

BRIDGE 47

The Bridge 47 Network brings people of various backgrounds together to learn from each other and collaborate for advancing transformative learning and SDG Target 4.7. Bridge 47 – Building Global Citizenship Education is a project co-created by 14 European and global partner organisations, co-funded by the European Union. The project mobilises civil society to take action for global justice through Global Citizenship Education.

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Transformative Competencies - How to Define and Implement Competencies for SDG Target 4.7

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Writer: Johanna Helin



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List of acronyms

ACT	Association for Citizenship Teaching
APCEIU	Asia-Pacific Centre of Education for International Understanding
ASEAN	Association of Southeast Asian Nations
CEDEFOP	European Centre for the Development of Vocational Training
CoE	Council of Europe
CSOs	Civil Society Organisations
EC	European Commission
ESD	Education for Sustainable Development
EU	European Union
GCED	Global Citizenship Education
GEMR	Global Education Monitoring Report
HEI	Higher Education Institutions
ICCS	International Civic and Citizenship Education Study
IEA	International Association for the Evaluation of Educational Achievement
IOs	International organisations
MGIEP	The UNESCO Mahatma Gandhi Institute of Education for Peace and Sustainable Development
OECD	Organisation for Economic Cooperation and Development
PISA	Programme for International Student Assessment
RFCDC	Reference Framework for Competencies for Democratic Culture
SDGs	Sustainable Development Goals
UIS	UNESCO Institute for Statistics
UNESCO	United Nations Educational, Scientific and Cultural Organization
VET	Vocational Education and Training

Summary

The SDG Target 4.7 emphasises the need for all learners to have the necessary competencies to promote sustainable development. It is seen as key to achieve the Agenda 2030. The idea of competencies encompasses knowledge, skills, attitudes and values. It puts the emphasis on learning outcomes, showing proficiency and demonstrating mastery instead of educational inputs and time spent in school. The focus on competencies has led to profound reforms in the formal sector, in reforming curricula and assessment systems and putting more emphasis on active learning methods.

In the context of Agenda 2030, there is a need to move forward from the abstract 21st century skills to define more concrete competencies that are required for a more just and sustainable future. Due to the multidimensional nature of both GCED and ESD – the backbone of Target 4.7 – it is not easy to define the key competencies for Target 4.7. These are sometimes defined as ‘global competencies’, ‘global citizenship competencies’, ‘competencies for sustainable development’ or ‘sustainability competencies’. These notions are commonly seen as transformative, giving learners the knowledge, skills, attitudes and values that support building a more sustainable and just society. Many international organisations (e.g. UNESCO, OECD, Council of Europe, etc.) have developed comprehensive competency frameworks for transformative competencies from their specific perspectives. **These frameworks should aim to also include diverse southern and indigenous perspectives.**

Transformative competencies for Target 4.7 should be debated, adapted, modified and implemented at global, regional, national and local levels, in all forms of education institutions. These processes need to be participatory, involving multiple stakeholders to develop relevant competency frameworks for different contexts. Due to the different worldviews, experiences, cultural backgrounds and political contexts, agreeing on one joint global competency framework for Target 4.7 might not be possible. However, the main goal should be to define the key competencies needed

for environmental, social, political and cultural sustainability.

The European Commission (EC) should play an active role in developing a holistic competency framework for Target 4.7. This would help to bridge the different ‘silos’ that work parallel for the same objectives with EC and strengthen the implementation of Target 4.7 in EU member states.

The competencies related to environmental sustainability have a higher chance of being included in education and employment policies. However, to respond to the challenges posed by globalisation, more **emphasis should be placed on competencies of dealing with uncertainty, addressing unequal power relationships, and aiming at the establishment of inclusive, just and democratic societies.**

There should be opportunities to develop transformative competencies for Target 4.7 through all forms of lifelong learning (formal, non-formal and informal learning). Education plays a key role in equipping people with the necessary knowledge, skills, values and attitudes to be change agents. All formal sector curricula should include the teaching and learning of relevant transformative competencies that support Target 4.7. Pre- and in-service training should equip formal and non-formal educators with skills to help learners achieve transformative competences and these should be included in the education and training of professions and included in qualification frameworks. Similarly, local level projects and initiatives developing these competencies need to be encouraged and funded to widen the opportunities to gain transformative competencies.

Finding suitable assessment methods and tools for transformative competencies has proven to be challenging. However, assessment of learning is needed in the education sector as well as in the process of implementing and monitoring Target 4.7. **Various ways of conducting assessment of these competencies should be developed in collaboration with researchers, practitioners and authorities to help assess and monitor Target 4.7.**

1

Introduction

The need to define the transformative competencies required for building a sustainable and just future became more urgent with the adoption of the Target 4.7 within the Sustainable Development Goals (SDGs). SDG Target 4.7 aims to “ensure all learners acquire knowledge and skills needed to promote sustainable development, including among others through education for sustainable development and sustainable lifestyles, human rights, gender equality, promotion of a culture of peace and non-violence, global citizenship, and appreciation of cultural diversity and of culture’s contribution to sustainable development” by 2030. The target is historic. For the first time, the importance of transformative education is acknowledged at a global level. However, the target is challenging to achieve, as it does not specify the “knowledge and skills needed to promote sustainable development”.

This paper was commissioned to support advocacy for SDG Target 4.7 in European and global policies by exploring the concept of ‘Competencies for SDG Target 4.7’. This advocacy paper draws from a desk review of existing global and regional competency frameworks at national, regional and global levels. The aim is to get a clearer understanding of these transformative competencies¹ and how they help the implementation

and assessment of Target 4.7. This paper is divided in three sections. The first section provides background to the different worldviews that frame the discussion on competencies, before turning to presenting some of the competency frameworks for Target 4.7. The second section gives some examples of how these competencies are being introduced into national education policies, professional skills training and lifelong learning. The paper finishes with conclusions and policy recommendations.



2

Context: Emphasis on competencies

Identifying the main skills and competencies² people need in an ever-more interconnected and globalized world has been a key concern in educational debates among policymakers, academics and the private sector. While everyone agrees that the 21st century requires people to have a different set of competencies, disagreements exist whether this is needed more for economic reasons or for a well-functioning society and democracy. For successfully adapting to the changing circumstances of globalisation or for being active in transforming them. Some also question whether so-called ‘21st century competencies’ are anything ‘new’ at all.

These debates have resulted in various frameworks for future education needs defined as ‘key competencies’, or ‘21st century skills’. Varying international organisations (IOs) and initiatives have articulated their lists of

competencies and skills. The 7Cs model (Fadel and Trilling, 2009:1), for instance, identifies the following skills: 1) Critical thinking and problem solving, 2) Communication, information, and media literacy, 3) Collaboration, teamwork and leadership, 4) Creativity and innovation, 5) Career and learning self-reliance, 6) Cross-cultural understanding, 7) Computing and ICT literacy (see e.g., EU’s key competencies³; OECD’s DeSeCo). Some models have also included citizenship (local and global) into their framework (e.g., British Council 2016⁴, ATC21S, 2009). These frameworks are still not clearly defined nor universally agreed upon. There are multiple points of divergence, starting from the definition of what competencies or skills actually mean to defining what the most important ones are (Anderson-Levitt and Gardinier, 2021).

Defining competencies and skills

‘Competencies’ and ‘skills’ mean different things, although often they are used interchangeably. According to the European Centre for the Development of Vocational Training (CEDEFOP, 2008), skills are the ability to perform tasks and solve problems. Types include: cognitive skills (like literacy and numeracy), technical skills (ICT and professional skills), and so-called ‘soft skills’ (teamwork, initiative, planning and organising, entrepreneurial

thinking, self-management and learning) (Bourn, 2018).

Competencies, on the other hand, are usually understood as combinations of knowledge, skills and attitudes that people need for successful learning, living and working. They involve the ability to meet complex demands by drawing on and mobilizing psychosocial resources (including skills and attitudes) in a particular context

(OECD, 2005). Competencies also refer to the values we hold or personal traits we possess. Thus, competencies are a wider concept. For example, problem solving is a competency that assumes one has mastered several skills depending on the task. Effective communication implies that one has the skills of listening to others, formulating their thoughts in a manner that is understandable and the courage to share these thoughts with others.

A key organisation promoting a competency-based approach to education is the Organisation for Economic Cooperation and Development (OECD). Between 1997-2003, OECD ran the *Program Definition and Selection of Competencies* project (DeSeCo). DeSeCo aimed at providing a conceptual framework to identify key competencies and strengthen international surveys measuring the competence level of young people and adults. DeSeCo contributed to the Programme for International Student Assessment (PISA) – a global assessment mechanism which, from 2000, has been comparing students’ knowledge and skills in the areas of reading, mathematics, and science. However, there was an understanding that students’ success depends on a much wider range of competencies and a longer-term vision of including new competency domains was developed. Later additions to the PISA framework included collaborative problem solving and financial literacy. The latest addition was global competence which is of particular interest to this paper (OECD, 2018; Gardinier, 2021). The next PISA round in 2022 will include creative thinking and the list of competencies may expand. The 2030 Learning Framework suggests ever-more innovative approaches to measuring new competencies, although measuring these transversal

competencies has proven to be a more difficult, complex and contested task than expected (Auld & Morris, 2019).

The competency-based approach has been heavily criticised by academics as a threat to the holistic and humanistic idea of education as it can result in educational practices dominated by outcomes, standardisation and testing (also referred as New Public Management). Many countries have narrowed their curricula to concentrate only on the subjects tested in PISA. (Ramirez et al, 2016)

Since the 1960s, UNESCO has promoted a more humanistic, egalitarian and democratic view of education as a human right. This ethos has been articulated in UNESCO reports *Learning to Be* (the Faure Report) (Faure et al. 1972) and *Learning: The Treasure Within* (the Delors Report) (Delors et al. 1996). The Faure Report was influenced by popular and critical adult educators, such as Paulo Freire, for whom the aim of adult education was the liberation of the working class (Elfert, 2019). The subsequent Delors Report presented a collective view of education, arguing that education choices were determined by the choices about what kind of society we wished to live in. It defined four “pillars” of education in



the 21st century: 1) learning to know; 2) learning to do; 3) learning to be; 4) learning to live together (Delors et al. 1996). Through these processes, education was seen to facilitate changes in values, world views and behaviour at the level of the individual, the community and the society as a whole. It countered the more instrumental and market-driven ideas promoted by OECD and the World Bank (Elfert, 2019).

As seen from the above discussions, the role of education and global competencies depend on our general views of the world which are further elaborated in the Appendix 1. In general, the economy-based ideas of competencies following neoliberal thinking tend to dominate. However, they are constantly being challenged and expanded by considering soft skills following the compensatory liberal thinking. It has a more holistic understanding of competencies and includes dispositions necessary for a global citizen, from critical thinking and empathy to informed and reflective action. The critical/decolonial understanding sees the competency-based education movement to be embedded within a particular set of existing exploitative economic, social and political power relations where the discourses of competencies act as powerful devices that construct learning in particular

ways (Chappell, Gonczi & Hager, 2000). Learning towards one worldview depends on backgrounds and experiences, e.g., in the European context, critical pedagogy has always been dominant in the UK, while in many post-Communist countries these more socialist approaches have less resonance.

However, worldviews can change with time. Agenda 2030 has brought different actors under a joint framework, which supports compensatory liberal ideas of sustainable development based on transformation to green and inclusive growth and respect for human rights and democratic values. In this model both ideas of education - the approach that sees education as a 'global common good' that builds collective and individual moral and ethical values, and the other approach focusing on the development of competencies and agency of individuals - are seen as valuable and compensatory (see e.g., GEMR, 2016). However, IOs are also not monolithic entities and within UNESCO there are also voices that promote the SDGs from a more critical perspective (see e.g., MGIEP, 2017).



3

Competence frameworks related to Target 4.7

UNESCO oversees measuring Target 4.7 and has operationalised it to two key concepts Education for Global Citizenship (GCED)⁵ and Education for Sustainable Development (ESD).

Both ESD and GCED have contested definitions and there are synergies and differences between them. GCED has a more anthropocentric approach (human-based), while ESD's approach is more biocentric (nature-based). However, both can be seen as transformative educational processes that empower learners to develop their capacities, capabilities and motivation to make critically informed actions for economic, environmental, social and cultural sustainability (Saldozar-Hernandez, 2019). Thus, both concepts include fostering a special set of competencies. For both transformative educations, UNESCO has developed learning objectives and guidelines and it promotes a complementary approach, including both in Target 4.7 (UNESCO 2012, 2015).

3.1 Global (citizenship) competencies⁶

The term 'global competencies' emerged in academic literature in the 1990s. It aligned with a neoliberal idea of a globally competent person who had knowledge of the world, could empathise with people from a range of cultures and speak a foreign language (Lambert, 1996). This idea is still at the core of how global competencies are defined in US education policy.

This background is one reason why there is scepticism of the term "global competencies" in the academic literature. Alternative terms such as "global mindedness" or "global awareness" are preferred (Connolly et al, 2019)

Drawing from the literature on global citizenship, UNESCO defined learning objectives for GCED in 2015. UNESCO's framework for global citizenship education is based on three domains of learning: cognitive (understanding and critical thinking related to local and global issues); socio-emotional (a sense of shared humanity, common values, respect); and behavioural (acting effectively – locally to globally – for peace and sustainability). Each has related key learning outcomes, key learner attributes, and topics (see image 1).

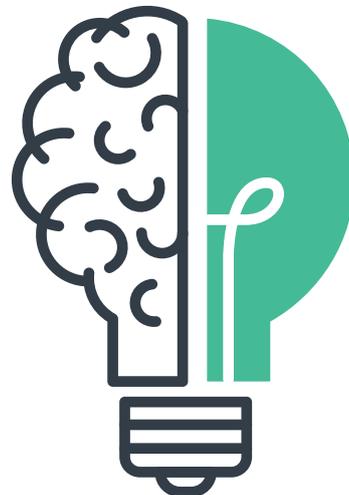
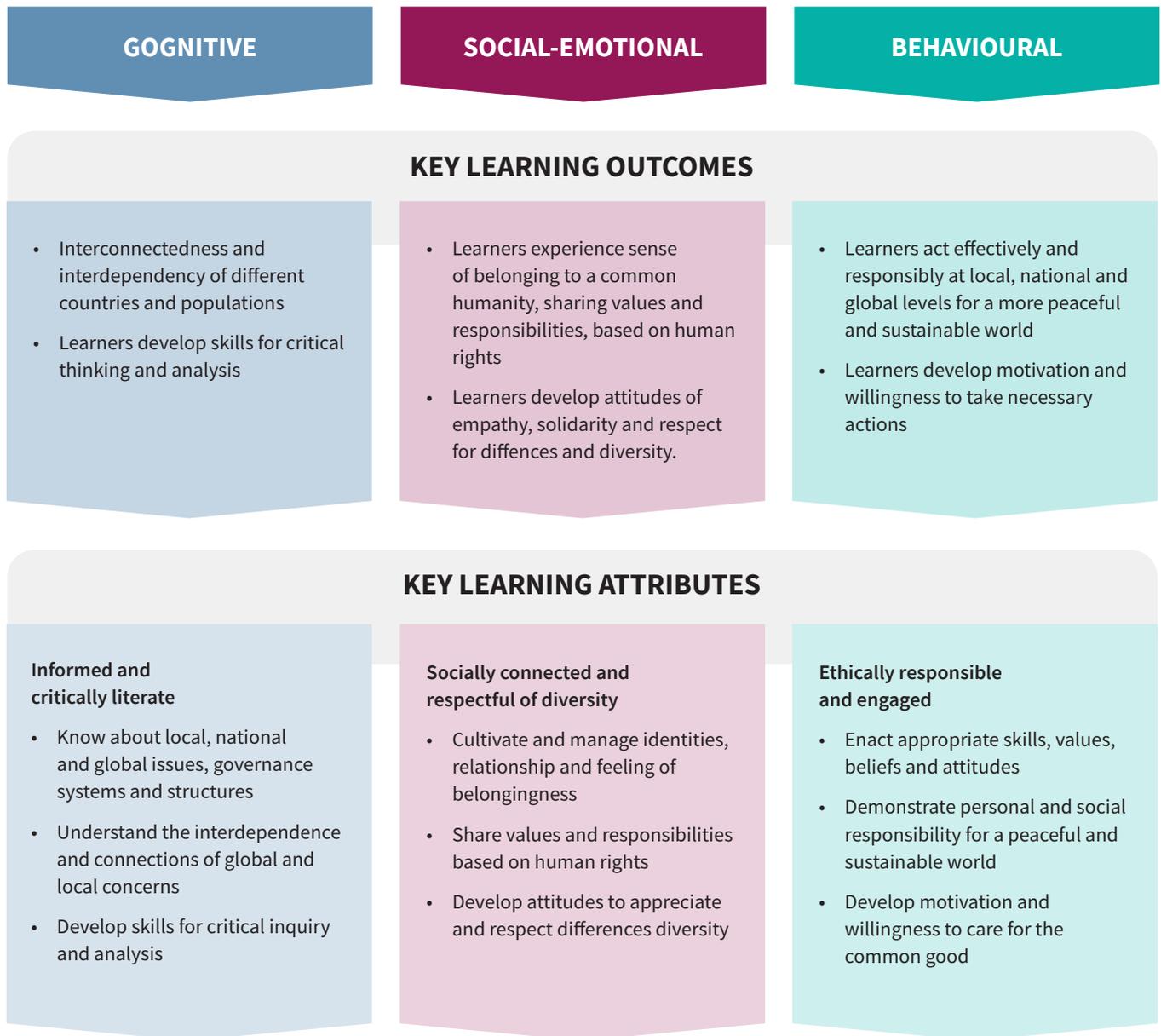


Image 1: UNESCO (2015): Outcomes and Learner Attributes for GCED.



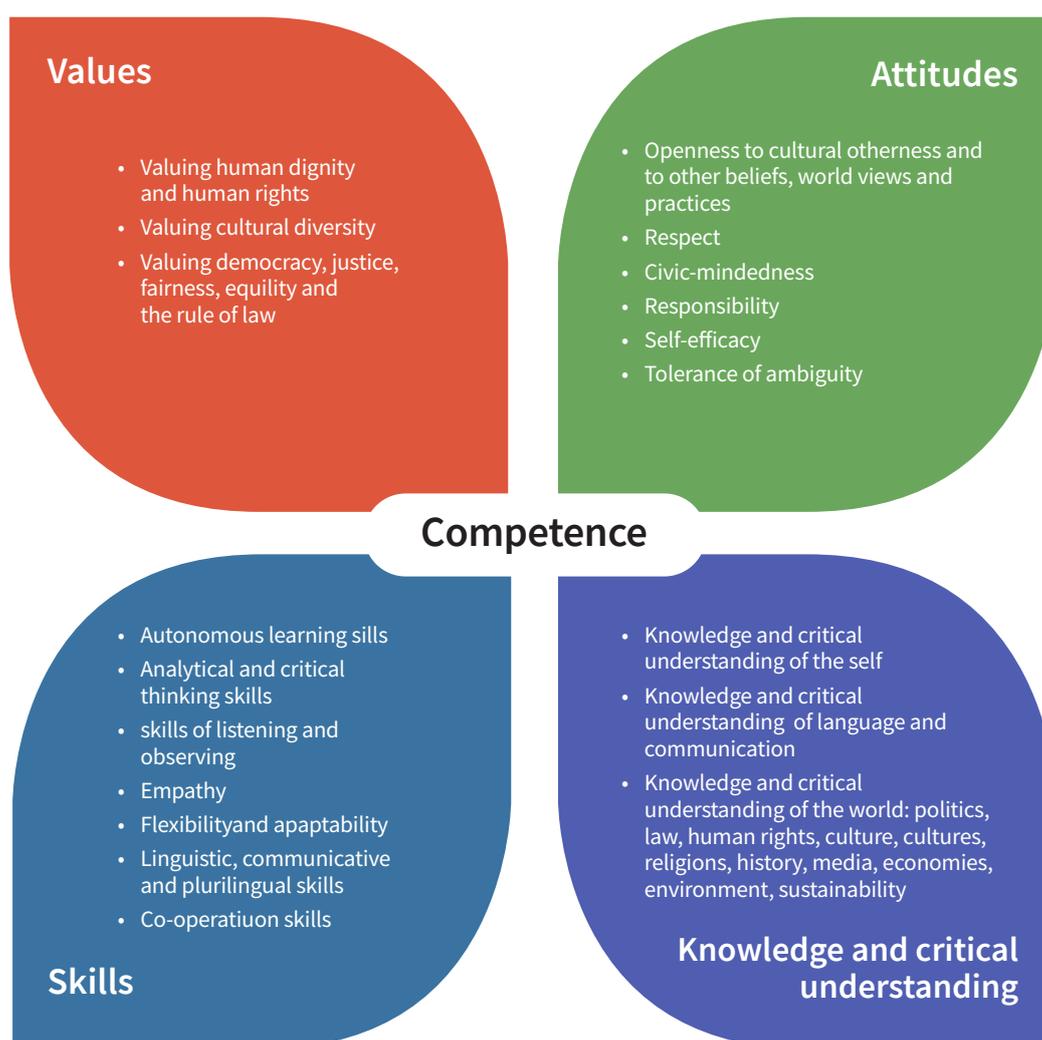
Based on this framework, the Learning Metrics Task Force (LMTF)⁷ determined a similar set of competencies, with additional emphasis on climate change, environmental awareness, leadership, and digital literacy. These ideas were further developed by the Working Group for GCED⁸ which defines the global citizenship competencies to include:

1. Empathy
2. Critical thinking/problem solving
3. Ability to communicate and collaborate with others

4. Conflict resolution
5. Sense and security of identity
6. Shared universal values (human rights, peace, justice etc.)
7. Respect for diversity/intercultural understanding
8. Recognition of global issues - interconnectedness (environmental, social, economic etc.)

The GCED Working Group also conducted a mapping to identify a vast array of measuring tools used for these competencies at local levels (Anderson & Bhattacharya, 2017).

Image 2: UNESCO (2015): Outcomes and Learner Attributes for GCED.



For measuring global competencies at the global level, UNESCO cooperates with the International Association for the Evaluation of Educational Achievement (IEA) and its ICCS instrument (International Civics and Citizenship Study), drawing on ideas from the Council of Europe (CoE). Their Reference Framework for Competences for Democratic Culture (RFCDC) contains a model of 20 competences organised under ‘values’, ‘attitudes’, ‘skills’ and ‘knowledge and critical understanding’ (see image 2). These need to be developed by learners if they are to participate effectively in a democratic culture and live in peace with others in culturally diverse democratic societies. In addition to competencies defined in the UNESCO framework, RFCDC brings in a special emphasis on democratic values as well as tolerance of ambiguity, flexibility and adaptability to changing circumstances.

RFCDC is used as the basis of many materials and approaches for educators and trainers in Europe. The North-South Centre of CoE, which has played a key role in promoting GCED in Europe, also refers to it in its Global Education Guidelines (2019). In an evaluation by UK teachers organised by the Association for Citizenship Teaching (ACT), the framework was found to be a useful support for assessment and as a reference and a toolbox in designing, implementing and evaluating educational interventions, in formal and non-formal settings. (ACT, 2019)

The OECD published its Global Competence Framework in 2018 to be tested in PISA the same year.⁹ The goal of the framework was to “support evidence-based decisions on how to improve curricula, teaching, assessments

Image 3: OECD (2018) Global Competence.



and schools' responses to cultural diversity in order to prepare young people to become global citizens". OECD defines global competence as the "capacity to examine local, global and intercultural issues, understand and appreciate the perspectives and worldviews of others, to engage in open, appropriate and effective interactions with people from different cultures, and to act for collective well-being and sustainable development". The global competence is defined as the combination of four strongly interdependent dimensions (examining issues, understanding perspectives, interacting across cultural differences and taking action), and each dimension builds on specific knowledge, skills, attitudes and values (see image 3). (OECD, 2018)

According to OECD, we need global competence "to live harmoniously in multicultural societies, to thrive in a changing labour market, to use media platforms effectively and responsibly and to support the SDGs". (OECD, 2018). In the academic literature, OECD's framework has been criticised for focusing on the individual intercultural competencies that learners need to secure effective employment in the multicultural workplaces of the global economy. The humanitarian discourse is said to be only used to frame its economic mission (Auld & Morris, 2019; Bourn, 2021). Auld and Morris (2019) argue that OECD presents global competencies as an ahistorical and depoliticised entity, focusing on the cognitive domain through the measurement of pupils' understanding. Ultimately, the ideal 'global citizen' sounds like a 'model OECD intern'.

There has also been criticism that the instruments simplify the official definition of global competency to what is easily measurable. Answering self-assessment questions might also lead to a possible cultural bias affecting the comparability of the results (Auld & Morris, 2019; Engel et al., 2019).

In addition to these international frameworks, there are also others developed by regional organisations, NGOs or national governments. For example, the Global Citizenship Educational Framework outlined by Oxfam UK refers to skills and competencies similar to the Working Group for GCED. The framework as consisting of critical and creative thinking, empathy, self-awareness and reflection, communication, cooperation and conflict resolution. However, like the RFCDC, Oxfam's list brings in the "ability to manage complexity and uncertainty, and informed and reflective action" (Oxfam, 2015).

Acting is also part of the models developed by the Asia Society in the US which has been one of the most influential organisations in the promotion of global skills and global competencies. They also partnered with OECD in developing the Global Competence Framework. In their framework, global competence is the capacity and disposition to understand and act on issues of global significance. Globally competent people have the knowledge and skills to:

- **'Investigate the World' (they are aware, curious, and interested in learning about the world and how it works);**
- **'Recognise Perspectives' (that they have a particular perspective, and that others may not share it);**
- **'Communicate Ideas' (effectively, verbally and non-verbally, with diverse audiences); and**
- **'Take Action' (have the skills and knowledge to not just learn about the world, but also to make a difference) (Mansilla & Jackson, 2012).**

Which framework we gravitate towards depends on our context. In the Asia-Pacific Region, there is a process to develop a global competency framework for the region that reflects its mixed cultural heritage and varying political contexts. The assessment frameworks developed by The Association of Southeast Asian Nations, ASEAN,

links the concept of global citizenship with the ASEAN Charter as "moral global citizenship" (UNICEF and SEAMEO, 2020). The GCED curriculum in Asia is shaped by an emphasis on moral virtues and personal values which reinforce the merging of civic education and moral education. In addition, notions of "collectiveness", "relationship", "social harmony" and "self-cultivation" are at the core of Asian GCED concept and reflected in the joint assessment framework (APCIEU, 2021). There is less emphasis on democratic values and political citizenship which might be because ASEAN includes states with authoritarian regimes uncomfortable with a push towards international human rights standards.

The situation is quite different in Europe where there is no agreed joint framework, but RFCDC by CoE seems the most appropriate to the EU values of human rights, democracy and tolerance. Following the terrorist attacks in Paris in 2015 the EU ministers of education formulated the 'Declaration on promoting citizenship and the common values of freedom, tolerance and non-discrimination through education', also known as the 'Paris Declaration' (2015). The declaration calls for a mobilisation of the education sector to promote inclusion and fundamental values, and defines that one priority for cooperation at the EU level is "ensuring young people acquire social, civic and intercultural competences by promoting democratic values and fundamental rights, social inclusion and nondiscrimination, as well as active citizenship". In 2016 Eurydice published an overview of education policy developments in Europe following the declaration. The overview shows that in most countries attention to social, civic and intercultural competences in education policy has intensified, particularly in secondary education.

Many of the existing models emphasise the need to accommodate diversity: understand different worldviews, engage in a dialogue and interaction between different communities that respects, listens to and values perspectives other than one's own. This is linked to the competence for cooperation: the ability to work with others who may have different viewpoints and perspectives, being prepared to change one's opinions as a result of working with others, and seeking cooperative and participatory ways of working.

3.2 Competencies for sustainability

In the field of ESD there have been attempts to develop a framework of key competencies for sustainable development or sustainability competencies¹⁰ to have a clearer vision of what is meant by Target 4.7. (see e.g. Burford et al. 2016; Giangrande et al 2016)

Many of these frameworks take as their basis the pillars from the Delors Report (see table below) like the United Nations Economic Commission for Europe (UNECE) report ‘Learning for the Future: Competences in Education for Sustainable Development’:



Four pillars of the Delors report and fifth pillar for transformative competence¹¹

Corresponding competencies from the perspective of ESD

1. Learning to know	domain (or subject) competencies: e.g. learning to learn, critical thinking, understanding the world and sustainability issues.
2. Learning to do	methodological competencies: e.g. technical and professional training and applying knowledge
3. Learning to be	personal competencies: e.g. agency for positive future outcomes, self-identity and self-knowledge, personal responsibility
4. Learning to live together	social competencies: e.g. understanding values and traditions, cooperating, celebrating diversity and managing conflict
5. Learning to transform oneself and society	sustainability competence: e.g. minimising ecological footprints, sustainable lifestyles, gender-neutral and non-discriminatory societies, and respecting the Earth and life in all its diversity

Based on Burford et al. 2016; Giangrande et al 2016

Another common approach to define competencies for sustainable development has been developed by Wieck et al (2011). Their work has been further developed into eight categories of competencies for SDGs by UNESCO (2017):



This competency framework for SDGs has been elaborated by UNESCO into a curriculum framework giving ideas for topics and learning objectives at different stages of learning. At different stages, the educators need to promote sustainability competencies at the appropriate levels of complexity. The framework highlights learning content and outcomes, the skills, attitudes and values that are desirable at each of the

life stages, and shifts learning from being only content driven to being outcome driven, action oriented and participatory. (UNESCO 2017)

At the implementation level, there are some general tensions in ESD between an emphasis on learning vs. behavioural change. Many educational activities are seen to concentrate on providing easy solutions e.g.

recycling or picking up trash without critical investigation and learning behind the problem of waste. An ongoing challenge has been to ensure that education and learning is at the forefront of sustainability initiatives. (Bourn, 2018)

The European Commission is developing a Green Competencies Framework (GreenComp). It is linked to the European Green Deal which was adopted in 2020 to make the EU a net-zero emitter of greenhouse gases by 2050. The Green Deal sees the

“need to enable a profound change in people’s behaviour and skills, starting in the education systems and institutions as catalysts. Actions should be geared towards changing behaviour, boosting skills for the green economy, fostering new sustainable education and training infrastructure and renovating existing buildings, thereby creating conducive environments for this change” (Green Deal, 2020).

What kind of competencies this framework will entail is still open, but the use of the term ‘green’ suggests that the framework emphasizes environmental protection and environmental behaviour over social justice. What would be needed is a more comprehensive framework for Target 4.7 that unites both global and sustainability competencies into a single framework and monitoring mechanism (see paper on Indicators for 4.7)¹².

3.3 Summary: the need for transformative competencies¹³

The above mapping of various frameworks linked to ESD and GCED (see joint table below) shows that although some broad similarities exist, there are differences in agendas and orientations which pose a challenge for having one internationally agreed upon measure for

UNESCO WG for GCED: Global Citizenship Competencies, 2017	OECD: Global Competence, 2018	Council of Europe: Reference Framework for Competences for Democratic Culture (RFCD), 2016	UNESCO: Learning Objectives for Sustainable Development (2017)
<ul style="list-style-type: none"> Empathy Critical thinking/problem solving Ability to communicate and collaborate with others Conflict resolution Sense and security of identity Shared universal values (human rights, peace, justice etc.) Respect for diversity/intercultural understanding Recognition of global issues - interconnectedness (environmental, social, economic etc.) 	<p>Multidimensional capacity that encompasses the ability to:</p> <ul style="list-style-type: none"> examine issues of local, global and cultural significance; understand and appreciate the perspectives and world views of others; engage in open, appropriate and effective interactions across cultures; and take action for collective well-being and sustainable development. 	<p>Values: valuing human dignity, human rights, cultural diversity, democracy, justice, fairness, equality and the rule of law</p> <p>Attitudes: openness to difference, respect, civic-mindedness, responsibility, self-efficacy, tolerance of ambiguity</p> <p>Skills: autonomous learner, critical thinker, listening and observing, empathy, flexibility and adaptability, good communicator, cooperation, conflict resolution</p> <p>Knowledge and understanding: critical understanding of self, language and communication, global issues (politics, history, cultures/religions, economies, environment, sustainability)</p>	<ul style="list-style-type: none"> Systems thinking competency Anticipatory competency Normative competency Strategic competency Collaboration competency Critical thinking competency Self-awareness competency Integrated problem-solving competency

transformative competencies. UNESCO is emphasizing humanistic values or sustainability and environmental awareness; OECD intercultural communication and upward social mobility and CoE human rights and democracy. Developing and agreeing on a comprehensive global framework for transformative competences under the Target 4.7 could be a positive step in creating synergies between the target's various elements and bringing the different educations listed in the target closer together to complement each others' efforts. However, it could also erase or limit the multitude of approaches and ideas that is characteristic of GCED. Taking into account the different cultures and traditions (see e.g. ASEM and EU approaches described above) agreeing on a joint framework between all nations might also not be possible.

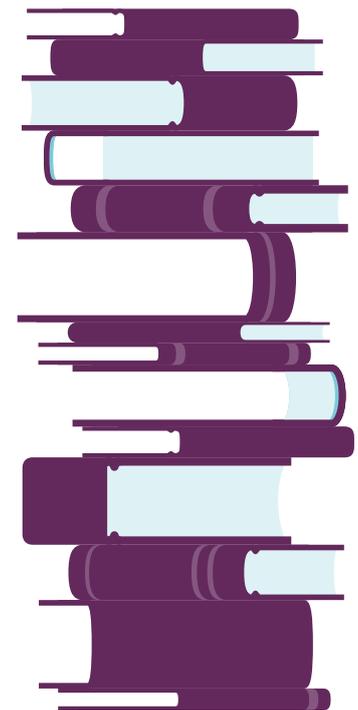
A transformative and reflective education process should empower people with new knowledge and competencies to help resolve common issues that challenge our planet and people. The list of urgent challenges is long: climate change and loss of biodiversity, growing inequalities, and ongoing conflicts. Since the adoption of the SDGs, new attacks on the fundamental basis of liberal democracies have emerged: free and fair elections, independent, objective media, and freedom of expression and assembly. That could be a reason why the RFCD is often viewed as the appropriate framework for Target 4.7 for this time and age, especially in Europe.

What seems to be a crucial aspect for transformative competencies is critical thinking and reflection, questioning of one's assumptions, and addressing complexity, difference and uncertainty. A more just and equal future also requires more critical/ decolonial approaches, e.g. the ability to audit past injustices and seek reconciliation to prevent them from happening again. The importance of digital, media and information literacy - the ability to use ICT in a way that is self-reflective and critical, that questions data and information, understands the role and importance of independent, quality journalism has also become an important global competence and crucial for inclusive and democratic societies (CoE, 2016).

For a more sustainable future, we need empathy and better competence in understanding interdependencies – the impact of global forces on our life and the lives of

others, and the connections between what is happening in our community and communities elsewhere in the world. A common criticism of all the models is that they present mainly 'Western' or 'Eurocentric' ideas, not a truly 'global' conception. 'Global South' is often included only as a source of methods and topics. The bottom-up idea that with education people will gain the ability and motivation to change the world is presented as a universal model, but it fails to recognise that people are differentially impacted by global challenges (like climate change or access to natural resources) and have different opportunities to act to affect their situation. Not everyone is living in well-functioning democracies with access to safe forms of protest, with technologies and access to social media at hand. Integration of theories, perspectives and realities from the Global South are needed for an integrated 'global' conception of transformative competencies (Grotlüschen, 2018).

Similarly, the lack of reference to indigenous knowledge, wisdom and right to self-determination has been criticised within the whole SDG agenda, but especially in the education Goal 4. In some contexts, where this issue is high on the political agenda like in Canada, it has been addressed in the national education policy as can be learned in the next section.



4

Transformative competencies in policy and practice

How do these skills and competencies relate to the reality of education and learning? The SDGs refer to the idea of lifelong learning within formal, informal and non-formal education contexts, but are learners being offered opportunities to develop skills and competencies that will lead to a more just and sustainable world?

The fact that IOs, like OECD, EU and later also UNESCO, have all started to use competency-based approaches has made many countries reframe their educational policies and curriculum in a similar fashion (Nordin & Sundberg, 2021; Engel et al, 2019). The first reforms happened in the vocational education and training (VET), afterwards in higher education institutions (HEI), and gradually the change has taken place also in the basic education sector. However, the many different meanings given to the concept of competencies has resulted in countries translating international ideas in a way that fits their own national political, economic, or cultural contexts (Anderson-Levitt & Gardinier, 2021). Thus, even if the education policies have started to look similar their concrete understanding and application depend on the context.

4.1 Transformative competencies in national education policies

The models for key competencies or 21st-century skills presented above were designed for formal education and many countries have reformed their curricula to include them. They are often introduced through cross-curricular approaches rather than as separate subjects.¹⁴

Regarding transformative competencies, sustainability competencies have a higher chance of being included. The UN Decade on Education for Sustainable Development from 2005 to 2014 supported national educational programmes to have increased emphasis on learning about global and sustainable development themes. The Global Monitoring Report (2016) estimates that as a result three-quarters of countries had some emphasis on sustainable development in their curriculum. However, the emphasis has been on environmental rather than global themes. The inclusion of themes like human rights and gender equality was much smaller.

However, some countries have developed frameworks with clear reference to global citizenship competencies. Those can vary from the more neoliberal model presented below by US education policy which highlights the skills needed to succeed in the global employment market, to the more humanistic models of Canada and Finland.

Comparison of some national approaches to global citizenship competences

US Department of Education (2017): “Global and Cultural Competence”	CANADA: Council of Ministers of Education, Canada (CMEC, 2018) “Pan-Canadian System Framework for Global Competencies”	FINLAND, National Education Agency: “As a Global Citizen in Finland” (Jääskeläinen et al., 2011)
<ul style="list-style-type: none"> • Proficiency in at least two languages • Openness to different cultures and perspectives • Critical and creative thinker able to work in cross-cultural settings to address social, environmental and entrepreneurial challenges • Continue to develop new skills and harness technology to support continued growth 	<ul style="list-style-type: none"> • Critical thinking and problem solving • Innovation, creativity and entrepreneurship • Learning to learn/self-aware & self-directed • Collaboration • Communication • Global citizenship and sustainability 	<p>Competency flower (see the picture) where the general aim (corolla of a flower) is the identity of a global citizen. Competences are</p> <ul style="list-style-type: none"> • global citizen’s ethics, intercultural competence, sustainable lifestyle, • global citizen’s civic competence, • global responsibility and partnerships, • global citizen’s economic competence

Image 4: Jääskeläinen, L and Repo, T. (2011): Global competence flower of Finnish National Education Agency.



In the global competence flower of the Finnish National Education Agency ethics is drawn as a calyx as it should be part of each competence. “In the unjust and unsustainable world we should learn to orientate ourselves critically and ethically. All the other competences are drawn as petals. Because the future is open and we cannot know in advance what the world challenges us to learn, one petal is marked with a question mark” (Jääskeläinen et al, 2011). Andreotti (2014) has criticised models that give us predefined ideas about what the future will look like and require, like the competency frameworks tend to do, and emphasised the need for being able to leave room for something ‘other’ that we cannot even imagine at present. The question mark in the Finnish framework can be seen to leave room for ‘other’ needs as well as reflecting the competence for adapting uncertainty and ambiguity present in the frameworks by Oxfam and RFCDC.

In the Canadian framework the competency related to “global citizenship and sustainability” is defined as involving reflecting on diverse worldviews and perspectives and understanding and addressing ecological, social, and economic issues that are crucial to living in a contemporary, connected, interdependent, and sustainable world. The framework also reflects contextualised decolonial views in stating that all education systems in Canada need to develop these global competencies in a context reflective of the Truth and Reconciliation Commission of Canada’s Calls to Action for Education. “Each of the global competencies of CMEC will be fostered in a way that reflects indigenous knowledge, perspectives, language, beliefs, histories, and teaching methods; that acknowledges the historical and ongoing contributions of indigenous peoples to Canada; and that recognises the legacy of residential schools” (CMEC, 2018).

4.2 Transformative competencies in professional skills training

The environmental aspects of transformative competencies are mainstreamed into professional training both through top-down policy changes as well as demand from the employers. This can be seen especially in Europe, where the European Skills Agenda

for Sustainable Competitiveness, Social Fairness and Resilience (2020) and the European Pact for Skills (November 2020) emphasize the importance of upskilling and reskilling the competencies of EU citizens to support the ‘green transition’ (EC, 2020). As mentioned above, the European Commission is preparing a Green Competencies Framework (GreenComp) which will further support this development.

At the same time, youth work is perhaps the only profession where the professional qualifications refer to global competencies. Both CoE and the European Commission’s SALTO-YOUTH¹⁵ have been developing competency standards for youth work at a national level that recognise the global influences on young people and encourage young people to broaden their horizons to be effective citizens (Bourn 2018).

4.3 Education and training for educators

A mapping done by Bourn and Hunt for GEM (2017) shows that governments and policymakers are increasingly encouraging teacher development programmes to include themes such as cultural understanding, global awareness and sustainable literacy (reference here). However, both PISA 2018 and a recent UNESCO study conclude that in many countries teachers are still poorly prepared to teach topics related to global citizenship and sustainable development (reference here), since initial and in-service courses and programmes are not building their competencies in these areas. There are positive developments but efforts are fragmented and dependent on individual teacher educators’ commitment (UNESCO, 2017). In many countries, civil society organisations (CSOs) have tended to be the drivers who provide the up-to-date knowledge and expertise on global issues to support the skills development of teachers. However, not all NGOs are equipped to root their work in educational practises that are based on learning and skills development instead of behaviourist and action-orientated campaigning approaches whose impact tends to be short-lived (Bourn 2018).

Some teacher training programmes concentrate on competencies, like the ‘Teaching for Global Competence’ programme by the Asia Society which is a teacher training programme that concentrates on competencies. It engages teachers in project-based learning that is inquiry-based, student-led, problem-focused, authentic, and rooted in real-world global issues. The focus is on approaches to teaching and learning rather than looking specifically at subject content which supports the development of skills and competencies in participating teachers (Mansilla & Jackson, 2011; Bourn 2018). A similar approach is at the background of Curriculum globALE (2021) which is a modular and competency-based framework curriculum for the training of adult educators worldwide. It is built on the principles of competencies, action, and learner orientation with emancipatory, humanistic and democratic values with a focus on human rights and sustainability issues like climate change (UIL, 2021). In general, these approaches use a social constructivist orientation to teaching and learning which includes collaborative inquiry and open-ended learning activities, discussion and reflection on complex problems and the understanding that people learn in different ways.

One key competence for teachers in our current polarised societies is managing the different worldviews presented in Appendix 1 in one classroom. Teaching controversial issues in a manner that is constructive and not polarising, combating extremist views and conspiracies are real challenges for educators everywhere. Preventing violent extremism through education is one of the key areas for GCED within UNESCO and emphasis is put on “equipping learners, of all ages, and notably young women and men, with the knowledge, values, attitudes and behaviours, which foster responsible global citizenship, critical thinking, empathy and the ability to take action against violent extremism” (UNESCO, 2016).

4.4 New Opportunities for Lifelong learning

The competency-based idea of education combined with digital technologies is challenging traditional approaches to education and increasing the emphasis on lifelong learning. Access to information and knowledge

is increasingly available for all which has weakened the monopoly of formal education institutions on the creation and transmission of knowledge. Boundaries between public and private education and between formal and non-formal and informal learning are being blurred in this process (Elfert, 2019).

With the rise of lifelong learning, there is an increasing need to validate the knowledge acquired through non-formal and informal education. New qualifications frameworks have been developed for this reason. For example, in Europe, the outcomes-oriented learning model has been firmly embedded in European education and training policies through the adoption of the European Qualifications Framework (EQF) in 2008 which has led to the establishment of comprehensive, learning-outcomes-based national qualifications frameworks (NQFs) in all European countries (EC, 2018).

Alternatives to formal qualifications are also emerging, such as digital credentials and badges, to make the skills that people have acquired more visible. Microcredentials are a fast-developing format for recognising learning - it is a form of credential that signifies mastery of a limited set of skills or competencies. These are increasingly offered by higher education institutions (HEIs) and sometimes developed in partnership with employers and industry associations. In Europe, the European Commission views microcredentials as part of its larger plan for the European Education Area by 2025. As part of this process, in July 2020 a new Europass21 platform was launched which allows learners to create their own profiles by listing all their qualifications, experiences and achievements and use a self-assessment tool to describe their skills, goals and interests (Microbol, 2020).

The availability of different microcredentials has grown rapidly in recent years. By the end of 2019, there were more than 800 microcredentials on the market with an ever-growing number, Coursera’s Specialization representing almost half of them¹⁶. A quick look at the offerings of Coursera shows at least 100 different courses on sustainable development offered at various levels and by different organisers from universities to IOs. Thus, for a motivated learner, there is a wide variety of choices to gain more knowledge and skills on various sustainability issues.



Some of these developments can provide CSOs with ideas about how to have the work they are doing in the non-formal education field recognised and marketed in new ways. Badge systems have been traditionally used by youth organisations, like the scouts and guides, and have now been developed, for example, UNESCO ASPnet schools in Lithuania, and for volunteers for European Voluntary Service.

At the same time, microcredentials can also pose a risk of over-simplifying the complex issues related to sustainability and social justice. The political ecology approach criticises activities that decontextualize and depoliticize sustainable development and make it into a naive, moralizing project without keeping the main culprits, governments and corporations accountable. Pedagogical approaches assume that individuals have a universal ability to act as sustainable global citizens and consumers. The right and the obligation of the learner to make free, however 'correct', individual choices for our common future, is emphasized (Ideland & Malmberg, 2015). To avoid putting blame only on the individual consumers, there is a need to develop age-appropriate ways of engaging with the global interdependencies and

injustices in a way that motivates us to change not only our own behaviour but also the unjust and unsustainable structures.

Last but not least, informal learning, i.e. learning that takes place outside of traditional learning environments and does not involve a curriculum, is the most common form of learning, but the most difficult to grasp. Yet, its impact on developing competencies relevant for global understanding and sustainability is vast. For example, the social movement 'Fridays for Future' has mobilised millions of young people around the world to demand that their leaders do more to curb climate change¹⁷. It has motivated young people to learn about the science behind climate change, to understand how politics work at different levels and to participate in democracy by demonstrating and striking. Thus, informal education at its best allows people to learn about issues that interest and matter to them, and connect with the information, resources, opportunities and people they need to contribute to solutions and drive change. Social movements can develop competencies and offer opportunities to meaningfully engage with peers, communities, and politics on global issues.

5

Conclusions

The shift towards competency-based education has affected teaching, assessment and perspectives about how students learn. Some aspects of this change have been heavily criticised for being dominantly influenced by neoliberal management practices of privatisation, standardisation, assessment and competition. However, the desire to make learners' achievements measurable, the emphasis on quality of learning outcomes, lifelong learning, and active pedagogy are regarded as beneficial for the implementation of Target 4.7 which stresses the need to acquire “the knowledge and skills for sustainable development”.

Developing the competencies of all educators to engage all learners and worldviews to address global sustainability issues is of key importance to achieve this task. Transformative competencies need to be clearly visible across formal, non-formal and informal learning spaces. Developing a single, joint global framework might not be feasible, nor beneficial, due to our different worldviews, experiences, cultural backgrounds and political contexts. However, the essence of Target 4.7 - the knowledge and skills for environmental, social, political and cultural sustainability - should be the main goal in all regional and national competency frameworks.



This desk research suggests the following policy recommendations:

- The need for all learners to have competencies to promote sustainable development is key for achieving the goals of Agenda 2030. Therefore, there is a need to move forward from the abstract 21st-century skills, to define more concrete competencies that are required for a more just and sustainable future at all levels of policy formation.
- The transformative competencies for Target 4.7 should be debated, adapted, modified and implemented at regional, national and local levels, in all forms of education institutions. The processes need to be, in a participatory and engaging, multiple stakeholders process to develop suitable competency frameworks for different contexts. This includes moving beyond Western-centric conceptualisations and taking into account diverse perspectives and expectations from indigenous communities and educators from the Global South.
- The transformative competencies should include dealing with uncertainty, addressing unequal power relationships, and aiming at the establishment of inclusive, just and democratic societies. They also need to find ways to overcome the polarisation present in our societies and develop ways to combat extremism.
- The European Commission should play a key role in developing a holistic competency framework for Target 4.7. in Europe that would involve both the work done to develop 'green' competencies and the learning needed for an inclusive and just society (the aims of the Paris Declaration).
- There should be opportunities to develop transformative competencies for Target 4.7 through all forms of lifelong learning (formal, non-formal education and informal learning). All formal sector curricula should include the teaching and learning of relevant transformative competencies that support Target 4.7. The pre- and in-service training for formal and informal non-formal educators should support the teaching of transformative competencies and they should be included in the education and training of professions and included in qualification frameworks. Similarly, local level projects and initiatives developing these competencies need to be encouraged and funded to widen the opportunities to gain transformative competencies.
- Various ways of conducting an assessment of these competencies should be developed in through cooperation between researchers, practitioners and authorities, and this process should also help assess and monitor Target 4.7 (see the paper on Indicators).

Appendix 1: Different world order positions to global competencies

	Realist	Neoliberal	Compensatory liberal ¹⁸	Critical/decolonial/ political ecology
Central Issues	Sovereignty and independence of nation states	Market-based capitalism, free market acceptance of inequality as a driving force for innovation, progress, efficiency	Freedom requires some considerations of equality. Meritocracy over inherited wealth and position	Fighting structural injustices and exploitation: inequality is firmly rooted in the basic institutional organisation of contemporary society
Need for system reform	Status quo; The principal concern of each state is to preserve its independence	Status quo; Freedom of the markets from state interference (negative freedom)	Soft reform; Equality of opportunity. Structural inequalities require compensatory social actions, programs	Radical reform: Removal of relations of domination and exploitation in all areas of social life
Role of education & learning	Nationalistic view Role of education is to cultivate patriotism	Positivistic view Human capital theory: Learning is an individual process of pre-specified skill/ outcome acquisition meeting pre-set standards. Easy to measure (questionnaires, tests). Competition serves as motivation to try harder.	Humanistic view A collective social endeavour. Strong importance on public, universal, comprehensive schooling to give equal opportunities. Competencies include social, intellectual and emotional factors. Contextual variation.	Postmodern view Contest and unlearn the ethnocentric, paternalistic, racist etc. paradigms. More space and recognition for alternative, indigenous knowledge. Any analysis must engage in an investigation of the power relations within society.
Views on globalisation	Negative: diminishing power for nation states. Increased competition between different national interests	Positive: more opportunities for economic activities, greater prosperity and innovations through unlimited growth	Mixed: economic growth lifted people out of poverty but also increasing inequalities, environmental challenges. Growth needs to be sustainable and inclusive. Limits of growth.	Negative: dominance by neoliberal, market-driven policies, power with the traditional elites who use it for their own benefits. We should aim at no-growth, post-growth models.
Understanding of global citizens/ global competencies	There are no global citizens just citizens of nation states Global competencies include language skills and ability to successfully promote the interest of your own country in the international arena.	Global citizens are cosmopolitan elites, people who are able to work successfully in a global job market Global competencies include language skills and ability to work in multicultural working environments successfully.	Global citizens respect other cultures and people, help solve world problems, and contribute to the global society Global competencies include cognitive, affective, volitional and motivational elements; interplay of knowledge, capacities and skills, motives and affective dispositions.	Global citizens question and change global power relations 'Global competencies' are problematic, as the idea is not critical enough of the growth-based consumer economy and existing inequalities. Potentially dangerous as language constructs reality.

Developed based on MacKinlay, R., and Little, R. (1986) with ideas from Andreotti (2014); Auld & Morris (2019); Chappell, Gonczy & Hager (2000); Gorur (2017); Suša (2019), and UNESCO (2015).

Footnotes

- 1 I'm using the term 'transformative competencies' to refer to both the 'global competencies and 'sustainability competencies' together.
- 2 Some authors/organisations are using competence while others use competency (pl competences, competencies). Some are making a distinction between them e.g. the Pan-Canadian Framework (2020) competency is a related set of skills, knowledge, and dispositions, while competence is the result of acquiring a competency, therefore global competence refers to being in possession of global competencies. In this paper, the model of Anderson-Levitt and Gardinier (2021) was followed. They recognise the possible differences in usage but treat competence and competency as equivalent.
- 3 The EU Reference Framework for Key Competencies (2018) sets out eight key competences: 1) Literacy competence; 2) Multilingual competence; 3) Mathematical competence and competence in science, technology and engineering; 4) Digital competence; 5) Personal, social and learning to learn competence; 6) Civic competence; 7) Entrepreneurship competence; 8) Cultural awareness and expression competence.
- 4 The British Council (2016) lists the following core competencies: Critical thinking and problem-solving, collaboration and communication, creativity and imagination, citizenship, digital literacy and student leadership and personal development.
- 5 Peace education, gender equality, multi/intercultural education are in this division seen to be placed under the umbrella of GCED.
- 6 The working group for GCED suggests using the term 'Global Citizenship Competence' instead of 'Global competence' to concentrate more on the actual knowledge, skills and dispositions related to GCED instead of the more general notion of 21st century skills and key competencies (Anderson & Bhattacharya, 2017).
- 7 Co-convened by UIS (UNESCO Institute for Statistics) and the Center for Universal Education at the Brookings Institute.
- 8 Working Group for GCED is a collegium of 90 organizations and experts co-convened by the UNESCO, the Center for Universal Education (CUE) at the Brookings Institution, and the United Nations Secretary General's Global Education First Initiative's Youth Advocacy Group (GEFI-YAG), (Anderson & Bhattacharya, 2017).
- 9 PISA assessed in 2018 the global competencies of 15-year-old pupils with a global competence cognitive test designed to elicit students' capacities to critically examine global issues; recognise outside influences on perspectives and world views; understand how to communicate with others in intercultural contexts; and identify and compare different courses of action to address global and intercultural issues. The cognitive test was taken by 27 countries and economies. In addition, students and school principals in 66 countries and economies completed background questionnaires on global competence. Students were asked to report how familiar they are with global issues; how developed their linguistic and communication skills are; to what extent they hold certain attitudes, such as respect for people from different cultural backgrounds; and what opportunities they have at school to develop global competence. The background questionnaire filled in by principals and teachers aims at getting a comparative picture of how education systems are integrating global, international and intercultural perspectives throughout the curriculum and in classroom activities. In 14 countries parents also filled the questionnaire (OECD, 2018).
- 10 The concept of Education for Sustainable Development is contested as it is seen to refer to a narrow modernist 'development' ideology. The focus on learning about sustainable development is also criticised as primarily a knowledge-based approach. Education for sustainability, is seen to be more normative, and has a stronger skills and values focus. However, the most transformative idea is education as sustainable development. ESD should not be seen as an end in itself, but as requiring a shift in thinking about the purpose of education (Sterling, 2001). As the concept of 'sustainable development' is already used in vast number of documents and policies it is not pragmatic to advocate changing it. However, when using the term in relation to competencies I prefer to use 'sustainability competencies' instead of 'competencies for sustainable development'.
- 11 The fifth pillar was suggested by a number of Latin American educators, as well as UNICEF during its own analytical process of the recommendations of the Delors Report. Later it has been used in the competency frameworks related to ESD.
- 12 Bianchi (2020) also underlines the need to develop a more encompassing system to identify and update the necessary sustainability (instead of green) competences critical to perform sustainability-related jobs and other jobs in a sustainable manner.
- 13 I use this concept to address all the different educations under Target 4.7.
- 14 For an example how key competencies are integrated in school curriculum see e.g. the plan for European Schools (Schola Europaea, 2018)
- 15 SALTO-YOUTH stands for Support, Advanced Learning and Training Opportunities for Youth. It is a network of seven resource centres working on European priority areas within the youth field which provide non-formal learning resources for youth workers and youth leaders and support organisations and National Agencies (NAs) in implementing EU's youth policies. (salto-youth.net/about)
- 16 The major platforms offering microcredentials are Coursera with some 37 million users, edX with 18 million users, Udacity with 10 million users and Futurelearn 9 million users. (Microbol, 2020)
- 17 See more at <https://fridaysforfuture.org/>

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BRIDGE 47

Bridge 47– Building Global Citizenship

The lead partner for Bridge 47 is Fingo ry (Elimäenkatu 25–27,
00510 Helsinki, Finland).

contact@bridge47.org
www.bridge47.org



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