation. Self-evaluation is therefore the start of evaluation, only then does evaluation of learning objectives become interesting and meaningful.

The NGO staff member can provide this evaluation framework and associated tools for GCE, which is not the same as using them oneself. In consultation with the school, these can then be adapted to the school's framework. The principle is that NGO staff members master the learning processes for GCE so that they also have expertise in reflection and evaluation.

Every NGO and school should normally have the necessary know-how for monitoring and evaluating projects. The criteria for making these stronger are woven into the categorisation in different categories.

11. Support for NGOs: what do NGOs need to provide quality?

The analysis and coding produce various criteria that are the same across NGOs. BeGlobal can play the role of quality assurance for these criteria. Item 4 (Doing and experiencing) and item 10 (Reflection and evaluation) provide the most input for this. This support in itself is a long-term project.

Point 4 argues that for 21% of students in Wallonia and Brussels, and for 29% of students in Flanders, the GCE sector is systemically non-existent. A vision text specific to vocational education that starts by doing and experiencing is a starting point. A curriculum based on the Dutch model in which practical subjects are explicitly included with clear evaluation criteria is a next step. (A curriculum based on the Dutch model is a goal-based curriculum, while a curriculum based on the Flemish model is content-based (Taalunie.org, s.d.). The development, collection and provision of tools that specifically fit within the two criteria mentioned above can then be incorporated with the NGOs and schools.

Practical subjects are a starting point to reach out to industry sector organisations. Their interest is a motivated, but also flexible-thinking workforce. These can provide support (financial and content-related) to work on a range of cross-curricular work skills through GCE projects.

NGOs can strengthen their position and enhance know-how by bringing in their own VET-specialists and providing a clear point of contact in their own organisation for VET-teachers. A growth curve for implementing projects and monitoring quality, along with a (customisable) template for a collaboration protocol with schools helps them frame the collaboration. The third categorisation in this report can provide the basis for this.

12. Prestige of the school

Although the prestige of the school is given a strong emphasis in the study by Annoncer la Couleur (2015), it risks increasing segregation through GCE. Growth line 1 is based on this study, but without reprising the indications of the number of students with a low socio-economic index ("SES students" in Flanders). In any case, changing the prestige of the school is a long-term work. However, the Vlaggen en Wimpels project (Bossuyt, Joos C Morbee, s.d.) made it clear that focusing on a school that reflects the neighbourhood by partnering with the neighbourhood enhances the prestige of the school. Nevertheless, nuance must be added that this project ran primarily in primary schools.

Foreign traineeships will of course raise the prestige of the school as well, but the question is whether this will not become too much a story of the happy few. Or in other words, foreign traineeships can only contribute to GCE if it is contained in a much broader project that involves all students.

Finally, the 'prestige of a year' through strong projects on GCE, can encourage other years to develop similar initiatives.

Part 2 - Results from national and international literature

In which projects from national and international literature do we find these criteria?

The search for leading global citizenship projects started from databases that collect articles on global citizenship education regionally and globally. For the international literature, these were, in alphabetical order, APCEIU database, EPALE, GCED Clearinghouse, GCED Online Campus, Global Education and Learning database (GEL), Publications Office of the European Union, School Education Platform, UNESDOC (UNESCO) and UNEVOC. The national databases subject to the study are from Acodev, BeGlobal, Caritas, CNCD-11.11.11, Gentse Inspiratiebank voor Diversiteit op School (GIDS), Iles de Paix, Klascement and Studio Globo.

In the first instance, the researchers searched for projects, activities or literature on GCE in technical and vocational education. Next, the results found were checked against the stated criteria.

Regarding literature, the researcher primarily found general studies on GCE. These studies focused in only one case on technical and vocational secondary education (Suhonen, 2024). If researchers were already talking about this target group, often described in the international literature as Technical and Vocational Education and training (TVET), then it was mainly about TVET for adults or the economic/ecological importance of TVET-students, without a focus on GCE. This could be seen not only from our own research, but it was also noted by Suhonen et al. in interviews with teachers:

'At the policy level, international organisations have begun to emphasise the need for 'sustainability competencies' or 'skills for the green transition' in VET including both technical and transversal skills and competencies, but largely focusing on ensuring economic growth and preparing learners 'for the "greener" labour markets of tomorrow' (Inter-Agency Working Group on Work-based Learning 2022, in Suhonen 2024).

Although Suhonen's research corresponds to some of our criteria, such as starting from the student's doing and experience, involving local actors, and embedding GCE in curricula (Suhonen 2024), it is important to note that their literature review and the results from their survey of teachers do not provide concrete guidance for the latter.

Leading research in Belgium also recognises the blind spot that GCE represents for vocational education at the moment. In 'Manuel d'éducation à la citoyenneté mondiale. Une perspective belge.' (Giraud et alli, 2024) only lists one pedagogical learning path by Kruit for vocational education as an example, out of a total of 264 pages. However, the researchers recognise the need for a further literature review on GCE for this target group: (freely translated)

"The Minister for Development Cooperation, Enabel and the Annoncer la Couleur/Kruit programme intend to open up new fields of action for the future (2021-2025): particular emphasis will be placed on less-reached groups, such as students in vocational and artistic education [...]. (Giraud et alli, 2024)"

The specific tools that are immediately useful for GCE in technical and vocational education are not only scarce in the literature, but also in the analysed activities and teaching programmes. Moreover, the effectiveness of the applied learning methods is never demonstrated. Teachers, in other words, have to search for effective teaching methods applied

to the vocational target audience. The experiences of the teachers interviewed confirm these findings.

The following is a schematic overview of the databases examined and the number of relevant and useful results that came up.

Platform	Quantity search results ₁	Quantity relevant but not useful results for labour market finality	Number of usable results for labour market finality	Percentage of useful material
APCEIU Database	1	0	0	0%
EPALE	0	0	0	0%
GCED Clearinghouse	6	2	0	0%
GCED Online Campus	0	1	0	0%
Global Education and Learning Database (GEL).	50	6	1	2.0%
Publications Office of the European Union	1	0	0	0%
School Education Platform	234	11	13	5.5%
UNESDOC	2	2	0	0%
UNEVOC	1	0	0	0%
ACODEV	2	2	1	50%
BeGlobal	321 (of which 10% were analysed)	13 (out of 32)	0 (out of 32)	0%
Caritas	3	1	0	0%
GIDS	1	1	0	0%

¹ These databases were searched for search terms in the language of the database. For the search terms used, see 'Methodology'.

As the summary table shows, after critical screening, there is not much ready-to-use material left for teachers in vocational education. A brief explanation of the usable material, by way of illustration:

The first example can be found in the Klascement database and is an inspiration brochure by Kruit on the potential of digital tools in GCE. This brochure includes one project developed specifically for students in technical and vocational education: "Where is the water?" by Join For Water and GameWise (Kruit vzw, s.d.). In this activity, young people are sent into the city by themselves with a tablet that leads them to local retailers. Based on their own experiences, they play the game and learn about their water footprint. This game therefore responds to 2 of our 12 criteria, namely: Learner/NGO: specialist of their own living environment and Doing and Experiencing.

If we take the search on the **School Education Platform** as an example, this illustrates the frustration of teachers in their search. Traditional search terms, such as "Vocational Education and Training + Citizenship Education" and its variations, generate 0 results. Only when the filters are used broadly enough and references to Global Citizenship Education are omitted, 234 results are generated. The prerequisite is that the teacher is familiar with the database and underlying philosophy. Of these 234 results, 13 (5.5%) provide useful ideas but no useful projects for vocational education. One of the reasons is that the term 'Vocational' primarily filters projects in which the arts (art education, arts) are used. It must be very discouraging for VET-teachers to source material in this way. The fact that applying the 10% rule at random in our own methodology generally fails to produce results confirms the fact that the way the databases for GCE are constructed are problematic, and the fact projects vocational education are lacking in these databases.

The reason why working with the neighbourhood and practical subjects can lead to strong GCE projects with an international dimension is illustrated below in two examples. They start from one or more VET-study subjects and the experiences of one of the researchers.

Hairdressing:

- The neighbourhood-oriented starting point is the different hairstyles in individuals' own families. Conversations about hairstyles with relatives of different generations help connect. Photographs can enhance discussions about them in class.
- Students create gift certificates for a free haircut. The goal is not to hand these out already, but to raise awareness that they will be handed out (clear end goal).
- The initial search for hairstyles is extended across multicultural channels via families and friends. What are (traditional) hairstyles in individuals' countries of origin? Which country's hairstyles would you like to learn more about? What is different from how the students themselves work? Based on this, students test out hairstyles on barber's mannequins. Students continue the project by taking pictures and using them to put together a mood board. Students analyse the photos together to discover the techniques used to create the hairstyles.
- Based on the mood boards, there is a pretend sales event on a day when the school opens its doors to the public (e.g., open day). Students present their mood board and their own design, and ask for feedback. Visitors are given three tokens they can give to different students if they see a design they think would suit them. The goal is not to award a 'winner', but rather to critically examine the individual designs.

- In the next lesson, they will discuss which designs were 'commercially' interesting and why. The students continue to experiment with the barber's mannequin.
- Students once again seek input. This time in the fashion world, but the icon has to come from another country (see We Present on the Wettransfer site).
- An additional challenge: a small head covering, attribute, or accessory must be added to the design.
- At the traineeship location, the students ask if a customer can be interviewed. The customer brings some photos of hairstyles (either that they like or from their past).
- Visit to retirement home and ecological input: what was it like at the hairdresser's back in the day? How often did you go? What products did they use? Was it more ecological then or now? Each student has a conversation with one resident.
- Moral dilemma: Who do you give your gift certificate to? To someone you know? Why? To someone who needs it? To what extent are you willing to adapt your design to the person's requests. Or do you base your choice of person on your design?
- Giving someone the haircut as part of the Integrated Trial (GIP).

Mechanics and Electricity:

- The students visit a museum of industrial archaeology with a focus on energy, past and present. They take pictures of objects and images related to energy.
- Based on these photos, they debate with older people in the neighbourhood; the retirement home is used as a go-between. In the meantime, the teachers search with the retirement home for people who used to be involved with energy.
- The 'energy specialists of the past' are invited to the school. The students show them around their work area. The tour is prepared in the general subjects project. The focus of the discussion is the comparison between past and present.
- The end goal is announced: building a portable power supply to charge a battery. The battery has to provide energy for three nights, 3 hours each time.
- Students choose one form of energy per subgroup that they would like to continue working on (water, wind, solar, kinetic energy, etc.). They look for examples of this in their own culture and in possible home countries.
- They develop their knowledge via the internet based on search terms given by the teachers, and visit the site of lowtechmagazine (<https://solar.lowtechmagazine.com/> of <https://www.lowtechmagazine.be/> , s.d.).
- The subgroups start with a first design. They create a technical drawing and a non-working model (with support). All parts have to be incorporated.
- A contact person from another country is sought for each subgroup, preferably introduced by a student. If this is not possible for each subgroup, the school/NGO can help out. Based on the model, they enter into discussion. The contact person from another country provides feedback on what is feasible (and possibly affordable) in their country.
- The students adapt their design based on the feedback. They discuss this at their traineeship location.
- The school launches a sponsorship campaign to get as many designs as possible into

other countries. This can happen by providing plans (with instructional videos) or scale models or tools.

- The subgroups further develop their design into a prototype that works. They test whether it meets the requirements and make adjustments. This is done in three iterations. The students now contact individuals from their neighbourhoods/traineeships themselves to provide additional feedback.
- The subgroups finalise their design. The models are exhibited in at the school's open day and during the summer holiday at the local cultural centre. The opening will be publicised via local government channels.
- In the final weeks, the younger classes (and even students from the final year of primary school) will visit the exhibition. Students from the 'healthcare choice subject' can develop a workshop and be involved in the project that way.

What factors reinforce or balance working with GCE in vocational education?

To better understand the correlated factors that determine whether students work with GCE in labour market finality, a systemic analysis with feedback loops was performed on the third categorisation (Meadows, s.d.; Jones C Van Ael, 2022). In the first iteration, possible feedback loops were recorded. In the second iteration, these loops were systematically developed and recalibrated to the methodological requirements. This involves retranslating each item to a neutral position, based on the wording "The extent to which...". The analysis automatically results in levers. These are factors that are found in multiple feedback loops, and which have a bigger impact on the system. The third iteration was used to eliminate errors in the loops.

A bigger system map (A3) is attached in Annex 2 – System map - third categorisation:

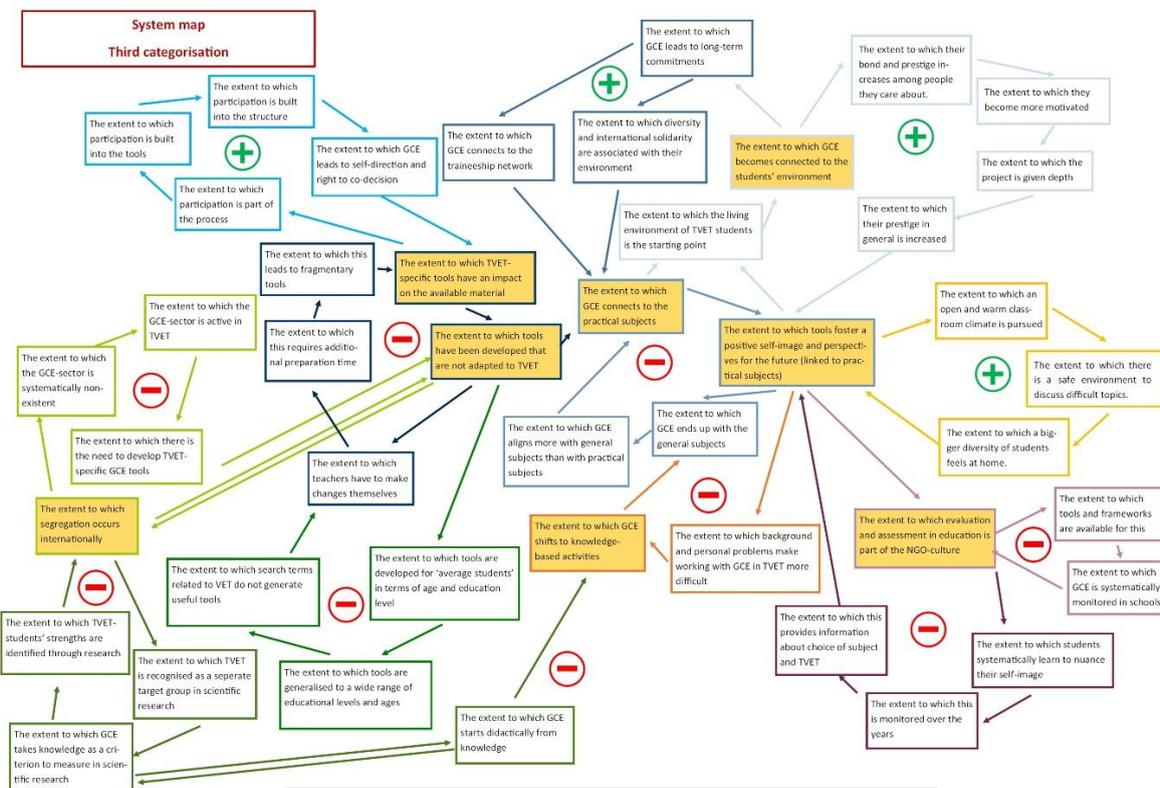


Figure 2. System map of the third categorisation with positive and negative feedback loops. The levers have a yellow background.

The feedback loops and associated arrows each have their own colour. In each loop there is a red minus sign or a green plus sign. The red minus sign indicates a balancing loop, the green plus sign indicates a reinforcing loop. It is important to take into account that a system map is a snapshot in time. In other words, the reinforcing or balancing nature of a feedback loop applies to the system as it is. If there is a different policy for certain factors, a balancing loop can turn into a reinforcing loop, or vice versa. The factors with a yellow background are the levers, or the places where multiple feedback loops converge.

The various feedback loops in the system:

The reinforcing feedback loops:

1. The first reinforcing feedback loop is about participation. There can be participation in the learning process or teaching tools, which means that students can learn about and practice participatory skills in a lesson. The reinforcing element is mainly determined by raising participation to the structural level of the project, or its self-directing nature across projects, in accordance with the second column of growth curve 2.
2. The second reinforcing loop takes the students' living environments as the starting point, which can lead to long-term engagement. The feedback loop acts through two pathways on the extent to which GCE connects to practice. First through the traineeship network and second through diversity and international solidarity, starting from the students' environment. Long-term engagement is necessary to ensure that GCE does not get stuck in one-shot actions.
3. The third feedback loop focuses on students' self-image and future prospects. The loop makes clear how prestige can be a driver for motivation and depth in the project. Prestige from those who they care about, comes before general prestige. The positive self-image makes them willing to open up their living environments to the school and GCE.
4. The fourth and final reinforcing feedback loop reflects the effect of a warm and open classroom climate. This makes students feel safer, which causes a greater diversity of students to feel at home, which strengthens their self-esteem.

The balancing feedback loops:

- 1) The first balancing feedback loop has two pathways and reduces the extent to which tools are developed that are not adapted to vocational education. The first pathway leads to the factor that states that there are not that many countries where segregated education is the rule. In such cases, no specific tools for vocational education will be developed in those countries. That second pathway shows that if the GCE sector is not active in vocational education, there is also no need to develop VET-specific tools.
- 2) The second loop reveals what happens when teachers have to make their own changes to tools. The result is fragmentary tools that have too little impact on making the material visible to other teachers. This then means that more visible tools are not adapted to vocational education.
- 3) The third loop reflects the effect of tools that are presented in a way that is too general. This reinforces the effect that search terms do not lead to tools, which means that teachers have to adapt tools.
- 4) Loop 4 explains what happens when GCE stays within the general subjects, leaving practical subjects out.
- 5) Loop 5 is also negatively reinforced by balancing loop 6, in which students' backgrounds and personal problems prompt teachers to choose knowledge-oriented subjects, reinforcing the connection to general subjects.
- 6) The sixth feedback loop shows that when NGOs avoid evaluation of GCE, the tools and frameworks to track the students' growth are not developed.

- 7) Loop 7 shows that, as a result, students do not have the opportunity to develop a nuanced self-image, which means that opportunities to have an impact on study choices and a positive self-image based on GCE are lost.
- 8) In loop 8, we see the impact of scientific research. The fact that segregation in education is relatively rare means that research relies heavily on knowledge as a criterion to measure GCE. As a result, the strengths of vocational education do not jump in the eye and, at the pedagogical level, the knowledge-based approach to vocational education is not called into question. This fosters the knowledge-based approach in practice.

Balancing loops are in the majority, which confirms the observation that GCE does not enter easily in vocational education. What is more, the analysis gives strong indications that the system 'GCE in VET' is in danger of disintegrating if the policy does not change (9 balancing loops versus 4 reinforcing loops).

Three levers are connected to the reinforcing loops:

- The extent to which VET-specific tools impact the available material.
- The extent to which GCE connects to the practical subjects.
- The extent to which GCE becomes connected to students' environment.

One lever is connected to reinforcing and balancing loops:

- The extent to which tools foster a positive self-image and perspectives for the future (linked to practical subjects).

Four levers are connected by balancing loops:

- The extent to which tools have been developed that are not adapted to VET.
- The extent to which evaluation and assessment in education is part NGO-culture.
- The extent to which segregation (in education) occurs internationally.
- The extent to which GCE shifts to knowledge-based activities.

We discuss all the levers:

- The extent to which VET-specific tools impact the available material.

This lever is somewhat surprising because it does not appear as a criterion in the third categorisation. Nevertheless, it is a highly logical one, because the multiplier effect of GCE in vocational education is primarily related to the impact of VET-specific tools. Or in other words, only when enough tools can be found for VET (which are qualitatively robust), teachers in non-supported schools will be able to experiment and develop them on their own.

- The extent to which GCE connects to the practical subjects.

The importance of connecting to the practical subjects from the third categorisation is confirmed here. The reasons are the same. It is easier and more productive to work on positive self-esteem via the practical subjects, as this both opens up possibilities to work with the neighbourhood and strengthens the connection to a positive and warm classroom climate.

Doing and experiencing is at the core of the practical subjects, making it a more natural way for VET-teachers and VET-students to adapt GCE to their reality.

- The extent to which GCE is connected to students' environment.

The feedback loops make it clear that connecting with the students' environment has both a positive impact on their motivation and prestige. This opens the way to strengthen GCE through international solidarity and the traineeship network.

- The extent to which tools foster a positive self-image and perspectives for the future (associated with the practical subjects).

This lever works to strengthen an open and warm classroom climate. If students disrupt this open classroom climate, due to their backgrounds or personal situations, we see GCE shift to knowledge and to general subjects. It should be emphasised that the analysis does not indicate that GCE cannot be taught in the general subjects, but rather that GCE alone in the general subjects is a tricky route.

- The extent to which tools have been developed that are not adapted to VET.

This criterion was to be expected as a lever. The central position in the diagram and the direct link to two other levers makes it clear that this is an important lever. Especially since this lever controls three balancing loops. Moreover, this lever is a condition for the lever just above it: the extent to which VET-specific tools impact the available material.

- The extent to which evaluation and assessment in education is part of NGO culture

This lever also does not appear in the criteria as such. It is a factor that has emerged to close feedback loops. From the research, it is not possible to estimate whether evaluation and assessment in education are or aren't part of an NGO's culture. If they are, these can quickly become reinforcing loops. If not, working out evaluation and assessment in itself will not be enough to implement it.

- The extent to which segregation (in education) occurs internationally.

Segregation, has been an option in education only in a limited number of countries. This means that at the international level, VET develops in many different forms, and is not universally associated with the perception that it is education for the weakest students. That does not change the fact that the knowledge-oriented approach for GCE at the methodological level is also driven by other motivations. This approach reinforces the view that GCE must start from knowledge, which pushes GCE toward general subjects.

- The extent to which GCE shifts to knowledge-based activities.

This is the final lever that links scientific research and the dominant pedagogical model on the one hand and classroom practice on the other.

Part 3 - Results from interviews

In what way do three (T)VET-teachers and three NGOs, from the French-speaking and Dutch-speaking parts of the country, view the criteria and trends from the criteria?

3.1 Introduction

During September and early October 2024, six respondents were surveyed about their experience with GCE, the barriers and levers they experience in the process. The group of respondents was made up of three TVET-teachers, each working in a secondary school in Wallonia, Brussels or Flanders, and three NGOs working around GCE in Wallonia, Brussels and Flanders.

The respondents' data were anonymised and coded as follows:

- T1 = Teacher 1, working in Flanders
- T2 = Teacher 2, working in Wallonia
- T3 = Teacher 3, working in Brussels.
- NGO1 = NGO 1 working in Flanders
- NGO2 = NGO 2 working in Brussels and Wallonia
- NGO2 = NGO 2 working in Brussels and Wallonia

The following sections will discuss the similarities and differences in the respondents' answers and test the barriers and conditions that are highlighted against the criteria we gleaned from the BeGlobal documentation.

When we refer to 'students' below, we always mean (T)VET-students.

3.2 Successful examples

After introducing and giving context to the research project, the opening question of the interview asked about examples of successful projects. The examples vary widely, ranging from international to Belgian projects outside and inside the schools, in cooperation with NGOs or on the teacher's own initiative.

Below we will elaborate on the nature of the projects and the success factors cited by experts by experience that were interviewed.

International projects

The survey shows that international projects take the form of traineeships, but also European collaborations or immersion trips outside Europe. Success depends to a significant extent on the **motivation of the organising teachers** (T1, T2) and cooperation with the NGO and local agencies (T2, NGO2). It was indicated twice that a foreign immersion trip was cancelled, once due to political reasons (the organiser from the municipality was not re-elected), the

second time due to political unrest in the destination country, and the fact that the NGO no longer provided support after that.

One example of a successful foreign project was by T2, which came up with a theme (migration) and a type of journey (train journey following migration route to the former Iron Curtain) in co-creation with the students. The **students co-owned** the project, which increased engagement and outcomes.

"So that was really nice because the students helped to organise it." (T2)

In this project, students worked with the accompanying teachers to find activities they could do during the trip, such as contacting a local asylum shelter. The teachers took care of the logistical planning.

Belgian projects

Teacher 1, working in a Flemish secondary TVET-school, gave the successful example of a biannual exchange with a school in the German-speaking community in Belgium in which classes took turns visiting each other's parliament. According to the teacher, success lay in **making the subject matter tangible, the bond of trust between the teachers involved that makes** the project supported in the **long term**, and the fact that the learning takes place **outside the school walls**.

The interviews revealed that a school trip is a common way to incorporate GCE in technical and vocational education. Both T1 and NGO2 see from experience that GCE outside the school walls has a more positive impact on students than within the school setting, because of the students' potentially complex relationship with this school setting (NGO2) and because of the possibilities to meet new people a school trip offers (T1).

"I think the basis of global citizenship is really just getting to know the other person. And then if you stay within your four class walls, you then don't achieve your goal." (T1)

Nevertheless, constructive efforts are being made on GCE even within the school walls. Methodologies experienced as fruitful in school context include debating, creating digital media (such as podcasts and videos), a workshop with an NGO at school and incorporating GCE themes into (language) lessons using theatre, film and current events. NGO3 experienced that it is crucial to alternate **different forms of work** within the same project, in order for students to stay motivated.

"You need to vary the methods to try and keep them interested". (NGO3)

This experience is also shared by Teacher 3, who recalls an enthusiastically received collaboration with an NGO on identity. This alternated several active methodologies with expressive imagery and touched on **themes very close to the students themselves** such as self-identity in relation to others and equality at school, which meant that the students were very engaged. The class was led by a fellow teacher who also worked part-time in the NGO in question. When this colleague changed jobs, the knowledge and connection with the NGO also ended, and after that the project was cancelled.

This shows that not only student motivation but also teacher motivation is a basic requirement for keeping projects alive in the long term. NGO 1 also confirms this, as they start each project from co-creation with the teacher, and find that where the school creates a support base and room for GCE, teachers are more motivated to participate in long-term projects.

NGO 3 cites an example of a long-term project that starts from the individual level, and in their own words has been their most successful project with VET-students. Using the Japanese philosophy *ikigai*, the project prompts students to reflect on the sustainability of their future profession. The success here, according to the NGO, was threefold: the fact that this is a long-term project (at least five three-hour sessions), starts from the individual and from their education/future profession.

NGO 2 underlines these same factors as essential for GCE in vocational education, namely: long-term, based on co-creation with the students and teachers, starting from, and ideally also reaching out to, the students' living environment.

'The idea was first of all to map out the world-system and try to understand it better with the students, based on their knowledge. In any case, I think that if we want a project to work, it has to be based on co-construction, you can't just come in with bare knowledge'. (NGO2)

Collaboration with teachers and students is also the basis of a sustainable GCE project for NGO 1. The NGO staff member gives the example of working with a school that came to them for support with an idea around ownership in VET. The school's starting point was their experience that young people in VET often struggle with feelings of inferiority compared to other study areas. Their goal was to boost students' self-confidence by starting from ownership. To do this, the NGO involved both teachers and students in the design process. A brainstorm was organised about the students' fields of interest, and based on that, they were given the space to develop their own project with a neighbourhood organisation. According to the NGO, the success of this project lay in its participatory nature (involving both teacher and students), whereby the teacher's experiences and the students' interests were the starting point. In addition, trust and connection are crucial, so that students can take responsibility and excel in their skills.

In summary, the most frequently cited success factor for a GCE project in technical and vocational education is the **tangibility of the topic**. Taking the **students' daily living environment** as the starting point, is important (T1, T2, T3, NGO2, NGO3) as well as **equality** between teacher/NGO staff member and students (T2, NGO2). By alternating **different methodologies**, such as venturing outside the school walls (T1 and NGO2) and pursuing **long-term** projects (NGO2, NGO3) and a process of **co-creation** between NGOs, teachers and students (NGO2, NGO3).

3.3 Vision on knowledge as a starting point

"My students are doers, not thinkers, and they find pleasure in doing" (T2)

The successful examples were also tempered by a few less successful examples. Besides 'uninspiring content' which doesn't really interest them, the common denominator here is starting from knowledge. All respondents found action to be a prerequisite to making a project a success within vocational education. What is striking here, is that not all teachers and NGOs structurally base their projects on practice. Teacher 2 and NGO 3, who do not structurally start with action, modified their lessons or workshops over time because they found that knowledge as the starting point does not motivate. Specifically, this involved making the theoretical framework shorter, finding shorter texts or replacing them with other methodologies, such as

video, play, song, debate or items from current events.

Teacher 1 advocates a shift of focus from basic knowledge to **'knowledge base'** in this context:

"I prefer the word knowledge base rather than basic knowledge, because basic knowledge is very difficult, to put that right with everybody. But I find knowledge base much more interesting. The fact that everyone is talking about roughly the same facts." (T1)

The knowledge base of students is a positive starting point to start a GCE project with, not only because, unlike when basic knowledge is the starting point, it keeps the gate open for an action-focused start, but also because it empowers them. Starting from the students' own knowledge base and living environment activates their pride and gives them ownership of the topic.

In fact, starting from bare knowledge is not ideal in vocational schools, because it puts students in a certain position that is very uncomfortable for them, because most of these students are aware of their limitations and the difficulties they have at school. (NGO2)

Starting from an **active methodology that encourages doing** rather than knowledge is key. Four of the six respondents insist on this approach. Although there is a willingness to start from the students' living environment, the focus of one teacher and one NGO is still mainly on the knowledge framework:

"So I've never made much of a difference between the vocational [technical] students and the general students... Perhaps I try to use their world as the starting point, or their knowledge". (T2)

The question that arises here is whether the knowledge-based teaching method as T2 cites above stems from their frame of reference, or from the current trend that starts from knowledge over skills to attitude that UNESCO prioritises (UNESCO.org, s.d.) and thus ends up in teaching programmes and workshops.

In any case, the teachers surveyed make loud calls for educational tools designed specifically for vocational education. In other words, tools and workshops that start by doing, before subsequently moving to knowledge and attitude, and not the other way around. Teacher 1 gives the specific example here of the EDU boxes developed by VRT, which require a lot of adaptation.

3.4 Co-creation with students

Whereas a doing-and-experiencing approach is a well-known and (moderately) tested approach among all respondents, the same cannot be said for co-creation. It is notable that only two of the respondents, NGO 1 and 2, prioritise co-creation with students in developing activities.

"So if you want to get into technical & vocational schools, and even schools in general, the demand has to come more from students. So I think there's something to capitalize on, here, too. At the start of the year, I don't know, all the students who are class representatives should meet a whole range of organisations and, faced with their offering, they should be the ones in a strong position and it shouldn't always be us who come up with the idea". (NGO2)

NGO 3 had previously come into contact with a school that had involved a student in the decision-making and rollout process of the workshop the NGO was going to run there, although that was in the context of that student's traineeship. When asked if there would be interest in structurally including this methodology in the offering, the NGO replied:

"It's a very good question because I hadn't thought about it, and I think that internally we haven't really thought about it, it hasn't been put on the table, but then personally I think that in the future for [NGO3], if we have the opportunity to think about projects with young people obviously that's a good thing right now." (NGO3)

The response shows a genuine interest in this method of student participation. In the area of teacher participation, on the other hand, NGO 3 has more experience and also has a special focus on this (because they consequently start from the students' education).

Among the interviewed teachers, there is limited experience of working with students to decide on a topic and sketch out a project (T2). Although the other two teachers also cover GCE topics, they rely primarily on the learning objectives for their subject and there is little room for student input.

When asked how GCE themes are approached in the classroom, Teacher 2 said:

'Yes, but it depends. Sometimes it comes from me, sometimes from current events. Yeah, I know when the Rana Plaza collapsed in India, I chose that theme to work on argumentation, for example. [...] when there were the attacks in Belgium, then there were topics that came from the students because there were students from immigrant backgrounds who had very strong feelings about it. (T2)

Nevertheless, teachers and NGOs understand the importance of a co-creative process. Students who have a sense of ownership by being able to participate in the design and rollout of a project will embody GCE themes for a long time (T2, NGO1, NGO2, NGO3). It is essential in this regard that the relationship between the teacher/NGO staff member and the students starts from **equality and authenticity** (T1, T3, NGO1, NGO2). Without these two basic values, it is impossible to establish a safe classroom climate and allow students to participate in their worth and from their strengths.

"We really want to see the school as a safe place where social issues can be dealt with, because they are so complex.

Yes, we actually want to provide them with skills and tools, because there is no one-size-fits-all solution to that and there are also often themes there that involve a lot of emotions. So actually in school, already being able to talk about that within that protected context where you can experiment. Also, with those different opinions, different perspectives, because also in school there are many different kinds of people, opinions and so on." (NGO 1)

3.5 The need for a GCE curriculum in schools

The Free Subsidised Education in Francophone Belgium (Fédération des Etablissements Libres Subventionnés Indépendants - FELSI) has incorporated GCE in its curriculum, specifically in the subject "Citoyenneté et Philosophie" (Citizenship and Philosophy) (felsi.eu, s.d.). In contrast, in the surveyed schools from Catholic Education, GCE is not incorporated, but rather transversally woven into the subjects.

All respondents were asked whether they have visibility into a clear curriculum for GCE in their study areas and, if not, whether they see a need for it. Except for Teacher 3, who teaches in a FELSI school and where GCE is therefore embedded in the subject 'Citoyenneté et Philosophie', Teacher 1 and 2 feel a **need for clear guidelines** on GCE. NGO 1 also notes from experience that there is ambiguity about GCE and its link to the learning objectives among teachers, and believes that in this sense, a clear guideline could provide guidance, and GCE could be more structurally embedded in the curriculum.

Teacher 1 looks in the first instance for **constructive support from the school directors** and secondly for guidelines from Catholic Education, an umbrella network that his school is part of. Teacher 1 argues that Catholic Education, for example, could embed GCE in a subject that does not take place every week, such as 'People and Society' but instead takes the form of a project day once a month. However, the demand for a curriculum is conditional for teachers 1 and 2: they argue that teachers still need the **freedom** to shape their own guidelines within the subject. They see this 'flou artistique' as the advantage of not having a clear curriculum.

"The big advantage then is that these curricula do allow a fair amount of freedom. So even though we may be crying out for a curriculum and for some more content, I think it's also up to us teachers to find that content and adapt it to our target audience." (T1)

And

"So I think our freedom is important because it allows us to keep up with the news. I don't want it to be too rigid. On the other hand, I think it would be interesting if this were a compulsory theme in the programme." (T2)

According to Teacher 2, guidelines should come from the Ministry of Education, rather than from the school directors. In this way, they are included in the learning objectives, and Catholic Education would also be required to include them in their curriculum.

'In Catholic education there are no citizenship courses, so it's part of other programmes.' (T2)

It is notable that in all schools surveyed, regardless of the network or umbrella, GCE ends up

primarily in general education classes rather than in practical subjects.

'Well, definitely religion class. There are geography and history lessons, because they deal with this subject and it's probably more compulsory. But I think it would be interesting, at least for the French programme, if there were also content guidelines with the freedom to approach them in one way or another.' (T2)

The **need for embedding GCE in practical subjects** is not so much put forward by teachers as by the NGO staff members in the interviews.

In this regard, NGO 2 emphasises the importance of active **involvement of subject teachers** in GCE. They are therefore trying to use their organisation to identify the pedagogical importance of GCE and the direct link of the practical subject with GCE for the subject teachers. According to NGO 2, the key to support among teachers in VET is the motivating attitude of school directors. In this regard, this NGO also aligns with the views of Teacher 1 and NGO 3, who have made it their expertise to start from the vocational subjects of VET-students and link them to GCE.

The **role of the school directors** goes beyond motivating, as NGO 3 demands and Teacher 3 proves. NGO 3 underscores the need for a clear policy and for programmes at the school level to incorporate GCE effectively. They see the need for guidelines from the political level to make GCE mandatory in the curricula, so that even schools and teachers who are not yet motivated for it will be encouraged to do so. Teacher 3 gives a nice example from a school where an educational coordinator has been working for several months. This colleague is in contact with a cultural representative of the FELSI, who informs the school team about local initiatives that can fit within 'Citoyenneté et Philosophie' or another subject. On the Dutch-speaking side, there is an example of a school that appointed a full-time project coordinator to involve the neighbourhood and outside groups. (NGO1)

According to NGO1, it helps if the school directors free up time for teachers to participate in GCE working groups, such as COSMOS project of the Kdg College. The NGO collaborates on this study on creating school organisational structures that allow students to sustainably contribute to solutions to socially relevant science issues, and is positive about the involvement of subject teachers and teachers of general subject projects. (kdg.be/onderzoek, s.d.)

Whereas NGO 3 looks at the school directors and teachers, NGO 1 emphasises the **supportive role of NGOs**. They designed a curriculum around citizenship with teachers and delegates from Urban Education in the province of Antwerp, and found it to be a very inspiring example.

NGO 2 also calls for closer cooperation between decision-makers, NGOs and teachers:

"In any case, I'd like there to be more links between the upper levels and the people on the front line. [...]."

"We don't understand each other, and it's the same thing between school directors and school teams, between the Wallonia-Brussels Federation and teachers, and between the people working on the excellence pact and those who embody the excellence pact So I don't think it's a specific problem with the GCE, but in any case it's about making more links and, above all, what I realise is that there's an enormous amount, a living source of information, in all the organisations." (NGO2)

In conclusion, we can state that there is a demand for a clear curriculum that safeguards teachers' freedom, that is shaped in consultation with teachers, school directors and NGOs, so that GCE is given a structural place in Belgian education and, more specifically, among subject teachers in technical and vocational education.

3.5 Strengths of students and evaluation

In the interview, teachers and NGOs were asked what they believe are the skills that students in technical and vocational education excel in, how these could be used in GCE and whether these competencies are measured.

An overview of the most frequently mentioned strengths and their capabilities:

- **Language and spontaneity** → use this strength for a debate, a discussion, to collaborate and for them to connect with local residents or involved actors through interviews (T1, T2, NGO1)
- **Teamwork, conflict resolution, empathy and customer-oriented** → organisation and rollout of projects: have students work with NGOs or other organisations around GCE, these students love entrepreneurship and have a professional work ethic thanks to the close link with the field (teacher, possible traineeship) (T1, T2, T3, NGO1)
- **Hands-on mentality and curiosity** → involve their technical knowledge in the topics, make sure they are relevant to their future professions and start from their living environments (T1, T3, NGO3)

Regarding the evaluation of these skills, there is no structural approach among the surveyed teachers. At Teacher 1's school, skills are positively reinforced in an informal way, but there is no formal measurement. Previous attitude reports always ended in failure because of the extra workload for teachers and because the question in the staff room was what the weight of such a certificate could/should be. Pending a new values report, the school is working with a soft-skills test (Kickstart Your Soft-Skills, KYSS) that has an impact on the approval for an international traineeship. GCE competencies are also not structurally tracked or monitored at Teacher 2's school. Being on a class council can however be a bonus for a student's success. (T2)

The opinion of NGOs is clear: they do not see it as their job to evaluate students during an activity. NGO 2 therefore does not track skills. However, they do design a general framework of agreements and attitudes with the students before the start of an activity. NGO 3 believes that it is important for teachers to recognise the skills that are addressed in GCE projects and that special attention should be given in teacher training or in post-training to recognising and evaluating these specific skills. However, NGO 1 does recognise their role as supporters. They are currently conducting research on formative assessment to give teachers tools in evaluating those "hard-to-grasp skills" (NGO1). Because the staff member interviewed is not actively involved in that study, she could not comment any further.

The survey on strengths and methods of evaluation therefore shows that there is a lot of organisational and linguistic talent in vocational education that currently does not get structurally evaluated. Teachers are searching for tools and NGOs could take a supporting role in this regard.

3.6 Opportunities with cultures in the class

Literature shows that GCE is often about global themes, linked to other countries and cultures. Teachers and NGOs were asked about what opportunities they see for starting from the cultures in the classroom.

"That is. The. Big. Blind spot. In a lot of these things, but also about how course tools are structured. Which images do we use, right? Why are there always white kids called Julien and Sandrine or something? I'm just saying. A lot of things are possible. It's not used enough, and I think that is also one of the reasons why a lot of students aren't receptive to it, because that doesn't, because they can't identify themselves in that." (T1)

Teacher 1 finds this theme particularly topical. For one of his courses, he writes his own courses, with a focus on the diversity and living environments of the students. Apart from that, in his school, not much is actually done with the cultural diversity in the classroom. He does know about another school where a diversity day is organised. At the school of Teacher 3, a *'dîner international'* was once organised. The dinner was not repeated because so few students brought a meal from their own culture. Teacher 3 attributed this to modesty on the part of students, and it is interesting for further research to see what the underlying reasons for this may have been.

Teacher 2 also believes that the students in her class should be given a platform more often to talk about their culture and customs at home. The teacher sees several challenges in this regard, including classroom management when emotions run high, and teacher attitudes which she believes are sometimes latently racist and unconsciously stereotyping.

Again, it can be argued that teacher motivation, and a **safe classroom climate** with mutual trust and **equality** is essential to a GCE lesson with impact.

"How do you make difficult topics discussable in the classroom? [...] But especially, how can you work preventively before things escalate in the classroom, you know. So focusing on that connection, that plurality. Above all, show that it's OK that there are different opinions in your class. Also make sure that your class is that safe place where this is possible, so that you listen to each other with respect." (NGO1)

NGO1 sees opportunities as an organisation to start from these different cultures in the classroom by working with **methodologies** that encourage students to **explore different perspectives** and express their own opinions while being mindful of the others' point of view

"If you do that, and you have such rich diversity in your classroom, yes, that's actually great, isn't it?" (NGO1)

Finally, the other NGOs are also advocates of methodologies that start from the personal context of the students, focusing on an appreciation of their culture in order to open a window to other norms and value frameworks within the classroom, the school and the broader (inter)national context.

3.7 Local context

In what ways do the respondents involve the local context in GCE?

It was mentioned above in the successful examples that a school trip is a popular way to teach GCE. Although collaboration with local initiatives is rare during school trips, the will and interest in this regard is unanimous among all respondents. Local collaborations that came up included a traineeship collaboration with a community social centre (T1, T3), or with a nearby non-profit organisation (T2), a collaboration with an asylum shelter (T2), with several local retailers (NGO2) and libraries (T2 and T3). Or the school could be a hub of the local society by opening its doors to external evening classes or to a student-organised afternoon restaurant (NGO 1).

Teacher 1 is aware of communally organised activities, but does not have many positive experiences with them because the offering is often thought up by people who are not in front of the classroom or have no feeling for the students' living environments. The teacher thinks that the city government has a supporting role to play, on the condition that the context of the target audience is taken into account. This teacher generally starts from personal contacts and looks for local collaborations in an informal way.

In contrast, teacher 2's experience is that she would like to be informed more often about local initiatives that are about GCE topics or are open to collaborations. This teacher sees a clear role here for NGOs to connect schools with local community centres and other initiatives.

As mentioned earlier, on both the French- and Dutch-speaking sides, there is an example of a school that appointed a coordinator to connect neighbourhood initiatives and schools. (T3, NGO1) What is striking is that in none of the interviews, the potential of the student is seen as a gateway to the neighbourhood, while most agree that starting from the young people's living environment is the way to bring GCE to this target group.

In short, **bringing GCE closer to students**, both literally (the school neighbourhood) and figuratively (their own background), is currently put into place rather haphazard, at the initiative of the teacher and (in exceptional cases) backed up by a project coordinator at school. There is clearly a supporting role in this regard for NGOs (and students) who can provide a bridge between schools on the one hand and local initiatives on the other.

3.8 Support and interest in long-term collaboration

The survey leaves no room for doubt in the area of collaboration: all teachers and NGOs are open to long-term collaboration with each other. There is clearly demand for long-term projects on the NGOs' side. They enthusiastically emphasise the added value of it, such as time to get to know a classroom and school context, build a trusting relationship, go more in-depth and achieve a qualitative impact.

"There's no doubt that long-term projects are a sine qua non for trying to have any impact." (NGO2)

The literature also agrees. The 'Manuel d'éducation à la citoyenneté mondiale' states the following: (freely translated)

"GCE should be seen as a long-term process, a transversal practice that helps develop critical thinking, reflection, collaborative skills and so on. This perspective cannot really be reconciled with the 'workshop' or 'project' format of most of the interventions by NGOs active in GCE in schools. (Giraud, C et al., 2022)"

Long-term collaboration logically requires a more substantial time investment. This is the most frequently highlighted challenge that can test a collaboration (all respondents). NGO 1 has noticed a decline in enthusiasm for multi-year projects in recent years and links this decline to the significant time investment for teachers.

In second place, there's the factor of financial resources (T1, T2, T3, NGO2, NGO3), followed by the involvement of school directors (T1, T2, NGO1, NGO2, NGO3), of competent teachers that take initiative (T1, T2, T3, NGO1), of students (T2, T3, NGO1, NGO3) and parents (T1, NGO3). For a good collaboration with NGOs, it is essential that the above-mentioned challenges are taken into account, as is a flexible attitude on both sides where appreciation and space are necessary in order to listen to each other's context. (all respondents)

"It is the students who need global citizenship education the most outside the school walls, that are least able to participate because of financial barriers." (T1)

One NGO also raises the question of a different assessment factor. Currently, their clients measure the number of projects to calculate grants. The question is to be allowed to work on a qualitative basis rather than quantitative. (NGO2)

In terms of long-term cooperation with and support for NGOs and schools, it can be asserted that interest is strong on both sides, as are concerns about time, resources and commitment.

3.9 Use of digital tools in GCE

Finally, teachers and NGOs were asked in what ways they use digital tools and AI for GCE. What is striking is that not many of them have experience using AI in the classroom, and therefore for GCE. Teacher 3 previously did a project on media literacy, in which she had students think critically about AI-generated images and fake news. Teacher 1 is still reluctant to use AI because students are ambivalent towards it, especially those who are so afraid of it

that they don't use it, and those who adopt everything uncritically. According to the researchers, there is a good opportunity for GCE here, namely to make teachers familiar with AI and provide tools for critical doing and thinking exercises with students. According to Teacher 2:

"And with regard to Artificial Intelligence? That's a more general question. Yes, on the algorithms, that's more of a reflection. And yes, asking us questions and helping them to ask questions about references and the instructions we give them." (T2)

NGO 1 was interested by our question and will bring AI as a topic to a future team meeting.

As for digital tools in general, most actors use them in a hybrid way, i.e., alternating digital tools such as videos, games, QR codes, anonymous polls, etc. with offline assignments. For NGO 2, this last aspect is crucial and digital tools may play a complementary but not predominant role in GCE. NGO 3 sees an interesting avenue in using digital tools as topics rather than resources, for example, by having them reflect on the ecological impact of their use. According to Teacher 3, it's all good, as long as the school can provide the necessary tools. Unstable Internet connections and a lack of ICT infrastructure are some of the challenges in this area.

3.10 Conclusion of analysis of interviews

From the above analysis, we can conclude that GCE in vocational education is a relevant topic and, because of the inspiring examples and challenges raised, there is a lot of fuel for further research.

In conclusion, we will now assess the interview responses against the stated criteria. Below, each criterion will summarise key findings from the interviews, by showing what was confirmed or refuted in them.

The resulting challenges will then be reiterated.

1. The student: each person involved is a specialist in their own living environment

The interviews show that TVET-students show strong engagement when projects start from their **own living environment**. Successful GCE projects are those that match students' specific practical subjects, daily experiences and interests. This not only increases the motivation for, but also the effectiveness of global citizenship education. Moreover, the interviews revealed a significant **opportunity** for involving students in **exploring the school neighbourhood**. Where the local neighbourhood was involved in a GCE project, the initiative came primarily from the teacher, to a lesser extent from the NGO or an internal project coordinator, and rarely from the student's own cultural community.

2. Teachers (help NGOs): each person involved is a specialist in their own living environment

Teachers play a crucial role in facilitating GCE through their direct interaction with students. Their knowledge of the **classroom context and the individual needs** of students makes them indispensable in co-creating educational projects with NGOs. Teachers who are actively involved by NGOs in the design and implementation of GCE projects ensure a better connection to the students' living environments. The prerequisite is the positive **motivation of the teacher**, based on authenticity and equality with the students.

3. NGOs (help teachers): each person involved is a specialist in their own living environment

NGOs provide valuable support to teachers by providing their **expertise** and resources. Collaboration between NGOs and teachers that is based on trust and flexibility for each other's context is essential to the success of GCE projects, with NGOs often serving as the **bridge** between the school and the broader local community. NGOs can also help teachers with organisational support and innovative methodologies, as well as provide opportunities for teachers and students to get out of the school setting.

In short, the remaining opportunity in the triangle between student - teacher - NGO is the mutual interaction **between the three actors**. If there is consideration for engaging and co-creating with all parties, then GCE can really have an impactful and sustainable presence in VET.

4. Doing and experiencing: the doing component is essential to achieve learning

'To start by doing' was probably the key answer in the interviews.

The experience of the respondents shows that active methodologies are crucial to the success of GCE. To start a project with practical activities, such as debates, workshops and school trips appears to be more effective than starting with a theoretical introduction.

Despite the fact that all teachers and NGOs are convinced that an **approach focused on 'doing'** is the right way to impart knowledge in VET, the sequence 'head (knowledge), heart (attitude) and hands (skills)' is still often used to develop lessons and projects.

However, by structurally starting from practice, this target group gets into contact with more GCE references and themes, and can deepen their learning experience. Essentially, out of doing and experience comes theory or knowledge.

5. A warm classroom climate ensures mutual respect and tolerance.

A positive and supportive classroom climate is fundamental to GCE. It promotes mutual **respect and tolerance**, which is essential to discuss complex and sometimes sensitive social issues that are part of GCE. Teachers and NGOs stress the importance of a safe and inclusive learning environment where students feel appreciated and heard, and there is space for **plurality**. Equal treatment of VET-students among themselves and between them and other students is fundamental here.

6. Participation (structural): GCE without participatory processes is a contradiction in terms.

The structural participation of students in GCE projects is essential. This means that students not only participate in activities, but are also involved in planning and decision-making. This **increases their engagement** and accountability, leading to more sustainable learning outcomes. However, the analysis shows that co-creation with students is not yet structurally embedded everywhere. This is inconsistent with the criterion of participation, both structural and process-based. See also criteria 1, 2 and 3 regarding co-creation.

7. Participation (process): GCE without participatory processes is a contradiction in terms.

In addition to structural participation, process participation is also important. This means that students remain actively involved throughout the project and their input is continually asked for and appreciated. This dynamic process ensures that projects stay relevant to students.

8. Project in the short-term: what are strengths of a short-term project?

Short-term projects offer the possibility to respond quickly to current issues and the immediate living environments of students. The **role of teachers** is significant in this regard. Indeed, they are the specialists of the **(practical) subjects** and are closest to the student. The interviews revealed that GCE is currently more likely to be given space in general subjects such as religion, language and history, rather than in practical subjects. All of the NGOs interviewed try in their own way to emphasise the importance of GCE to teachers of practical subjects.

Short-term projects can act as stepping stones to more long-term initiatives.

9. Project in the long-term: what are strengths of a long-term project?

Long-term projects provide an opportunity to build **deeper relationships** between students, teachers and NGOs. In this way, they make it possible to deal with more complex topics and ensure lasting collaboration. These projects promote continuous learning and can lead to significant personal and academic growth in students. From the analysis, we can see that all respondents call for long-term projects, but all have concerns. The most common **barriers** feared or experienced in this regard are time, finances and the involvement of all parties (including parents).

10. Reflection and evaluation: ensuring that it is possible to see change and progress.

Reflection and evaluation are essential to identifying student learning and monitoring projects. By regularly reflecting on their experiences and evaluating their progress, students and teachers can gain insight into the results achieved and the areas that need improvement. However, the evaluation of GCE skills is not yet structurally embedded, which makes it trickier to visualise the impact. In the interviews, only one of the three NGOs saw a supporting role for itself in this evaluation. The other NGOs saw it as the teacher's job to assess students' skills. The right approach is probably to be found somewhere in the middle: the NGO staff member can provide GCE-evaluation tools that the school can still flexibly adapt to its own context.

11. Support for NGOs: what do NGOs need to provide quality work (besides their role as experts)?

In addition to their expertise, NGOs need structural support such as financial resources, space and time to build close relationships with teachers and students. A clear policy and involvement of the school directors are crucial to successfully integrate and support projects. Nevertheless, the current assessment criteria of their clients, which are often quantitative, can limit the quality of NGOs' work.

12. Prestige of the school

Although the prestige of the school, according to the literature, plays a role in the success of GCE projects, this theme did not emerge in the interviews. It is the case that teachers are often inspired by examples from colleagues or other schools, which indirectly raises the prestige of those examples.

Most common challenges

The most common challenges in global citizenship education (GCE) in technical and vocational secondary education in Belgium are diverse and complex.

1. The first major challenge is the time investment required for (long-term) projects, which is often difficult to combine with teachers' current workload.
2. In addition, financial resources are a significant barrier, as many schools and NGOs have limited budgets for extra-curricular activities.
3. The involvement of the school directors is crucial, but not always guaranteed, which can complicate the implementation of GCE projects.
4. Teacher and student motivation and commitment also play a role; without motivated initiative-taking teachers, projects may struggle to get off the ground.
5. Furthermore, there is a need for clear policies and guidelines from education policy to structurally embed GCE in the curriculum.
6. Cooperation between schools and NGOs requires a flexible attitude and mutual understanding.
7. Finally, technical infrastructure and access to digital resources can be challenging, especially in schools with limited ICT facilities.

These challenges call for an integrated approach in which all stakeholders work together and receive support from higher levels to realise sustainable and effective GCE projects.

4 Conclusions

4.1 Conclusion from the third categorisation

The living environment of VET-students is connected to a significant extent to their family, friends and topics they find important. International solidarity and the conventional GCE themes are not really relevant here. That is why it is advisable to initiate GCE through projects in their neighbourhoods and start looking for opportunities for GCE here. Teachers and NGO staff members can support each other in this regard by making their expertise available to the maximum extent possible according to the students' process. Doing and experiencing are essential in this regard. This is such an important condition that we can argue that for VET-students (and by extension for many disadvantaged groups in education), the GCE sector is non-existent. Based on doing and experiencing, GCE can thrive on and stimulate an open and warm classroom climate at the same time: a very rewarding, virtuous cycle.

Participation is one of the core principles of GCE and should be envisaged structurally and process-based in projects. The end goal is not participation, but rather self-direction and a culture of joint decision-making for teachers and students, both in projects and across projects. In terms of content, involving practical subjects is a must, because students derive a positive and future-oriented self-image from it, and it opens up opportunities to collaborate with the neighbourhood and the traineeship network. A project-based approach (which can start from course subjects, theme days, annual themes or project weeks) is best placed within a long-term plan that has a clear growth curve, on which schools and NGO's can mutually agree. On the one hand, reflection and evaluation is aimed at a nuanced self-image of students and on participation and the recognition of the student as a specialist of their living environment. This requires clear growth curves. On the other hand, reflection and evaluation should guide the projects over the years and open up possibilities for capitalisation. NGOs can be supported in this by developing a separate vision of GCE for VET and creating VET-specific tools. These tools should ideally be made available in open source to NGOs and schools. A curriculum for VET across subjects and years, and a way to evaluate it, is a prerequisite for this. The prestige of the school is not an end in itself for GCE, but strong collaboration with local actors via GCE can contribute to it.

For the time being, the third categorisation holds the middle ground between a categorisation resulting from scientific analysis and a useful tool to increase the intensity and quality of GCE in VET. Through a limited number of interviews, feedback was sought on the main criteria. As such, it is advisable in the next phase of the research project to test the framework more broadly, in order to realise successful implementation in practice. The cross-references between categories can be seen, on the one hand, as inconsistencies in the categorisation but, on the other hand, as hints to look at other categories for inspiration. We give an example: the category 'Reflection and Evaluation' (10) refers to rich language development as an engine for a nuanced self-image. There is a cross-reference here to the short-term project category (8), which states that richer language nuances and therefore connects the social group. Cross-referencing encourages users of this categorisation as a tool to incorporate language development into the project in different ways.

4.2 Conclusion from database-analysis on good practices

In conclusion, when teachers say that they have to adapt tools too often and that there are no tools to be found for VET, this research study confirms that they are correct. The most obvious search terms generate little or no material. Only when a database's structure is known, it generates useful ideas, but almost no useful projects. Some of the reasons are already described in the analysis of BeGlobal documentation. The two quotes from other reports at the start of the introduction and context of this study confirm this.

4.3 Conclusion from the reinforcing and balancing loops in the system map

The system map partially confirms what is gleaned from the categorisation, but also has nuances that shed a different light on realising GCE in VET. It is concerning that the balancing loops are significantly in the majority. This means that GCE is at risk of disintegrating in VET. It can also be put another way: where NGOs are not present in VET to offer strong projects, Global citizenship education degenerates to fairly knowledge-based citizenship education. It must be added that the BeGlobal documentation show that NGOs are comparatively less present in VET. The analysis clearly shows that the scientific culture on GCE and the prevailing didactic model are mutually reinforcing and advantage general secondary education. The system map analysis provides two new elements: firstly, that it is important that VET-specific tools need to be made visible to teachers. Not only by developing, but also by relabelling existing tools. The second new element is that NGOs belief in evaluating GCE is necessary to increase the potential on positive self-esteem of students.

Finally, the system map makes clear how inter-dependent the various factors are on each other. Careful consideration from sector experts, a focus on the possibility to adapt and listening to the job market are three elements that will be needed to get this 'wicked problem' in transition.

4.4 Conclusion from the interviews

In summary, the analysis of the interviews shows that successful GCE in vocational education depends on close collaboration between students, teachers and NGOs, each contributing from their own expertise and living environments. Active participation, a warm classroom climate and a focus on doing and experiencing are crucial elements. Both short- and long-term projects have their own strengths, and reflection and evaluation are essential to measure progress. NGOs need structural support to deliver quality work, and the prestige of the school can have a positive impact on the implementation and success of GCE projects. However, the analysis also highlights some discrepancies between the theoretical criteria and practical implementation, such as the lack of a structural practice-focused approach, co-creation with students, and embedding GCE skills in the curriculum.

Finally, this series of interviews not only highlighted useful examples and blind spots, but also

prompted respondents to reflect on their own methods and needs. In this sense, we can say that the discussion in itself is an essential way of bringing GCE to the attention of VET institutions. To conclude with the grateful words of Teacher 2:

"OK, but it's great, it gives me lots of ideas for this year, yes. [...] So, and to think about my practice again and get some ideas. Well yes, my problem is more afterwards, putting them in place, having ideas, it's not, it's afterwards. It's actually starting, it's one thing at a time, that's all. [...] thank you, yes, thank you for thinking about it. Yeah, it gives me energy." (T2)

5 Recommendations

5.1 Schools

- **Build relationships with the students' neighbourhood** and neighbours. These relationships open the possibility of drawing on students' living environments for learning. They bring the school and home culture closer together, which is a prerequisite for learning. Students and their families have international connections themselves. If these are used for GCE, it links to who they are and what they find important.
- Activate the **traineeship network** to support working in the neighbourhood. TVET-students derive part of their positive self-image and future prospects from their practical subject of choice. As a result, traineeship locations can be incubators to positively connect GCE with students' futures. Especially since GCE is essentially about the future (of our world).
- Form a **working group** (by grade) to develop doing- and neighbourhood-oriented projects. In this way, increase the offering of TVET-specific tools. This working group may have broader goals than GCE. Actively work towards sharing good practices for TVET.
- Provide time and space to enter into **long-term processes** with external organisations. GCE in TVET is a long-term project that can only be realised via the neighbourhood in a long-term perspective. In this way, it can be avoided that GCE gets caught up in actions that focus too much (or exclusively) on awareness or raising money or items for others. Consideration can be given to how the traineeship network can support this (financially).
- Give GCE (or the SDGs) a place in the school's vision statement and make this concrete in the school's **policy plans**. The focus of this should be making the SDGs a reality in the school system rather than in the learning goals for students. Communicate about this with stakeholders.

5.2 NGOs

- Aim to reach 25% of the offering with TVET and other specific target groups in education. This percentage corresponds to the number of students who chose this/these form(s) of education. Currently, TVET systemically cannot benefit from the offering of NGOs. Working with TVET will increase awareness for this target group and the development of tools for them.
- **Develop TVET-specific tools** and tools for other target groups in education. The starting point in this regard is the living environment of the students and what they find important. These tools will only be useful if they don't start from theory, or from

the didactic model 'knowledge - skills - attitude', but immediately connect to learning by doing. Practical subjects are the ideal gateway because they are better aligned with students' positive self-image and their practical aspect links to the traineeship network. This way, students can create a positive impact in their neighbourhoods more quickly.

- Develop a culture in which **evaluation** is not linked to 'students' points', but rather to giving students opportunities to develop a nuanced self-image. The expertise of NGOs is needed here to design a growth curve over the years and study areas. In this way, GCE can build bridges between students' strengths that are hidden from the school on the one hand, and study choices and labour market skills on the other.
- Provide adequate upskilling so that NGO staff speak **the language of education**. NGO staff members will of course be working in education. Speaking the language of education, including knowledge of curricula, language development, school rules, assessment systems, digital systems, etc. will allow NGO staff to see opportunities to translate GCE into school practice. This is necessary to change the current culture around GCE in education (which is now neither neighbourhood-oriented nor practical-oriented).
- Include a **TVET specialist** on the team. There are several options in this regard: a TVET-teacher, a volunteer expert by experience, a group of TVET-students who help shape projects, a collaborative project with youth work that includes TVET-students, etc.

5.3 BeGlobal

- Make GCE in TVET a **policy priority** to eliminate the systemic handicap. BeGlobal's own research, the databases with practical examples, the interviews with teachers, the number of TVET-schools that collaborate with NGOs, the search terms on which databases are structured, ... in all areas it seems that TVET is the blind spot in the system, while the group of students represents 21% (Federation Brussels-Wallonia) to 29% (Flemish Community) of students.
- **Clean up BeGlobal's tools** in terms of search terms, to make useful tools visible for TVET-teachers. A next step could be for BeGlobal to enter into discussions with the major databases in Belgium and use its international network to raise this issue at the international level. Collaboration with other sectors, such as nature and environmental education, art education and heritage education can strengthen this requirement.
- Develop a curriculum based on the Dutch model for all years in TVET. This item can then be **used for all practical subjects**. Expressly include the practice and the neighbourhood in this. This curriculum consists of successive goals. If designed SMART, the curriculum can form the basis for the recommendation right below. In addition, it can help to categorise good practices.

- Develop a **reflection, evaluation and assessment framework** for GCE in TVET that focuses in the first place on nuancing the self-image of students in the area of GCE. This framework should primarily serve students so that they are supported to build a positive self-image. Their identified strengths can help them in their subject choices and reveal TVET skills that remain hidden in the current curriculum. On the one hand, enter into dialogue with NGOs to include their expertise in this, and on the other hand, reflect with them on the need for this framework to structurally embed GCE in TVET. Here, too, collaboration with other educational sectors may be considered.
- Develop a **collaboration protocol** that allows schools and NGOs to engage with each other in a qualitative manner. This can ensure that prior consideration is given to the expertise that is mutually necessary to make a project successful. It also avoids the same pitfalls to recur.
- Develop a non-mandatory **growth curve for NGOs** to develop long-term implementation and quality of projects on GCE. In this way, NGOs would be challenged to push the boundaries towards structurally embedding GCE in schools.
- Set up two **learning networks**. One for the NGOs to work on TVET, and one for TVET-schools. Use these learning networks to help support the above-mentioned recommendations in a participatory manner. In these networks, turn the cultural differences between the two linguistic parts of the country into a strength. Of the sectors already mentioned, the GCE sector is the only one that is anchored at the federal level.

5.4 Government

- Provide **budget and support** to realise the **SDGs** in vocational education. In this regard, take into account the limited financial possibilities of the target group and the current shortfall TVET needs to catch up.
- **Support the scientific research** that links TVET and pedagogical practice.
- Provide **long-term support** according to the model of 'Kunstkuur for GCE'. This would allow specialists from TVET and experts from the GCE sector to experiment together with quality practices on GCE. Kunstkuur is a three-year collaboration between a school in mainstream education and a Part-time Arts Education school, (Cultuurkeur.be, s.d.).
- Strengthen the criteria in government databases to categorise or tag projects and good practices for TVET.
- Embed GCE in the learning objectives at the government level.

5.5 Scientific research

- Develop research that identifies via GCE the **strengths of students** from disadvantaged, multicultural and/or minority groups
- Develop research that valorises **GCE in VET** by trying out methodologically different paths.
- Support the practical field in developing a **curriculum and assessment models** for GCE.

5.6 A possible model for GCE projects in TVET

Currently, there is little point in organising impact research on GCE in TVET. There is no framework against which trends or effects it can be measured, there is no uniformity as to which scientific concepts give an accurate measurement of GCE. The development of a curriculum and a framework for (self-)evaluation to develop a nuanced self-image that includes an evolution over years are prerequisites for this, and these are not currently met. VET mainly needs guidelines to develop tools, which can incorporate the strengths of NGOs, schools and students.

In short, there is a need for a broad-based exploratory phase, in which diversity can increase in the first instance. Impact research only make sense in the next step. That does not change the fact that schools and NGOs can reflect on their processes and pathways in a valuable way. The third categorisation of this study, if refined, can serve as a **checklist of good practices**. Schools and NGOs can also use it to identify their strengths (and weaknesses).

The following roadmap can help in this regard:

1. Map the **strengths of the school and the NGO**. Identify synergies and pitfalls. The system map can help with this.
2. Get an idea (through students) of **the neighbourhood**. Identify opportunities to work with GCE
3. Map the **traineeship network** and opportunities for GCE within it. What are strengths of this network or of specific traineeship places?
4. Decide on the **angle** of the growth curves, and where you want this project to end up (see third categorisation).
5. Work out a basic concept for a **pilot project** involving several classes and/or years. Think about how you will involve the neighbourhood and the traineeship network. For a pilot project, focus on classes that already have a warm and open classroom climate.
6. Make sure this concept is approved by the **entire teaching staff**, including teachers who are not involved. Test the concept with stakeholders (neighbourhood, traineeship network, others).
7. Based on the basic concept, work out a **timetable**. Go over the criteria of the third categorisation and decide:
 - a. Where to find quick wins.

- b. Which can still be realised this year.
 - c. What the longer-term targets are.
- 8. Present the new concept to **stakeholders** as well as the classes involved.
- 9. **Continue to develop the project**, for each subject area involved, for classes in which there is an acceptable level of a warm and open classroom climate. Develop it to the level where the time investment of students and teachers is clear. Make sure the practical subjects, the neighbourhood, the traineeship network and the students are involved.
- 10. Set a clear **end goal** that still gives students a lot of space.
- 11. Consider and document how you will **measure** the goals of the project, the evolution of students and the evolution of teachers. Incorporate this into the planning for each class. Work SMART as well as focused on nuancing the self-image of students.
- 12. **Decide who is responsible for what**, based on the strengths and energy of all involved. Link this to the planning.
- 13. Decide how the **network** (of other schools and NGOs) can learn about this project and how they can adopt it in a subsequent year.
- 14. Plan 3 to 5 **evaluation sessions** at the project level, with an overview of your progress based on the third categorisation. If necessary, repeat step 7.
- 15. Based on this project, decide what **long-term planning for GCE** entails. What strengths of the school can we focus on even more, which weaknesses need to be compensated? What are opportunities for growth?
 - a. Based on this, devise a plan over 3 to 5 years to spread across multiple study areas and classes, and raise quality. Limit this plan to no more than 2 pages.
 - b. Develop a pre-trajectory to 'remedy' classes that do not have a warm and open classroom climate based on information from all teachers and not just the teachers who have difficulties with that class.

6. Literature

1. Abduh, L. (2022, September 29). *Kritisch wereldburgerschap verwerven kan ook dichter bij huis – MO**. MO* Magazine. <https://www.mo.be/column/om-welke-interculturele-competenties-gaat-het>
2. Acodev, C ALC. (z.d.). *Comment aborder l'éducation à la citoyenneté mondiale et solidaire avec vos étudiants et étudiantes? Activités et ressources pour les départements pédagogiques des Hautes Écoles 2017/2015*. Consulted September 20, 2024, from <https://www.acodev.be/ressources/comment-aborder-leducation-a-la-citoyennete-mondiale-et-solidaire-avec-vos-etudiants-et-e>
3. Agence Française de Développement, & Office for Climate Education. (2023). *Simulation d'une négociation climatique—Kit pédagogique à l'usage des enseignants du secondaire*. Consulted September 17, 2024, from <https://www.afd.fr/fr/ressources/simulation-dune-negociation-climatique-kit-pedagogique>
4. ANGEL (2024). *Global Education Digest 2023*. London: Development Education Research Centre, IOE, UCL's Faculty of Education and Society.
5. Annoncer la Couleur (2015). *L'Éducation à la Citoyenneté Mondiale dans les écoles de l'enseignement secondaire de la Fédération Wallonie-Bruxelles*. (Material BeGlobal).
6. Best Evidence Encyclopedia (z.d.). Consulted from <https://bestevidence.org/> on April 14, 2024.
7. Bossuyt, T., Joos, A., C Morbee, A. (z.d.). *4 jaar vlaggen & wimpels: Ervaringen, instrumenten en voorbeelden*. De Veerman.
7. Cabezudo, A. (2019). *Guide pratique sur l'éducation a la citoyennete mondiale. Concepts et méthodologies en matière d'éducation à la citoyenneté mondiale à l'usage d'éducateurs et de responsables politiques*. Centre Nord-Sud du conseil de l'Europe. <https://rm.coe.int/global-education-guidelines-version-francaise-168099098e>
8. Caritas International. (z.d.). *Caritas International België*. Consulted September 12, 2024, from <https://www.caritasinternational.be/nl/educatie/>
9. CFWB. (z.d.). *Population scolaire du fondamental et du secondaire (ordinaire et spécialisé)*. Chiffres Clés. Consulted September 30, 2024, from <https://statistiques.cfwb.be/enseignement/fondamental-et-secondaire/population-scolaire-du-fondamental-et-du-secondaire-ordinaire-et-specialise/>
10. CNCD-11.11.11. (2022, October 5). *Educatieve kaart 2022*. https://11.be/sites/default/files/2022-10/Educatieve%20kaart%202022_051022.pdf
11. *COSMOS - Creating Organisational Structures for Meaningful Science Education through Open Schooling for all | KdG Hogeschool*. (z.d.). Consulted October 2, 2024, from <https://www.kdg.be/onderzoek/projecten/cosmos-creating-organisational-structures-meaningful-science-education-through>
12. Cultuurkuur (z.d.). *Samen op weg met Kunstkuur*. Consulted from <https://www.cultuurkuur.be/kunstkuur> on October 10, 2024.

13. Decombel, C., & Giraud, C. (2024, August). *Global Citizenship Education—Magazine 2024—Verankering van wereldburgerschapeducatie in Belgische scholen: Waar staan we en wat moet er nog gebeuren?* <https://beglobal.BeGlobal.be/learn/magazine-2024- barometerstudie/>
14. Departement Onderwijs en Vorming. (z.d.). *Comissie der wijzen. Prioriteit voor professionaliteit. Hedendaags personeelsbeleid met competente leerkrachten, krachtige scholen en sterke schoolbesturen.* <https://data-onderwijs.vlaanderen.be/documenten/bestanden/rapport-commissie-van-wijzen.pdf>
15. Directorate-General for Education, Youth, Sport and Culture (European Commission), ET 2020 Working Group on Promoting Common Values and Inclusive Education, Donlevy, V., Staring, F., Battaglini, M., Driel, B. van, Leeuw-Roord, J. van der, C Janum, A. (2021). *Compendium of inspiring practices on inclusive and citizenship education.* Publications Office of the European Union. <https://data.europa.eu/doi/10.2766/473420>
16. *Discover | European School Education Platform.* (z.d.). Consulted September 11, 2024 from https://school-education.ec.europa.eu/en/discover?query=citizenship+education&sort_by=field_esep_publication_type%3A6356Cf%5B1%5D=insight article types%3A6356Cf%5B1%5D=insight article types%3A561459Cf%5B2%5D=insights education type%3A249
17. Education Endowment Foundation (z.d.). *Consulted from <https://educationendowmentfoundation.org.uk/> on April 14, 2024.*
18. *Enseignement.be—Les Indicateurs de l'enseignement.* (z.d.). Enseignement.be. Consulted September 30, 2024, from <http://www.enseignement.be/index.php?page=28570&navi=2264>
19. Eugenio-Gozalbo, M., Ramos-Truchero, G., Suárez-López, R., Andaluz Romanillos, M. S., C Rees, S. (2022). Introducing Food Sustainability in Formal Education: A Teaching-Learning Sequence Contextualized in the Garden for Secondary School Students. *Education Sciences*, 12(3), Article 3. <https://doi.org/10.3390/educsci12030168>
20. European Commission/EACEA/Eurydice (2017). *Citizenship Education at School in Europe – 2017. Eurydice Report.* Luxembourg: Publications Office of the European Union. Consulted September 19, 2024, from <https://www.gcedclearinghouse.org/sites/default/files/resources/180152eng.pdf>
21. Eurydice European Education and Culture Executive Agency. (2016). *Promoting citizenship and the common values of freedom, tolerance and non-discrimination through education: Overview of education policy developments in Europe following the Paris Declaration of 17 March 2015.* Publications Office of the European Union. Consulted September 10, 2024, from <https://data.europa.eu/doi/10.2797/396908>
22. Fédération Wallonie-Bruxelles. (z.d.). *Population scolaire du fondamental et du secondaire (ordinaire et spécialisé).* Chiffres Clés. Consulted September 30, 2024, from <https://statistiques.cfwb.be/enseignement/fondamental-et-secondaire/population-scolaire-du-fondamental-et-du-secondaire-ordinaire-et-specialise/>
23. *FELSI - Programme Tronc commun.* (z.d.). FELSI. Consulted October 1, 2024, from

<https://www.felsi.eu/tronc-commun>

24. *Formes et degrés de l'enseignement secondaire ordinaire de plein exercice*. (z.d.). Enseignement.be. Consulted September 11, 2024, from <http://www.enseignement.be/index.php?page=24547Cnavi=45>
25. Franke, K. B., Huebner, E. S., C Hills, K. J. (2017). Cross-Sectional and Prospective Associations Between Positive Emotions and General Life Satisfaction in Adolescents. *Journal of Happiness Studies*, 18(4), 1075-1093. <https://doi.org/10.1007/s10902-016-9763-8>
26. *GCED Clearinghouse database*. (z.d.). GCED Clearinghouse. Consulted September 10, 2024, from <https://www.gcedclearinghouse.org/about>
27. *GCED Online Campus*. (z.d.). Consulted September 12, 2024, from <https://www.gcedonlinecampus.org/HTML/about.php>
28. Gesche-Koning N. (2018). *Research for CULT Committee – Education in Cultural Heritage*, European Parliament, Policy Department for Structural and Cohesion Policies, Brussels
29. Giraud, C., Pirotte, G., & Faulx, D. (2022). *Manuel d'éducation à la citoyenneté mondiale. Une perspective belge*. Presses Universitaires.
30. Grano, P. (2022). *Glocal citizenship education in lower secondary school. A case study in the Canton of Ticino (Switzerland)* [Ph.D. Thesis, Universitat de Barcelona]. In *TDX (Tesis Doctorals en Xarxa)*. <https://www.tdx.cat/handle/10803/687617>
31. Grega, P., BAHR CABALLERO, K., C Grega, N. (2018). *Étude d'impact: Perception des enseignant-e-s quant à l'impact des interventions d'éducation à la citoyenneté mondiale et solidaire (ECMS) dans l'enseignement obligatoire de la Fédération Wallonie-Bruxelles (FWB). Rapport final*. <https://www.acodev.be/ressources/etude-dimpact-ecms-dans-lenseignement-obligatoire-rapport-final-drjs-2018>
32. Guerrero Farías, M. L. (2021). Elite global citizenship, a case of a secondary school in Bogotá, Colombia. *International Studies in Sociology of Education*, 30(3), 268-286. <https://doi.org/10.1080/09620214.2020.1819373>
33. Hanley (née Kan), N. (2020). *Empathy-Based Pedagogical Approach to Global Citizenship Education: Kazakhstani Secondary Schools Context* [Doctoral, UCL (University College London)]. In *Doctoral thesis, UCL (University College London)*. (pp. 1-1). UCL (University College London). <https://discovery.ucl.ac.uk/id/eprint/10097678/>
34. Han, C., Hoskins, B., C Sim, J. B. (2014). The relationship between civic attitudes and voting intention: An analysis of vocational upper secondary schools in England and Singapore. *Compare: A Journal of Comparative and International Education*, 44(5), 801–825.
35. Hattie, J. (2009). *Visible learning: a synthesis of meta-analyses relating to achievement*. New York: Routledge, and Visible Learning (z.d.). Consulted from <https://visible-learning.org/2016/04/hattie-ranking-backup-of-138-effects/> , on April 14, 2024.
36. Hirtt, J. (2019). *École, savoirs, climat. Enquête sur les connaissances et la conscientisation des élèves de fin d'enseignement secondaire, à propos du dérèglement climatique*. Consulted from <https://www.skolo.org/CM/wp->

<content/uploads/2019/10/Ecole-savoirs-climat-Aped-2019.pdf> on June 19, 2024.

37. Hong, Y. (2023). How will a conceptualized GCE curriculum function within Chinese secondary schools? *PROSPECTS*, 53(3), 443-457. <https://doi.org/10.1007/s11125-021-09596-0>
38. Imoka, C. (2018). Training for "Global Citizenship" but Local Irrelevance: The Case of an Upscale Nigerian Private Secondary School. In N. N. Wane C K. L. Todd (Red.), *Decolonial Pedagogy: Examining Sites of Resistance, Resurgence, and Renewal* (pp. 73-91). Springer International Publishing. https://doi.org/10.1007/978-3-030-01539-8_5
39. International Bureau of Education- United Nations Educational, Scientific and Cultural Organization (IBE-UNESCO). (2018). *Training tools for curriculum development: A RESOURCE PACK FOR GLOBAL CITIZENSHIP EDUCATION (GCE)*. <https://www.gcedclearinghouse.org/sites/default/files/resources/190059eng.pdf>
40. Jerome, L., Hyder, F., Hilal, Y., C Kisby, B. (2024). A systematic literature review of research examining the impact of citizenship education on active citizenship outcomes. *Review of Education*, 12(2), e3472. <https://doi.org/10.1002/rev3.3472>
41. Joint Research Centre (European Commission), Caldeira, S., Wollgast, J., Storcksdieck, S., C Mak, T. N. (2016). *How to promote fruit and vegetable consumption in schools: A toolkit*. Publications Office of the European Union. <https://data.europa.eu/doi/10.2788/33817>
42. Jones, P. C Van Ael, K. (2022). *Design systems through complex systems*. BIS Publisher.
43. Karanikola, Z., C Panagiotopoulos, G. (2023a). Adult Education and Globally Engaged Trainers: The Case of Vocational Training Institutes. *Education Sciences*, 13(4), 362. <https://doi.org/10.3390/educsci13040362>
44. Kavadias, D., Hemmerichs, K., C Spruyt, B. (2017). Segregation and Socialization: Academic Segregation and Citizenship Attitudes of Adolescents in Comparative Perspective? *Journal of Social Science Education*, 16(2), 29-40.
45. Kruit. (z.d.). *Digitale praktijken voor wereldburgerschapeducatie: Inspiratiebrochure*. KlasCement. Consulted September 11, 2024, from <https://www.klascement.net/wereldburgerschapeducatie/downloadbaaresmateriaal/125417/digitale-praktijken-voor-wereldburgerschapeducatie-inspiratiebrochure/>
46. Labrot, L. (2024, May 27). *Blue Lines: Linking Citizenship and Employability – DARE Network*. <https://dare-network.eu/blue-lines-linking-citizenship-and-employability/>
47. Lauwers, J., C Saey, M. (z.d.). *Handleiding vakdoorbrekend projectwerk in hhttp://democraticschools.ecos.pt/wp-content/uploads/Escola_EN_site.pdfet secundair onderwijs. Transversaal werken aan actief burgerschap*. https://www.civiclabb.be/wp-content/uploads/2021/10/AB_004_Handleiding_Welt_DEF.pdf
48. Leerpunt (z.d.). Consulted from <https://leerpunt.be/>, on April 14, 2024.
49. Lohyňová, K., C European Schoolnet. (2017, July). *Entrelearn entrepreneurial learning toolkit for teachers*. <https://files.eun.org/I->

[LINC/entrelearn entrepreneurial learning toolkit for teachers.pdf](#)

50. Lowtechmagazine (z.d.). Consulted from <https://solar.lowtechmagazine.com/> of <https://www.lowtechmagazine.be/>, on October 1, 2024.
51. Meadows, D. (z.d.). *Leverage Points: Places to intervene in a system*. Consulted from: https://donellameadows.org/wp-content/userfiles/Leverage_Points.pdf on November 24; 2023.
52. Marsella, A. J. (2009). Diversity in a Global Era: The context and onsequences of differences. *Counselling Psychology Quarterly*, 22(1), 119-135. <https://doi.org/10.1080/09515070902781535>
53. Martens, A. (2012). Op een onbeschreven blad: Enkele lang gekoesterde bedenkingen over migratie, armoede, opstand en solidariteit. *Tijdschrift voor Sociologie*, 33(1), Article 1. <https://doi.org/10.21825/sociologos.86791>
54. Morgado, A., C Franco, J. (2016, October). *Scale of Reference for Participatory Citizenship Schools: a tool for School Participation!* http://democraticschools.ecos.pt/wp-content/uploads/Escala_EN_site.pdf
55. Murphy, C., Osawa de Silva, B., C Winskell, M. (2019). Towards compassionate Global Citizenship: Educating the heart through development education and cognitively-based compassion training. *Policy & Practice: A Development Education Review*, 15, 53-69.
56. Nay, J. (2018). Natural Language Processing and Machine Learning for Law and Policy Texts (NESET). *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.3438276>
57. Nicaise I., Franck E., Cincinnato S. (2021), Dertig jaar sleutelen aan gelijke onderwijskansen: een B-attest ? in: J. COENE, T. GHYS, B. HUBEAU, S. MARCHAL, P. RAEYMAECKERS, R. REMMEN, C W. VANDENHOLE (red.) (2021). *Armoede en Sociale Uitsluiting, Jaarboek 2021*, Brussel: Uitgeverij ASP, p.123-139.
58. Ond.vlaanderen.be (z.d.). Leerlingenaantalen. Consulted from <https://onderwijs.vlaanderen.be/nl/welke-gegevens-bao-en-so-vind-je-in-Dataloep#inschrijvingen-leerlingenaantallen> , on September 8, 2024.
59. Popjaková, D., Karvánková, P., C M ĩntálová, T. (2020). Using the 'New Age Atlantis' Case Study for Global Education Components of Geography Lessons Across Lower Secondary Schools in Czechia. *Review of International Geographical Education Online*. <https://doi.org/10.33403/rigeo.641168>
60. Quinoa, asbl. (z.d.). *Dezobeyi—Désobéir, un acte citoyen. Carnet d'accompagnement*. <https://quinoa.be/wp-content/uploads/2018/10/Quinoa-Cahier-carnet.pdf>
61. *Ressources – BeGlobal*. (z.d.). Consulted September 11, 2024, from <https://beglobal.BeGlobal.be/ressources/?lang=fr>
62. Sampermans, D., Claes, E., C Janmaat, J. G. (2021). Back on track? How civic learning opportunities widen the political knowledge gap in a tracked education system. *School Effectiveness and School Improvement*, 32(2), 241-259. <https://doi.org/10.1080/09243453.2020.1830125>
63. Schulz, W., Ainley, J., Fraillon, J., Kerr, D. C Losito, B. (2010) ICCS 2009 International Report: Civic knowledge, attitudes, and engagement among lower- secondary

- school students in 38 countries. Amsterdam: International Association for the Evaluation of Educational Achievement (IEA).
64. Soriano, D. J. (2022). *Enhancing the Competency of Grade 11 STEM Learners using Global Citizenship Education (GCED)—Based Curriculum* (SSRN Scholarly Paper No. 4242689). <https://doi.org/10.2139/ssrn.4242689>
 65. Studio Globo. (z.d.). *Actuales: Black lives matter en omgaan met racisme*. https://www.studioglobo.be/sites/default/files/2021-03/actuales-blm-omgaan-met-racisme-handleiding_0.pdf
 66. Suhonen, R., Cantell, H., Rajala, A., C Kallioniemi, A. (2022). Teachers' perceptions on addressing global issues in upper secondary vocational education and training in Finland. *Ammattikasvatuksen aikakauskirja*, 24(4), Article 4. <https://doi.org/10.54329/akakk.125877>
 67. Suhonen, R., Rajala, A., Cantell, H., C Kallioniemi, A. (2024). *From training workers to educating global citizens: How teachers view their opportunities of addressing controversial global issues in vocational education*. *Journal of Vocational Education & Training*, 7(2), 354-380. <https://doi.org/10.1080/13636820.2023.2266727>
 68. Taalunie.org (z.d.) Onderwijstermen, consulted from <https://onderwijstermen.taalunie.org/term/leerlijn/> on September 30, 2024.
 69. Umeh, M. H. C., Onyeike, V. C., C Ukaigwe, P. C. (2018). CHILD'S RIGHTS ACT AWARENESS LEVEL IN PUBLIC SECONDARY SCHOOLS IN ANAMBRA STATE. *Journal of Education in Developing Areas*, 2(2), 430-438.
 70. UNESCO. (2024). *Global citizenship education in a digital age: Teacher guidelines*. UNESCO. <https://doi.org/10.54675/BBSJ1884>
 71. UNESCO. (2022). *Transforming Technical and Vocational Education and Training for successful and just transitions—UNESCO strategy 2022-2025*. United Nations Educational, Scientific and Cultural Organization. https://unevoc.unesco.org/pub/unesco_strategy_for_tvet_2022-2029.pdf
 72. Unesco.org (z.d.). What you need to know about global citizenship education. Consulted on September 10, 2024, from <https://www.unesco.org/en/global-citizenship-peace-education/need-know>.
 73. UNESCO, C APCEIU. (2019). *EIU Best Practices 2015—Integrating Global Citizenship Education in Science Classroom*. https://www.unescoapceiu.org/post/3476?findex=Ccategory_id=Csfield=post_bothCskey_word=vocational
 74. UNESCO, C United Nations Office on Drugs and Crime. (2019). *Empowering students for just societies: A handbook for secondary school teachers*. <https://unesdoc.unesco.org/ark:/48223/pf0000370901/PDF/370901eng.pdf.multi>
 75. UNESCO-UNEVOC. (z.d.). Consulted September 10, 2024, from <https://unevoc.unesco.org/home/>
 76. Unesdoc. (z.d.). Consulted September 18, 2024, from <https://unesdoc.unesco.org/search/N-EXPLORE-9ed62ceb-f1b5-4e65-952f-2aab7c619294>
 77. van der Donk, C, & van Lanen, B. (2019). *Praktijkonderzoek in zorg en welzijn*.

Coutinho.

Annexes

Annex 1: criteria for third categorisation

Annex 2: system map third categorisation

Annex 3: project-database analysis

These annexes can be downloaded separately from the [BeGlobal website](#).