**What is Global Competence, and how can it be learned effectively?**

**Introduction**

After many decades of advocacy by academics and educators alike, education for global competence was formalised in 2018 as the Organisation for Economic Co-operation and Development (OECD) launched a new assessment of global competence as part of PISA. The Programme for International Student Assessment is a triennial international survey that aims to evaluate education systems worldwide by testing the skills and knowledge of 15-year-old students. The member states of the United Nations (UN) had previously adopted the UNESCO Sustainable Development Goals (SDGs) in 2015. Global competence is considered necessary for achieving the United Nations’ Sustainable Development Goals, a list of 17 overarching aims considered essential in achieving global sustainability for all. For example, gender equality, an end to poverty, climate action, and peace and justice (OECD and Asia Society, 2018).

A group of seven European partners from Catalonia, Belgium, and Wales are currently working on an Erasmus+-funded project on global competence. The partner institutions are drawn from across a broad range of educational institutions, including schools, universities, and local authorities. Further information can be found on the project website: <https://blocs.xtec.cat/thinkglobal/> The *Think Global!* project explores how global competence is defined, taught, learned, and measured in the classroom, through international collaboration, and offers a model of professional learning for teachers to support students in developing global competence. The project seeks to address the following research question, through development and piloting of practical classroom activities: What is global competence, and how can it be learned effectively? This paper aims to explore the theoretical issues underpinning the research question through a review of the literature, in order to provide some context to the project. The paper addresses a number of themes, beginning with the terminology of global competence, how it has been incorporated into the curriculum, the pedagogies which are reported to support learning global competence, how it might be assessed effectively, the implications for professional learning, and finally the issue of representation and questions of bias.

**Definitions and Discourse**

The *Think Global!* project uses the definition outlined in *Preparing Our Youth for an Inclusive and Sustainable World: The OECD PISA Global Competence Framework* (OECD, 2018), in which global competence is described as a ‘multidimensional capacity’. It comprises four interdependent and overlapping dimensions that PISA (2018) argue people need to apply successfully to their everyday life in order to be ‘globally competent’. These dimensions are as follows:

1. The capacity to examine issues and situations of local, global and cultural significance (e.g. poverty, economic interdependence, migration, inequality, environmental risks, conflicts, cultural differences and stereotypes);

2. The capacity to understand and appreciate different perspectives and world views;

3. The ability to establish positive interactions with people of different national, ethnic, religious, social or cultural backgrounds or gender; and

4. The capacity and disposition to take constructive action toward sustainable development and collective well-being. (OECD, 2018: 7-8)

The dimensions are mirrored in the four domains of global competence as defined by the Centre for Global Education at Asia Society (2018), which are to:

* Investigate the world;
* Recognize perspectives;
* Communicate ideas;
* Take action (OECD & Asia Society, 2018).

The Asia Society (OECD & Asia Society, 2018) argues that the term ‘global competence’ aims to bring these overlapping dimensions and domains together as a whole concept, that can be taught, learned, and enacted.

However, it has been argued elsewhere that there is no single, agreed-upon definition of global competence, and there are many terms and purposes that overlap, such as ‘education for global citizenship’, ‘global mindedness’, and ‘global education’ (Engel, Rutkowski & Thomson, 2019). For example, education for sustainable development aims to enable the development of competencies “that empower individuals to reflect on their actions, taking into account their current and future social, cultural, economic and environmental impacts, from a local and a global perspective” (UNESCO, 2017: 7). This definition mimics that of global competence, yet the two terms exist separately.

Furthermore, the skills required to be globally competent are also applied to different contexts, and are often described as 21st Century Skills. These generally include the cognitive skills of critical thinking, problem-solving, knowledge application, and creativity; interpersonal skills such as communication and collaboration; and intrapersonal skills, for example self-direction, and motivation (asiasociety.org). I would argue that the overlap across multifarious definitions and the conflation of terminology to imply skills, attitudes, and behaviours works to make the concept of global competence less distinct, rather than clarifying its aims and implications for learning and teaching. The range of terminology used to describe what is meant by global competence, and indeed the term itself, raises difficulties in interpreting exactly what teachers should be doing in the classroom in order to support their students to develop ‘21st century skills’. Sälzer and Roczen (2018) discuss the multitude of terms and overlapping definitions and objectives, stemming from different theories that can confuse and lessen the impact of ideas about ‘global competence’. For example, ‘intercultural competence’ and ‘global citizenship’. This range of terms can in turn lead to difficulties in assessment of the skills, knowledge, and aptitudes of global competence since the focus and objectives of the different theoretical approaches may differ.

**Global Competence in the Curriculum**

The reasons given for teaching global competence centre on the need to ensure children and young people are fully prepared for the future. Boix Mansella and Jackson (2011) argue that increased globalisation requires a new style of learning and skills development to ensure young people are ready to tackle the challenges that globalisation presents, and enjoy the benefits of becoming global citizens. These skills include, for example, the ability for active participation, multilingualism, intercultural sophistication, critical enquiry skills, and creative, innovative approaches.

This argument is supported by the World Education Forum (2020), which advocates for new education models in what it refers to as the Fourth Industrial Revolution. The Forum claims that primary and secondary schools need to adapt to ensure their students are prepared for the world after education. Based on the findings of what the report described as a global consultation, the authors identify eight characteristics that they argue define “high-quality learning in the Fourth Industrial Revolution—‘Education 4.0’” (World Education Forum, 2020: 4). These include global citizenship skills; innovation and creativity; interpersonal skills; and problem-based and collaborative learning. All of which are incorporated into the OECD (2018) model of global competence. It is worth noting that the contributors to the report, and to the consultation are predominantly from the USA and North-Western Europe. This issue will be explored again, later in the article.

There is a good deal of recent research internationally that demonstrates how specific classroom activities can support students to develop some of the skills and dispositions that are encompassed by the term global competence. Few of these use that particular term, however, and many centre on the SDGs, perhaps since these are already articulated as objectives that curricula and classwork can be developed to meet. For example, student-centred classroom activities that support the development of global competence such as structured debates, learning from current events, learning through play (OECD & Asia Society, 2018), and through reading diverse literature (Holmes, 2019). The World Economic Forum (2020) *Education 4.0 Framework* also recommends personalised and self-paced learning; accessible and inclusive learning; problem-based and collaborative learning; lifelong and student-driven learning.

The use of technology is a key feature in many of the examples of classroom-based work that aims to enhance students’ global competence, particularly through project work. Tiven et al (2018) advocate global digital exchange, a means of connecting students with their peers around the world, online. The aim is to learn from one another and acquire global competence by creating and sharing online content in e-classroom discussion boards for other students to access and respond/reply. For example, a Digital Participatory Research (DPR) project reported by Mathews (2016), and undertaken by two teenaged groups – one in Jamaica and the other in South Florida, USA, led to student engagement in globally significant issues. This was achieved through student-led photography exploring glocal issues (local issues that have global significance) that formed the focus of sustained dialogue between the groups, and the discussion of potential solutions to the issues identified (Mathews, 2016).

Project-Based Learning (PBL) is also considered to be an important tool in developing global competence, which is often facilitated through digital and online technologies to enhance the reach and international elements of the learning. PBL is generally carried out in groups, and requires students to work together on an authentic, real-world project, with the aim of improving reasoning and collaborative skills as well as maintaining interest through authentic learning. Bel (2010) argues that PBL is an essential learning strategy for enabling students to become independent thinkers, and describes the opportunities PBL affords as follows:

Children solve real-world problems by designing their own inquiries, planning their learning, organizing their research, and implementing a multitude of learning strategies. Students flourish under this child-driven, motivating approach to learning and gain valuable skills that will build a strong foundation for their future in our global economy (Bel, 2010: 39).

Project Based Learning is a useful example of how many school systems incorporate global competence into the curriculum through standalone activities, or specific curriculum strands that aim to focus on achieving the skills, knowledge and dispositions required to be globally competent. However, in some educational systems, global competence is incorporated into the culture of the school so that it exists across everything that takes place throughout a student’s education.

Analysis of the early childhood, compulsory and upper secondary schools in Iceland explored how schools approach education for sustainable development. The research identified approaches that exist across the whole school system, such as a focus on critical thinking, tolerance, and active participation. The authors emphasise to democratic school culture and how this supports students to enhance their social skills, respect for others as well as themselves, and their citizenship identity (Jóhannesson et al, 2011). Similarly, research carried out in Sweden found that democratised classrooms, where students (as young as four) share power with teachers in designing the day-to-day curriculum can support students to develop 21st century competencies (Nordgren, 2006). However, it is worth noting that the social context in Sweden is already different from most systems, globally. The Swedish system does not encounter poverty and the socio-educational disadvantage that brings, particularly the consequent impact on children’s learning.

**Signature Pedagogies of Global Competence**

For each of the learning strategies and classroom practices outlined above, teachers will need to use or develop particular pedagogies to meet the learning objectives required for global competence. Some of these pedagogies will already exist in the repertoires of the majority of teachers. For example, supporting students to work in groups. However, there will be others that are unfamiliar, and will require some learning on their part. Tichnor-Wagner et al (2016)carried out a systematic review of the literature on K-12 teacher training and global education, and identified 12 core elements that they argue globally competent teachers demonstrate. These are divided into dispositions, knowledge, and skills. Through the research, Tichnor-Wagner et al (2016) found that the teachers all demonstrated the same core signature pedagogies throughout her/his regular teaching. The three signature pedagogies evident across all subject areas were:

1. Intentional integration of global topics and multiple perspectives into and across the standard curriculum;
2. Ongoing authentic engagement with global issues; and
3. Connecting teachers’ global experiences, students’ global experiences, and the curriculum (Tichnor-Wagner et al, 2016: 12).

There are clearly implications for teachers in terms of the knowledge-base and personal experience they will need in order to teach global competence. There are also implications for professional learning. For example, Boix Mansilla (2016) argues that teachers will need to support what she describes as “thinking dispositions”, which enable students to inquire about and consider multiple perspectives on a topic, critically engage, and discuss these respectfully.

In order to support students to engage in these discussions, teachers will need to create safe classroom cultures where students can express themselves, speculate, question, and debate respectfully. In this culture, the teacher acts as a facilitator, offering challenge and support, while modelling the values of global competence, such as equality, respect, dignity, and diversity. This can be achieved through a number of pedagogical approaches, many of which are already familiar to teachers. The extent to which a teacher might be familiar with any particular pedagogy, is influenced by the culture within which that teacher was educated, trained, and teaches. Some cultures of teaching encourage a learner-centred approach, whereas others are more didactic with the teacher functioning as expert. Teachers may need professional learning (PL) opportunities to develop skills that enable them to shift from an instructional, didactic approach to a more open, student-centred classroom model. There are also implications for school leadership in ensuring a school culture that support and enhances the opportunities for global competence education. In order for global competence to be incorporated into global education systems, either teachers will need to adjust their approaches to suit the intended learning outcomes, or the assessment framework designed by PISA will need to adjust to accommodate a range of pedagogical cultures.

There are further arguments to suggest that the need for teachers to develop global competence goes beyond the curriculum and the PISA assessment framework. Siagatullin (2019) argues that it is imperative that preservice teachers are globally competent, in order to work in diverse classrooms and schools effectively. The findings suggest that incorporating global knowledge into preservice teacher education makes a significant difference to the student teachers’ personal and professional growth. It does so by enabling these teachers to understand that educators should have sound global knowledge, be tolerant of diversity, and be active citizens to bring about change. The argument here is an interesting one, and the evidence points to a genuine development in the student teachers’ professionalism. However, there is an issue in relation to the current provision of teacher education which is also relevant to the professional learning (PL) that is available to qualified teachers. Global competence is a relatively new concept in terms of its formal establishment within curricula and assessment frameworks, so teacher education providers and those responsible for PL will need to develop new programmes that can bring new and qualified teachers up to speed on the pedagogies required for teaching global competence.

**Progression in Global Competence**

The issue of PL for teachers also arises when considering how student progression in global competence can be measured and assessed. Boix-Mansilla and Jackson (2011) argue that global competence-focused assessments, “are ongoing; offer informative feedback; can be conducted by multiple stakeholders” (Boix Mansilla and Jackson, 2011: 66). However, the PISA assessment for global competence is summative, and comprised of two parts - a cognitive assessment and a student questionnaire. The cognitive assessment aims to assess how well students can use their knowledge and experience of global issues to understand, reason, and analyse specific case studies. The questionnaire aims to elicit information about students’ attitudes, as well as knowledge and skills. Students are asked to report on their knowledge of particular global issues such as poverty, migration, or climate change. The questionnaire also focuses attitudes by asking questions that aim to find out students’ interest in and respect for other cultures.

For analytical and assessment purposes, this framework distinguishes four, interrelated cognitive processes that globally students need to use in order to fully understand global or intercultural issues and situations:

1. The capacity to evaluate information, formulate arguments and explain complex situations and problems by using and connecting evidence, identifying biases and gaps in information and managing conflicting arguments.

2. The capacity to identify and analyse multiple perspectives and world views, positioning and connecting their own and others’ perspectives on the world.

3. The capacity to understand differences in communication, recognising the importance of socially-appropriate communication conventions and adapting communication to the demands of diverse cultural contexts.

4. The capacity to evaluate actions and consequences by identifying and comparing different courses of action and weighing these actions against one another on the basis of short- and long-term

(OECD, 2018: 25)

*Teaching for Global Competence in a Rapidly Changing World* (OECD and Asia Society, 2018) offers some useful case study examples of how this can be achieved in specific curriculum subjects. There are also detailed examples of how global competence can be taught and assessed through interdisciplinary approaches. What this assessment framework doesn’t capture effectively are the discursive and behavioural aspects of global competence that would seem to be central to embodying its dispositions.

Global competence has multiple dimensions, and the emphasis is on how students respond to and act on the knowledge and skills they develop. Therefore, despite the PISA framework, it can be argued, as Boix-Mansilla and Jackson (2011) imply, that formative assessment is more valuable than summative in determining the extent to which students have progressed. The rubrics designed by PISA will not reveal the students’ progress towards developing global competence.

Based on an analysis of the PISA framework for global competence, Bamber et al (2018) discuss the implications for implementing transformative education, in terms of the pedagogies and skills required of teachers. The authors argue that,

Practitioners must develop creative and innovative strategies to overcome the constraints of institutional assessment mechanisms and move beyond individual assessment. They must facilitate and assess cooperative learning and forms of knowing, being and doing that emerge through working collaboratively. Formative, as opposed to summative, informal alongside formal, assessment which nurtures the learners’ ongoing becoming should be employed

(Bamber et al, 2018: 225).

In summary, Bamber et al (2018) argue for formative assessment that is both informal and formal in order to understand how students are progressing. This approach has implications for professional learning, since the classroom teacher must build opportunities for formative assessment in global competence into the curriculum, and may not have the required skills or knowledge to achieve this. There are other, practical considerations for teachers to address when designing appropriate assessment for global competence that have significant implications. For example, s/he will need to select what should be assessed from the extensive list of competencies, and distinguish ‘correct’ from ‘incorrect’ responses for a given competency. This will be particularly challenging for behavioural and attitudinal competencies, and could potentially lead to difficulties creating transparency and replicability in the assessment. These modes of assessment that focus on student-centred progression through a series of competencies that are not easily quantified will require a considerable paradigm shift in some classroom and school cultures.

**Conclusion: Challenges for learning and teaching global competence**

The discussion above details a number of key issues that are important in understanding and implementing global competence in the curriculum. The overlapping and, at times, conflated definitions of similar skills, knowledge and competencies such as global education, education for sustainable development, and 21st century skills, can cause difficulties in designing classroom activities, and assessing progress effectively. Furthermore, the need for specific classroom practices to teach global competence and meet the SDGs, so that learning is student-centred, needs further consideration. The assessment of global competence is also beset with some conflict. The PISA assessment framework is rigidly structured to record summative student achievement, yet there is recognition that formative, classroom-based assessment would be the more effective strategy. The teaching, learning, and assessment of global competence require specific pedagogies to ensure their effectiveness, some of which will require a significant shift in the skills and knowledge-base of current teachers. The Asia Society (2008) recommends recruiting teachers with an international background in the first instance. However, this is not always possible, and professional learning and opportunities for teachers to engage in international dialogue, are therefore key to ensuring teachers are skilled in the pedagogies required for 21st century education, all of which will require appropriate resourcing.

There are further, important, limitations to the OECD definition and to the current frameworks on global competence, with regards issues of representation and bias that impact significantly on students’ capacity to learn global competence. It is argued (by, for example, Europe-wide Global Education Congress, 2002; Grotlüschen, 2018; Sälzer & Roczen, 2018) that the PISA Framework for global competence reflects a neo-liberalism that is culturally biased towards white, Western, ‘scientific’ discourse. The focus on the Sustainable Development Goals in particular reflects a European perspective on what can be considered ‘globally responsible’ behaviour and does not take into consideration issues of culture, socio-economic status, geography, or political situations in many countries.

Grotlüschen (2018) carried out discourse analysis of the global competence domain which revealed significant reveals bias towards Western discourses. The study found that “Overall, the western, cognitive and rational, late modern discourse seems to be dominant while it silently disqualifies the areas ascribed as non-scientific, like religious, emotional, bodily issues (most of them being constructed as 'female' rather than 'male' and 'colored/south' than 'white/male')” (Abstract).

This, in turn, creates additional challenges in applying the PISA assessment framework. Elements of the assessment require students to respond to scenarios to demonstrate how they have developed the required attitudes and behaviours to be globally competent. If these assessment tools display the same level of biased representation as Grotlüschen (2018) argues, this is clearly problematic for schools and students in nations who are from the global south. The assessment would be biased against swathes of students for reasons of geography, and socio-cultural heritage. I would also argue, that this bias runs counter to the apparent moral and ethical focus of the drive towards global competence. If students are being supported to develop ‘tolerance’ towards diversity, it cannot be ethical that some students are excluded from the possibility of success. Furthermore, the notion of ‘tolerance’ needs redressing if students are to really engage with one another. Recognition might be a more appropriate term to encompass the levels of respect and fellow-feeling that the domain should be engendering. To ensure these are fair and not biased against students who are not from white European backgrounds, the scenarios – and associated assessment framework - would need to set clear expectations for socially desirable responses that are not culturally biased. As Sälzer & Roczen (2018) argue, assessment of global competence therefore needs to be transparent and replicable to ensure parity of esteem across all participating nations and cultures.

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