

## Science by Streetlight and the OECD’s measure of Global Competence: a new yardstick for internationalisation?

### Abstract

Educational institutions have been among the most active social organisations responding to and facilitating processes associated with globalisation. This has primarily been undertaken through the attempts of schools and universities to 'internationalise' their student intake, staffing, curricula, research, and assessment systems. Amongst the many benefits associated with the promotion of 'internationalisation' is that it will provide students with attributes labelled as Global citizenship, skills or competencies, that will contribute to improving tolerance, respect and harmony between nations and cultures. Various nations and global agencies actively promote such goals and Global Citizenship was included in the UN’s Sustainable Development Goals (SDGs). Positioned as a response to the SDGs, the OECD has developed a metric to compare the 'Global Competency' of 15-year-old pupils, which was incorporated into PISA 2018. We analyse the rationales for this decision, the conception of 'Global Competence' adopted by the OECD and how these have changed since its inception in 2013. We also explore how it will be measured and how the OECD deals with what they describe as 'the most salient challenge affecting PISA'. We argue: (i) the official conception of 'Global Competence' finally adopted was strongly influenced by the OECD’s quest to position itself as the agency responsible for monitoring progress on the SDGs, and then amended to match what could be easily measured; (ii) although the OECD presents its Global Competencies using a humanitarian discourse, it is framed by its economic mission.

### Introduction

The Organisation for Economic Development (OECD) compares the academic performance of 15-year olds globally through its Programme for International Student Assessment (PISA), describing the assessment as 'the world’s premier yardstick for evaluating the quality, equity and efficiency of school systems' (OECD 2012, 11). Table 1 shows the demographic coverage of its international large-scale assessments (ILSAs) which now include: adults, 4/5 year olds, teachers and university students.

**Table 1. The OECD’s Main international education survey**

Programme/Start date	Who is assessed?	Subject Areas	Sources of context information	Frequency	Coverage
<b>OECD PISA (2000) Programme of International Student Assessment</b>	15 year olds in FT education.	- Reading - Mathematics - Science - Collaborative problem-solving (2015) -Global Competency(2018)	- Students - Parents (optional) - Teachers (optional) - School principals	Every three years since 2000	OECD countries: 34 Non-OECD participants: 38 (PISA 2015)
<b>OECD PIAAC (2013) Programme for the International assessment of Adult Competencies.</b>	16-65 year olds	- Literacy - Numeracy - Reading components - Problem-solving in technology-rich environments	- The individuals who are assessed	Every 3 years	OECD countries:24 Non-OECD participants: 2 (PIAAC 2011)

<b>OECD TALIS (2008) Teaching and Learning International Survey.</b>	Teachers of lower secondary education <sup>1</sup>	(Focuses on the learning environment and working conditions of teachers)	- Teachers - School principals	Five years between first two cycles Since 2008	OECD countries: 16 Non-OECD participants: 7 (TALIS 2008)
<b>OECD AHELO (2012) Assessment of Higher education learning Outcomes.</b>	University students at the end of the B.A. programme	- Generic skills common to all university students (such as critical thinking) - Skills specific to economics and engineering	- Students - Faculties - Institutions	A feasibility study was carried out in 2012	Institutions from 17 countries participated in the feasibility study in 2012
<b>OECD PISA-D (2018) PISA for Development</b>	15 year olds in school and some 'Out of school' 14-16 year olds.	School based: - Mathematics - Reading - Science Out of school: - Mathematics - Reading	- Students - Teachers - School principals	Results of a pilot round in 9 countries to be released in Dec 2018, merging with PISA in 2021	Low- and middle-income countries (9 pilot countries)
<b>OECD IELS (2018) The International Early Learning and Child Well-being Study</b>	4/5 year olds.	- Emergent literacy - Emergent numeracy - Empathy and trust - Self-regulation	- Parents - Staff	2017 field trial/Pilot 2018 Main Study	Pilot Study In USA, England & Estonia

Through these ILSAs the OECD has exerted a significant but uneven influence on national education systems, often redefining the aims of schooling indirectly by encouraging the narrowing of curricula, and more directly by advocating the integration of its test components in local curricula and the transfer of policies and practices associated with high-performing nations. The tests are an exercise in economic internationalisation as their rationale has been based on the claim that future economic growth and survival of nations in the global knowledge economy necessitates improving the quality of human capital, as measured by PISA scores, and through the transfer of international/global 'best practices'. Woodward (2009) refers to these processes of normalisation and knowledge construction as *cognitive* and *epistemic* governance respectively. Through these processes, the OECD's testing regime has emerged as a powerful form of 'internationalisation' that has the capacity via comparative measurements to affect entire education systems from kindergartens to higher education. When extended to Global Competencies, the assessment has the potential to be used as a measure of internationalisation in schools, and used to exert pressure for reform.

The OECD's new paradigm for development (OECD 2011) is significant for this study, marking the organisation's intention to extend its influence into developing 'contexts', with the stated goal of having all nations participating in PISA by 2030 (Ward 2016). To pursue this new paradigm, the organisation unveiled its PISA for Development (PISA-D) initiative, which is currently being piloted and which will massively extend the OECD's coverage by providing a gateway for low- and middle-income nations to participate in the regular PISA assessment from 2021 onwards. The OECD legitimated this move by positioning PISA (through PISA-D) as the primary metric for measuring progress on the UN's Sustainable Development Goal (SDG) 4.1.1, which emphasised 'inclusive and equitable quality education' for secondary-aged pupils. Moving to position itself as the primary agency responsible for

tracking progress on the SDGs, the updated OECD Learning Framework 2030 (OECD 2018b) extends beyond the cognitive-economic focus of ‘education quality’ to encompass the non-cognitive dimensions highlighted in SDG 4.7:

...the 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. (Target 4.7, Education 2030, Incheon Declaration and Framework for Action 2016, 20)

Although the pursuit of ‘Global Citizenship’ has long been a central goal of internationalisation efforts in schools and had been explicitly promoted by UNESCO (2012)<sup>2</sup>, its identification as an official global target had significant policy ramifications. When translated into the language of assessment, ‘global citizenship’ becomes ‘global competencies or skills’. In 2013, the OECD first considered including the assessment of Global Competency as the ‘innovative assessment domain’ (one-off domains which vary every three years) in the 2018 PISA test. However, as we show below, the rationale presented for its inclusion and their conception of a globally competent citizen initially bore little resemblance to that described in Target 4.7. This article focusses on the OECD’s measurement of Global Competence through an analysis of (i) key documents and presentations produced by the OECD, (ii) related documents, in particular those relating to the SDGs, and (iii) academic commentaries and critiques. Documents were analysed with regard to their rhetorical goals, recognising that these goals transcend specific texts to encompass the broader organisational agenda (Swales 1990; Auld and Morris 2014).

An extensive overview of the OECD’s agenda and goals was developed to provide an interpretive frame to guide the analysis. This process began with an initial review of literature that analysed the OECD’s mission and agenda in education governance, primarily surveying relevant academic commentaries (e.g. Kallo 2009; Sellar and Lingard 2014; Addey 2017). This was followed by an in-depth analysis of organisational documents detailing the extension of the OECD’s agenda in education governance through its ‘new paradigm for development’ (OECD 2011; 2012; 2013), and the evolution and maturation of this agenda in the form of the OECD Learning Framework 2030 (OECD 2016a; 2018a). These reviews were used to clarify the OECD’s shifting agenda and to provide a basis for interpreting its activities, including the decision to include global competence in the assessment and its changing nature over time. To inform this interpretation, we undertook a further review of documents preceding the post-2015 discussions (e.g. UNESCO 2012), the final shape of the UN’s Sustainable Development Goals (UNESCO 2016), and reports that attempt to establish a framework for monitoring progress on these goals (e.g. UIS 2016; 2017; 2018).

Within this frame, we conducted a thematic analysis of the key OECD documents relating to Global Competence that had been published since it first appeared in 2013, identifying key features and how they had changed or remained consistent over time (Reimers 2013; OECD 2014; 2016a; 2016b; 2018a; 2018b; Schleicher 2016; 2018). This was pursued through an iterative process of independent coding, extension and then collaborative triangulation, before supplementing this with analysis from two scholarly articles that were brought to our attention as we were undertaking our review (Grotluschen 2017; Ledger et al. *forthcoming*). These two articles provided insights into the nature of the ‘Global Citizen’ promoted by the OECD and the actors involved in developing its framework, which we then

---

<sup>2</sup> The Global Education First Initiative (UNESCO 2012), initiated by Secretary-General Ban Ki-moon to strengthen progress towards the Millennium Development Goals, listed ‘foster global citizenship’ as one of its three priorities to build a better future for all. The other two priorities were, ‘to put every child in school’ and ‘to improve the quality of learning’.

situated within the interpretive frame guiding the analysis in this article. The structure of the article addresses sequentially the critical issues concerning the OECD's measurement of Global Competence: why was it undertaken; how was Global Competency defined; who defined it; and how the OECD overcomes challenges inherent in measurement and comparison.

Tracing the shifting rationales and definitions over time in this way complements research that delves 'inside the PISA laboratory' (e.g. Gorur 2011), and which unpacks both issues associated with achieving comparability (e.g. Gorur 2014 on equity) and the cultural assumptions embedded in measurements (e.g. Rappleye et al. *forthcoming* on wellbeing). Our analysis reveals a process that is more *ad hoc* and opportunistic than the official portrayal, and while the measurement was developed as part of the OECD's aspiration to expand its influence in education governance (see Addey 2017; Auld et al. 2018), there is a high degree of contingency to both its inclusion and the outcome. The decision to measure GC complements the OECD's Learning Framework 2030 that is allied to the UN's SDGs, but is also in line with Schleicher's (2018) recent assertion that PISA will be ready to evolve to accommodate new trends and 'hot topics', and to thereby ensure its continued relevance. The assertion indicates a significant shift in approach, with implications for how PISA is constructed and analysts' ability to maintain its *scientific* credentials.

The three domains measured regularly by PISA (science, maths and literacy) have a far more established nature than global citizenship, which largely operates as a floating signifier and conveys a diverse range of meanings. Oxley and Morris (2013) identify eight different conceptions of Global citizenship used in the literature, and there is also evidence that the concept is understood and represented in school curricula differently across nations (Goren & Yemini (2017)). Countries that are high in nationalism (e.g. US, Israel, China) tend to frame GCE as a tool for maintaining their status, whereas countries dealing with an influx of immigrants (e.g. Spain and Germany) try to frame it in more multicultural terms (Engel 2014; Engel and Ortloff 2009). In each of these settings local influences can be found to impact the way GCE (and citizenship in general) is understood and received. A similar absence of uniformity is evident in how Global Citizenship is defined by the OECD over time and by different international agencies. For example, voices within UNESCO promote the SDG's from a far less instrumental perspective than the OECD (e.g. UNESCO/MGIEP 2017).

We argue that the OECD's conception of Global Competencies is an ahistorical and depoliticised entity, focusing on the cognitive domain through the measurement of pupils understanding. This is fundamentally in tension with the organisation's quest to promote the 'appreciation of cultural diversity', as the model 'global citizen' ultimately sounds like a model OECD intern (OECD 2018c) or member of the global middle class (Maxwell and Yemeni 2018). We suggest the rationale for measuring Global Competencies has in its final form been driven by the organisation's goal of legitimating and strengthening its role in measuring the SDG's through PISA-D, evidenced by its inclusion in the OECD's Learning Framework 2030 (OECD 2018b). Under the post-2015 banner of humanitarian assessment, the organisation has superficially aligned its definition with the UN's SDGs but will use global competencies to support its core purpose; namely, to identify the causes of high-performance on its assessments and to then promote policies and practices that might improve education-economic performance in other nations.

## **Surveying the OECD's measure of Global Competence**

### ***Rationales***

Between 2013 and 2018, a multitude of reasons for assessing Global Competencies were presented, but the overall narrative which runs through the documents is one in which the OECD portrays itself as responding to two exogenous forces. First, it is depicted as a necessary and inevitable response to the irresistible impacts of globalisation and technological change. Second, it claims it is undertaking the task in response to the demand of others (policy makers/ educational leaders) who are seeking to address those impacts. Similar claims, that PISA-D and IELS were developed in response to demand from stakeholders was made despite evidence to the contrary (Auld et al. 2018). Here we survey the rationales that were given at each key stage (2014; 2016; 2018).

The first proposal that the OECD assess Global Competencies was made by Fernando Reimers in a paper considered by the PISA Governing Board in 2013. Reimers emphasised “a world that is increasingly interdependent”, in which “people will have to negotiate how to adopt ethical and legal frameworks amidst cultural pluralism”, and in which “they will have to figure out their common humanity and their differences with others who come from different cultural and civilization origins” (1). Ultimately, the rationale for “global education” is presented as “preparing students to make meaning of their lives in [this] highly interdependent world” (1). Building on this, Reimers positioned global education as “the new civics of the 21<sup>st</sup> century”, claiming that “citizenship is embedded in a mesh of relationships that are global as well as local” (1). Comparative research is then positioned as particularly useful for supporting this task, with the final inference: “building on the successful record of the PISA studies, [the OECD] is well positioned to assume a leadership role in advancing the development and implementation of cross-national assessments of global competencies of students” (2).

Reimer’s (2013) paper was titled *Assessing Global Education: An Opportunity for the OECD*, raising the question of what this opportunity was. UNESCO has traditionally been viewed as the organizational carrier for civics education (Rauner 1999), and earlier in 2013 Reimer had acted as an expert at a *UNESCO Technical Consultation on Global Citizenship Education* (2013), for which the rationale was:

The Global Education First Initiative (GEFI), launched in 2012 by the UN Secretary-General, includes global citizenship education as one of its three priorities. Within UNESCO, education for peace and sustainable development is being proposed to be the overarching goal of its education programme for the next 8 years, with empowered global citizens as an objective. Work is underway through the Learning Metrics Task Force to define what is required to support young people become “citizens of the world,” including learning outcomes and competencies. 1.1.3. There is a *clear opportunity* to include reference to global citizenship education in the post-2015 development agenda as part of the knowledge, skills and competencies that learners require in the 21st Century and beyond. (UNESCO 2013, 2)

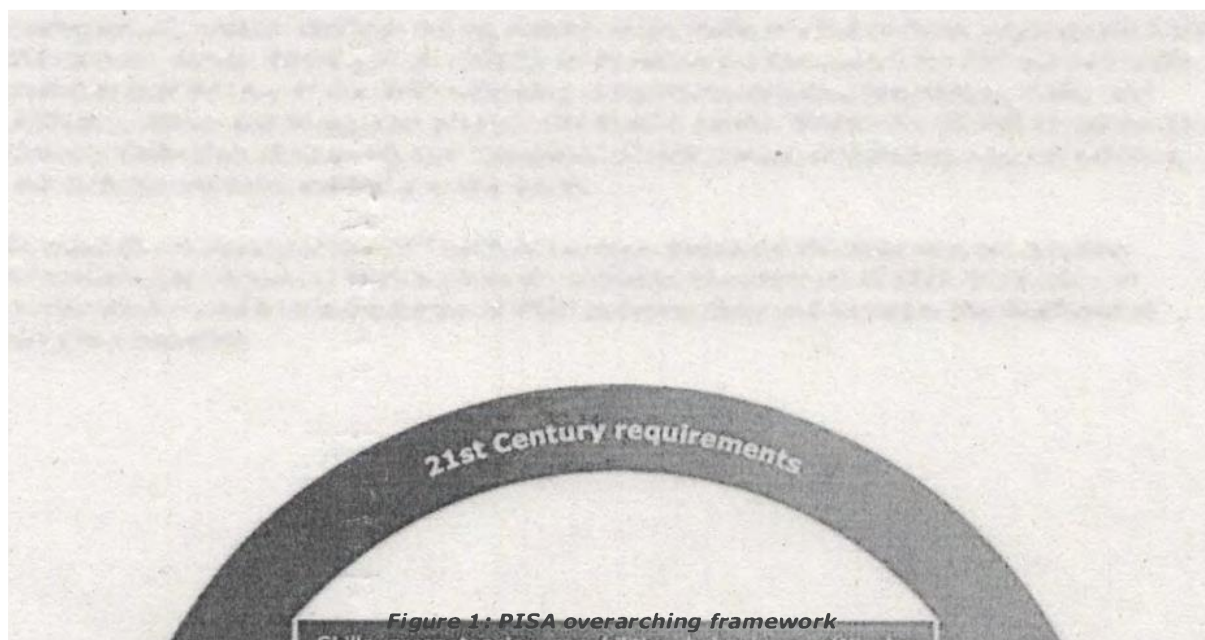
It was thus clear that global citizenship education would likely form a major part of the SDG’s, with plans duly elaborated by the UN’s GEFI a year later (UNESCO 2014) and confirmed at Incheon (UNESCO 2015).

One year later, the 38<sup>th</sup> meeting of the PISA governing board (2014) discussed the PISA 2018 Framework Plans, with Global Competence on the agenda. Reimer’s research is referenced, but only to note a history of efforts to define global competence, to confirm that those definitions are influenced by various contested and changeable values, and then to identify some aspects of those definitions. UNESCO is mentioned only once, regarding surveys run by other international organizations, and there is nothing about either the Millennium Development Goals or the post-2015 discussions. The interest in Global Competencies takes the same starting point, emphasising the way in which “our learning,

work and societal environments are becoming increasingly global, interconnected and interdependent”, and arguing that “students must leave school equipped with the attitudes, knowledge and skills to work and live in a global society and that educators must develop global competencies in themselves and their students” (6). These experiences are deemed “crucial for the growing number of students who will seek to pursue their further studies outside their home country” (6), and to “make a positive contribution to the global community” (6).

The rationale is, however, still ultimately framed by the organisation’s vision of the global knowledge economy, emphasising that “education needs to adapt its program and take account of what students will need in their future lives... [as] the requirements of the global knowledge required in the 21<sup>st</sup> century society go far beyond the traditional literacies” (6). The idea that global competencies are necessary for students to function as mobile knowledge workers is sharpened in Pearson’s initial attempt to define a framework, which “covers the attitudes, behaviours, knowledge and skills that students, by the end of formal secondary education, need to be equipped with in order to be successful in their future studies and employment paths” (6). A further departure from global competencies as ‘the new civics’ relates directly to the OECD’s quest to identify the ‘factors’ associated with high performance on its assessments: “To meet the demands of the 21<sup>st</sup> century we have proposed the following overarching framework (see Figure 1 below) to show how the different components of PISA 2018 will – in combination – enable interpretation of PISA outcome data and increase the likelihood of revealing causality” (2014, 7).

Figure 1. PISA 2018 overarching framework (OECD 2014)



The report elaborates, “This model suggests that the purely cognitive and essentially non-cognitive form a continuum, from skills to behaviours and attitudes, from tools for working to living in the world” (7). After PISA had gone through several rounds, Schleicher (2009) had conceded that it would not be possible to identify causal relations through PISA, the OECD (2012) sought to overcome the issue by “combin[ing] advanced forms of educational assessment with sophisticated survey research methods” to identify an “extensive web of correlations”, which would in turn reveal the “range of factors that could conceivably affect that performance” (23). The rationale thus emerges that by expanding the measurement into yet more domains the organisation will ultimately get closer to identifying causality. Global Competencies is thus an additional variable within the overarching schema of 21<sup>st</sup> century requirements/skills, with the primary goal of cultivating knowledge workers for the global economy.

That is, it was framed by the OECD's long-established mission (to identify and advocate the causes of high education-economic performance) rather than by: (i) its new paradigm for development, (ii) anticipated post-2015 discussions, or (iii) demand from member (or non-member) nations.

Two years later, the basic claims regarding the global situation are the same, and Andreas Schleicher opens the foreword with a familiar economic framing:

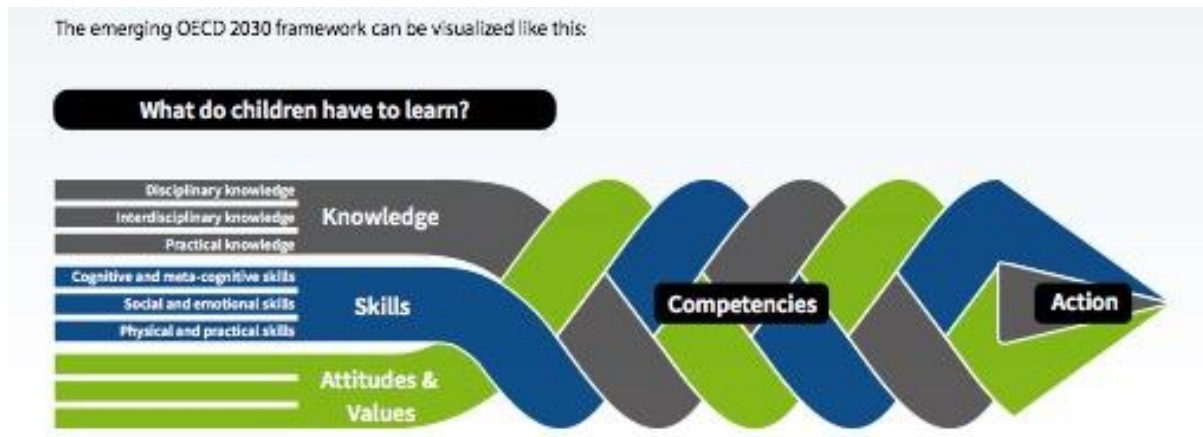
The more interdependent the world becomes, the more we rely on collaborators and orchestrators who are able to join others in work and life. Schools need to prepare students for a world in which people need to work with others of diverse cultural origins, and appreciate different ideas, perspectives and values. (OECD 2016a)

Gabriela Ramos presents a more nuanced rationale that focuses on “inclusive societies”, in which “citizens need not only the skills to be competitive and ready for a new world of work, but more importantly they also need to develop the capacity to analyse and understand global intercultural issues” (OECD 2016a, 1). The BBC Press Release (Schleicher 2016) stated that “there is such a need for *new rankings* to show young people's competence in a world where globalisation is a powerful economic, political and cultural force”. Schleicher elaborates the need for the assessment with reference to globalisation, uncertainty, migration and because education leaders around the world are increasingly talking about *the need to teach* “global competences”. In essence, pupils will be better able to deal with the problems arising from Globalisation if they possess Global Competencies. This is identified as an undervalued part of the school curriculum on the grounds that its inclusion will help reduce sources of conflict in societies and produce a multitude of worthwhile benefits (e.g. peace, prosperity and beauty). The specific role of the OECD in developing measurements is then reframed as secondary to education leaders' emphasis on global competency, and as a response to the absence of a system for measuring, comparing and improving nations performance on this aspect.

Despite global citizenships inclusion under SDG4.7, there is no explicit mention of the SDGs amidst the rationales. The competencies remained situated within the OECD's overarching framework that aimed to combine ‘the purely cognitive and essentially non-cognitive’ into a continuum revealing underlying causal relationships, which would in turn be used to identify policy lessons and improve education-economic performance. The framework itself, however, was updated in 2016 as part of the OECD's emerging *Education 2030 Framework* (OECD 2016a, 2). The document emphasises “the need to find a new concept of growth”, one that “may not be a quantifiable concept, based solely on maximising economic gains, but a multidimensional concept that includes care for the environment and social harmony, as well as acceptable levels of security, health, and education”, and which covers “quantitative and qualitative indicators, including subjective well-being and quality jobs”, ensuring “the benefits of growth are fairly shared across society” (OECD 2016a, 1).



Figure 2. Education 2030 Framework (OECD 2016a)<sup>3</sup>



Although there is no mention of the SDGs, global competencies/citizenship or sustainability in the framework presented in 2016, the OECD would later claim that its *Learning Framework 2030* (OECDc 2018) “contributes to the UN 2030 Global Goals for Sustainable Development (SDGs), aiming to ensure the sustainability of people, profit, planet and peace, through partnership” (3). That is, the basic framework originally conceptualised under the OECD new paradigm for development was gradually extended to incorporate more aspects of the SDGs and thereby to align more closely with the UN-sanctioned agenda post-2015.

In 2018, the organisation found its final positioning. Gabriela Ramos opens the foreword by reiterating the two main rationales for GC identified in OECD 2016a. These relate to future knowledge workers and a plea for inclusivity:

Reinforcing global competence is vital for individuals to thrive in a rapidly changing world and for societies to progress without leaving anyone behind... Citizens need not only the skills to be competitive and ready for a new world of work, but more importantly they also need to develop the capacity to analyse and understand global and intercultural issues... Together, we can foster global competence for more inclusive societies.  
 (OECD 2018a, 2)

Schleicher, however, presents an altogether different rationale to his OECD 2016a opening by attributing the OECD’s focus on global competencies to the promotion of sustainable development, which is depicted as ‘the missing piece of the Globalisation puzzle’. He elaborates:

In 2015, 193 countries committed to achieving the UN’s 17 Sustainable Development Goals (SDGs), a shared vision of humanity that provides the missing piece of the globalisation puzzle. The extent to which that vision becomes a reality will depend on today’s classrooms....This has inspired the OECD’s PISA, the global yardstick for educational success, to include global competence in its metrics for quality, equity and effectiveness in education. PISA will assess global competence for the first time ever in 2018. In that regard, this framework provides its conceptual underpinning.  
 (OECD 2018a, 2)

<sup>3</sup> The OECD 2030 Framework is updated in OECD 2018b as the OECD Learning Framework 2030, and even then is presented as ‘work-in-progress’ (4).



The claim that the UN's SDGs *inspired* the OECD to include Global Competencies in its metrics looks like an exercise in *post hoc* rationalisation given that the decision to assess Global Competencies was considered five years earlier and the SDGs were only linked to the OECD's assessment of Global Competencies explicitly in 2018. The main text nuances Schleicher's rationale, and a section titled 'why do we need global competence' gives the following rationales: (i) to live harmoniously in multicultural communities; (ii) to thrive in a changing labour market; (iii) to use media platforms effectively and responsibly, (iv) to support the sustainable development goals. Of these, the requirement 'to thrive in a changing labour market' most clearly fits the OECD's initial framework, which focused squarely on cognitive skills in education and their implications within a competitive global knowledge economy. The subsection elaborates:

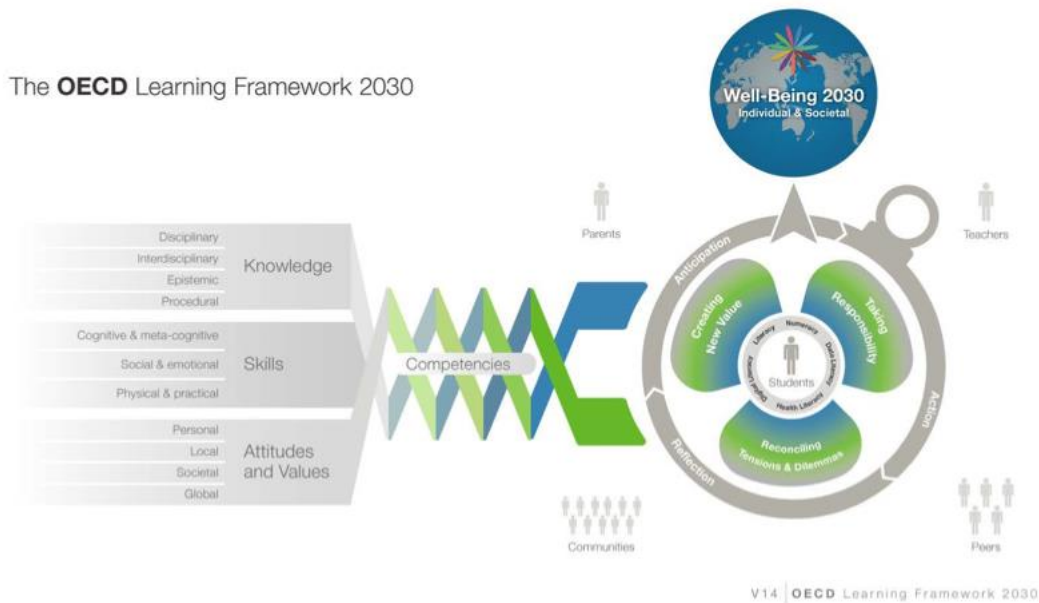
Educating for global competence can boost employability. Employers increasingly seek to attract learners who easily adapt and are able to apply and transfer their skills and knowledge to new contexts. Work readiness in an interconnected world requires young people to understand the complex dynamics of globalisation, be open to people from different cultural backgrounds, build trust in diverse teams and demonstrate respect for others. (5)

This statement represents continuity with the initial rationale presented in 2014, and reiterated in 2016, which indicated that global competency would form part of the broader continuum of cognitive and non-cognitive skills necessary to function as a global knowledge worker, and the inclusion of which would enhance the organisations capacity to make causal judgments on education performance and future economic competitiveness. The other rationales are secondary to the organisation's central mission, while the section 'to support the sustainable development goals' states: "educating for global competence can help form new generations who care about global issues and engage in tackling social, political, economic and environmental challenges" (5). Having established the importance of Global Competence under the SDGs, the OECD poses the question: 'Should we assess global competence?' (6). It duly answers in the affirmative, because high demands can only be met "if education systems define new learning objectives based on a solid framework, and use different types of assessment to reflect on the effectiveness of their initiatives and teaching practices" (5). Once school systems are being assessed on a 'solid framework', the next step will be to identify policies and practices that are associated with high performance:

A fundamental goal of this work is to support evidence-based decisions on how to improve curricula, teaching, assessments and schools' responses to cultural diversity in order to prepare young people to become global citizens (OECD 2018a, 6).

The OECD's traditional emphasis on global knowledge workers is thus substituted for globally competent citizens, with the latter encompassing and nuancing the former to accommodate the SDGs but not replacing it. This preserves and strengthens the OECD's broader ambitions in education governance and its new paradigm for development, which has been updated in the form of the OECD Learning Framework 2030 (see Figure 3. below) and is now tied directly to the realisation of the UN's SDGs.

Figure 3. OECD Learning Framework 2030: Work-in-progress (OECD 2018b)



This shift in rationales is mirrored in the way ‘Global Competencies’ was redefined which we explore below.

### *(Re)defining global competence*

The definitions of global competence have varied over time and, while there are some common elements across the documents, a process of alignment with the SDGs is discernible, particularly in the final document. The definitions are summarised in the following quotations and discussed below:

... the skills and mind habits to understand global interdependence, and to live with meaning and direction in contexts where global interactions increase exponentially. (OECD 2013, 2)

... the capacity of an individual to understand that we learn, work and live in an international, interconnected and interdependent society and the capability to use that knowledge to inform one's dispositions, behaviours and actions when navigating, interacting, communicating and participating in a variety of roles and international contexts as a reflective individual. (OECD 2014, 9)

... the capacity to analyse global and intercultural issues critically and from multiple perspectives, to understand how differences affect perceptions judgements, and ideas of self and others, and to engage in open, appropriate and effective interactions with others from different backgrounds on the basis of a shared respect for human dignity. (OECD 2016a, 4)

... the capacity to examine local, global and intercultural issues, to understand and appreciate the perspectives and world views 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. (OECD 2018a, 7)

In his initial proposal to the PISA Governing Board (OECD 2013), Reimers presented the rationale for global competencies in terms of ‘the new civics’ for the 21<sup>st</sup> century. Reimers’ definition (above) is supplemented by distinguishing two approaches to Global Competency, one

focussed on *knowledge* and the other on *dispositions*. During these early phases the OECD canvassed a range of ideas and definitions, and this continued in the 2014 document, in which the intent to include Global Competency in the 2018 PISA cycle was confirmed. Noting the need to encompass both knowledge and behaviours in any definition and drawing “heavily on Pearsons’ existing expertise and knowledge of what works in PISA” (OECD 2014, 8), the OECD (2014) stressed that this definition (see above) might change as the Global Competence Expert Group (GEG):

...refine(s) this initial high-level definition of the construct. The GEG will do so as it continues its discussions of the knowledge, skills, attitudes, and behaviours that comprise global competence. (OECD 2014, 10)

In 2016, and despite framing the rationale largely in terms of the need to develop ‘globally minded’ workers in the foreword, Schleicher (OECD 2016a) enunciated a more elaborate definition of Global Competence, which moves it towards a focus on global issues and intercultural sensitivity.

The final definition of OECD 2018a contains two significant changes from the OECD 2016a definition. First, the expectation that pupils are critical and reflect on their own perceptions of others was removed. Second, the quest for ‘human dignity’ was replaced by ‘to act for collective well-being and sustainable development’. The reasons for these changes are not specified but the focus on ‘understanding’ aligns Global Competence more closely with assessment as understanding is more readily measurable than critical reflection. Similarly, the removal of reference to ‘respect for human dignity’ allows a focus on cognitive aspects (knowledge, skills and attitudes) and allows the exercise to avoid assessing ‘values’.

The direct references to sustainability and well-being introduced in 2018 follows the amended rationale and strengthens the OECD’s quest to assess the SDGs through PISA-D and its Learning Framework 2030 (OECD 2018b). This can be interpreted as the evolution of its new paradigm for development, extending beyond the cognitive-economic focus into the non-cognitive aspects of education and aligning with the UN’s globally-sanctioned agenda.

### **The Nature of the Global Citizen**

The OECD (2018a) divides Global Competency into four primary dimensions (knowledge, values, attitudes and skills), and then targets four primary rationales: to live harmoniously in multicultural communities; to thrive in a changing labour market; to use media platforms effectively and responsibly; and to support the SDG’s. What emerges is a conception of Global Competence that is more akin to promoting inter-cultural tolerance and global sustainability. In terms of Oxley and Morris’s (2014) analysis of the conceptions of Global Citizenship, the focus is on a cultural/social/sustainable conception rather than a critical or political one that requires active engagement. The result is a portrayal of the globe as an ahistorical, depoliticised and fixed entity, which is to be accepted and understood as it is. The expectation is that schools should teach pupils about globalisation and provide them with the skills to adapt and fit into it. Any consideration that the world has been shaped through colonisation, subjugation and religious fundamentalism, inter alia, and that the barriers to human dignity operate both within and across nations and cultures is absent. Similarly, with specific regard to the 2016a OECD document Ledger et al. (*forthcoming*) comment:

... (it) presumes that young people need to change to meet the world of the future, rather than suggesting that we should work systemically to construct alternative futures to meet the needs of the young.... Thus, young people must change to fit the predicted world, eschewing a world that should be changed to fit people (21)

A further insight is provided by analysing the nature of the model 15-year citizen, which the OECD envisages, and his/her nemesis 'the poor global citizen'. A globally competent student who will score highly on the test is one who has experienced other cultures, is bi-lingual, and has access to social media and a liberal western education; ie a member of the global middle class. In contrast, the low performing student is monolingual, probably socioeconomically disadvantaged, and has limited exposure to other cultures and to social media. Ledger et al. (*forthcoming*), in their detailed analysis of the assessment items provided in the OECD 2016a document provide a succinct description of a model student:

... a globally competent person feels confident and happy about travelling to other countries, implying that if one hails from a background where this is not a norm, and feels apprehensive about such new experiences, one is not globally competent (24)... The ideal globally competent student has money to donate to charity, has a home in which they can host exchange students, has met people from many countries, and goes to a school which is able to offer exchange programmes. These variables essentially describe the habitus of a global elite, making it hard to see how a child from a lower socio-economic background and/or an attendee of a poorly funded local school could possibly score well on this scale. (25)

This outcome is predictable, given that the OECD has grafted goals and ideas associated with the SDGs upon its economic mission and associated conceptions of the global knowledge worker. That is, of the four rationales presented (see above), the OECD remains oriented towards the way in which global competence will enable students to flourish as a knowledge worker in a changing labour market.

Further insights into the problems which the test faces are provided by the sample Questionnaire items, many of these require pupils to express their extent of agreement/disagreement with statements such as these:

- Immigrants who live in a country for several years should have the opportunity to vote in elections.
- Immigrants should have the opportunity to continue their own customs and lifestyle.
- I want to learn how people live in different countries
- I am interested in how people from various cultures see the world.
- I am interested in finding out about the traditions of other cultures.

These underline the focus on measuring intercultural awareness and the extent of tolerance within a nation towards foreigners. In the absence of any publicly available analysis of how the validity of these items across has been established, two considerations are pertinent. First, for those pupils who live in multicultural urban societies currently seeking to integrate large influxes of immigrants and refugees (Italy and Germany) their responses will be influenced by their lived experiences, including the coverage of that topic in the domestic media and by local politicians. For other pupils, who live in relatively homogeneous societies (e.g. Japan) or where the media is centrally controlled (e.g. China), their answers will be essentially hypothetical and rooted in a very different set of experiences.

## **Who was Involved**

The nature of the competent global citizen is best understood with attention to those involved in its construction. In this section we again draw on the detailed analysis developed by Grotluschen (2017), Ledger et al. (*forthcoming*), and supplement these with insights from Kraess' (2018) analysis of PISA-D. The OECD (2018a) claims that the final framework is :

...the product of a collaborative effort between the countries participating in PISA and the OECD Secretariat, under the guidance of Andreas Schleicher and Yuri Belfali. (1)

In practise, the framework was developed by OECD staff and various experts they commissioned, and the core group was termed the Global Competence Expert Group (CEG). Grotluschen (2017) provides a detailed analysis of the personnel involved in developing the GC framework from 2013 and concludes:

Overall, the group never was very global; it never included countries which are less familiar with the English language than the former Commonwealth and Asian countries. There is no contribution from Latin America and Africa...

In terms of the literature used to develop the project Grotluschen (2017) notes:

The process documents from 2014 contain citations of theories on feminism, gender and sexual orientation as well as anti-racist and postcolonial theories (OECD 2014, 25-28). These references disappeared in the most recent brochure (OECD 2018). Theories of moral development and their feminist critique were removed. Citations regarding feminism, homosexuality, Latin Americans or People of Color perspectives mostly disappeared....Northern definitions of literacy, numeracy and global competence are spread over the globe and Northern hierarchies of high and low literacy, high and low global competence are counted in levels and numbers.

A similar conclusion is drawn by Ledger et al. (*forthcoming*), who conducted extensive social network analysis and concluded:

...despite OECD nominally espousing a version of global competency based on multiple perspectives and understanding cultural differences, (our) findings show evidence of an OECD conversation impoverished by a limited degree of diversity of scholars, publication types, backgrounds, and viewpoints (33)... a mistake that runs afoul of the very purpose of educating for global competency. (38)

Kraess (2018) makes a similar point in her analysis of the OECD's PISA-D programme, indicating a broader organisational issue. Ledger et al. (*forthcoming*) note the glaring paradox, namely that the OECD relied on a small group of experts, primarily drawn from the USA and UK, to develop the Global Competence framework. Ultimately, these nations have not only withdrawn from the test of Global Competence but are in many respects responsible for shaping the nature of 'the global' and its ongoing problems. Recent reports (BBC 2018) suggest that more than half of the countries involved in PISA (including England, the United States, Germany, France, Denmark, the Netherlands, Finland and Ireland) decided not to take the global competency test and only about 28 countries have agreed to do so. The nations likely to have their Global Competency measured and compared forward are those that are considered 'developing' under the UN SDGs, and which will be incorporated into the OECD Learning Framework 2030.

### ***Dealing with the Challenges: science by streetlight***

To identify and advocate 'best practice' the OECD has to endorse a series of problematic assumptions (see Auld and Morris 2014; 2016). It must demonstrate that (*i*) the aims and outcomes of education systems are directly commensurable and are accurately captured by

comparative assessment surveys (specifically, the conception of Global Competency). To be meaningful, the measure should have some greater significance, which was traditionally that (ii) systems' performance on cross-national assessment surveys can be directly related to future competitiveness in the global knowledge economy (see Komatsu and Rappleye 2017 for critique). This is now supplemented more broadly with regard to improvement on the assessment being central to achieving the SDGs and therefore collective wellbeing. To identify policy lessons, the OECD must assume that (iii) the causes of high-performance exert an independent, constant and predictable effect, are absolute and universal and therefore are readily transferrable. In terms of locating causality with a specific aspect of society, to support the transfer of "better policies for better lives", (iv) causality must be located within school systems' practices and structures.

The foundations for bypassing these issues are laid in the construction of the measurement itself. It is illustrative of the OECD's depoliticised perspective that the school and the family are identified as the sole sources of discriminatory behaviour whilst no reference is made to national governments, the media or politicians.<sup>4</sup> In 2016, Global Competencies were promoted because it would help "to counter the discriminatory behaviours picked up at school and in the family" (2016a, 2). Two years on, the OECD (2018) stated, "PISA will provide a comprehensive overview of education systems' efforts to create learning environments that invite young people to understand the world beyond their immediate environment" (5). Throughout, young people's Global Competency is framed as wholly determined by the actions of schools. For example, the 2018 assessment is described as, "the first comprehensive overview of education systems' success in equipping young people to address global developments and collaborate productively across cultural differences in their everyday lives" (OECD 2018a, 38). Notwithstanding, the OECD note that the Global Understanding Survey of Barrows et al. (1981) found:

... only weak relationships between students' educational experiences—coursework, language study or study abroad—and their levels of international knowledge. (OECD 2018a, 22)

This finding is then ignored, a well-rehearsed strategy (see Auld and Morris 2014; 2016) and the 'challenge' to assessing Global Competencies is identified:

The most salient challenge for the PISA assessment is that — through a single international instrument — it needs to account for the large variety of geographic and cultural contexts represented in participating countries ... (OECD 2018a, 21)

Two strategies are employed to anticipate this challenge before it is explicitly stated in the text. First, it is addressed tangentially through a boxed insert titled 'Defining Culture', which is not discussed in the main text and states:

"Culture" is difficult to define because cultural groups are always internally heterogeneous and contain individuals who adhere to a range of diverse beliefs and practices. Furthermore, the core cultural beliefs and practices that are most typically associated with any given group are also

---

<sup>4</sup> While locating causality within schools opens the possibility to identifying and isolating transferrable 'best practice', the OECD also gains its agentic capacity from government endorsements and references from policymakers (Rautalin and Alasuutari 2009), and it relies heavily on the media to popularise its assessments (Grey and Morris 2018). A similar focus on school and family rather than national-level influences is identified with regard to other OECD programs, such as TALIS (see Berkovitch and Benoliel 2017)

constantly changing and evolving over time. However, distinctions may be drawn between the material, social and subjective aspects of culture. Culture is a composite formed from all three of these aspects, consisting of a network of material, social and subjective resources. The full set of cultural resources is distributed across the entire group, but each individual member of the group only uses a subset of the full set of cultural resources that is potentially available to them... Defining culture in this way means that any kind of social group can have its own distinctive culture: national groups, ethnic groups, faith groups, linguistic groups, occupational groups, generational groups, family groups, etc. The definition also implies that all individuals belong to multiple groups, and therefore have multiple cultural affiliations and identities.

(OECD 2018a, 8)

Culture is thus portrayed as fragmented, atomistic and fluid, and consequently, individuals can be members of a host of different but shifting cultures but all fall under the inescapable influence of globalization, and hence partake in global citizenship. Although scholars have moved the field beyond a reified view of culture as belonging to a specific group or nation (e.g. Anderson-Levitt 2012), the interpretation here is used to dismiss any distinctive influence on perceptions of Global Competence and therefore create a straightforward platform for comparison. The second strategy also involves the use of a boxed insert titled 'Perspectives on global competence from different cultures' which recognises the Western perspective adopted by the OECD and explains:

However, related concepts exist in many countries and cultures around the world. One interesting perspective on global competence comes from South Africa and involves the concept of Ubuntu. There is much literature written about Ubuntu... meaning that a person is a person because of others. This concept of Ubuntu can be used to illustrate a collective identity, as well as connectedness, compassion, empathy and humility. There are other similar concepts to Ubuntu found in different cultures around the world including in indigenous cultures in the Andes and in Malaysia. Collective identity, relationships and context (as impacted by historical, social, economic and political realities) all become major emphases in other cultural discourses on global competence.

(OECD 2018a, 19)

In contrast to the earlier depiction, cultures are now portrayed as coherent, homogeneous and stable and rooted in different societies and while they may be a bit different from Western conceptions, they share common features. The message, reiterated in the main text, is that the OECD are measuring the essence of both Western and non-Western views of Global Competence. The challenge of culture is neatly identified, marginalised and resolved, and the focus shifted to how it is learnt within schools.

In terms of developing the assessment, the OECD has positioned PISA as a reliable and scientific measurement. While this assessment and its cognitive-economic claims have been challenged (Komatsu and Rappleye 2017), the organisation's analysts have encountered even greater difficulty dealing with concepts such as equity and wellbeing. Gorur (2014) highlighted the difficult philosophical decisions that analysts had to make when constructing a/the concept of equity for the PISA surveys, aware that if they wanted to present a coherent measurement they 'couldn't go in' to the philosophical debate, and the diminished concept that resulted. Rappleye et al. (*forthcoming*) pick up on this insight, identifying the narrow cultural assumptions underpinning the concept of wellbeing in OECD surveys and demonstrating what happens when the diminished concept used in the OECD surveys (which was constructed using a Western concept of the individual) is modified for one built on different cultural assumptions about the nature of *self* and *other*; in this case, the rankings of high and low performers were more or less inverted.



The OECD's conception of a competent global citizen are constructed on similarly narrow cultural foundations. And yet in the case of Global Competencies the problems are multiplied, and just as the rationale and definitions had shifted over time to follow *what should be measured*, the aspects measured (i.e. the *de facto* definition) again simply follows *what can be measured*. The actual assessment does not measure the qualities stated under the official definition, and social skills and attitudes are limited to background information (values are not assessed at all – *see below*). Three domains of Global Competence are identified (OECD 2018a, 22) and the methods of assessment are:

1. Knowledge.... Cognitive test and questionnaire
2. Cognitive skills ... Cognitive test and questionnaire
3. Social skills and attitudes.... Questionnaire only

Values are included as a fourth domain in the framework but described as ‘beyond the scope of the PISA 2018 assessment’, which does not rule out the possibility that they will be assessed later. As noted above, however, the official definition of Global Competency is not actually being assessed as the organisation focuses on what is more easily measured. In so doing, the OECD provides an illustration of a classic methodological problem; namely the ‘street light effect’, which involves a tendency to search for an object where the lighting is best, not where it is located (Freedman 2010). In this case the lighting is best if they focus on assessing and comparing the cognitive domain.

A challenge of a more technical nature arises from the nature of the assessment items described above. Most 15-year olds will be able to discern the most virtuous answer from the questions and the tests may provide a good indication of national differences in their degree of compliance and willingness to provide the virtuous answer. A variant of that problem is recognised when it is explained that:

people from some cultural backgrounds tend to exaggerate their responses to typical questionnaire items based on a Likert-type scale... whereas others tend to take a middle ground.  
(OECD 2018a, 22)

The problem is however solved because:

The responses to the questionnaire items will thus not be used to position countries and students on a scale. Instead, they will be used only to illustrate general patterns and differences within countries in the development of the skills and attitudes that contribute to global competence among 15-year-old students, as well as to analyse the relationship between those skills and attitudes and students' results on the cognitive test.  
(OECD 2018a, 22)

In essence, by presenting the data in a way which shows ‘general patterns and differences’ rather than as a league table resolves the problem. Secondly it confirms that the eventual scale or league table used to measure nations will only be based on where the light shines brightest; that is, the cognitive tests. The questionnaire items (social skills and attitudes) will not actually be used to determine outcomes (i.e. rankings), but will be used in combination with other components to enable the interpretation of PISA outcome data and increase the likelihood of revealing causality.

## Conclusion

Our analysis challenges many of the basic claims made by the OECD. The claim that they were inspired by the SDGs emerged long after the decision to proceed and the development work had begun. The claim that the exercise was undertaken as ‘a collaborative effort between the countries participating in PISA’ is partly true, as the main participants were drawn from the USA and UK. However, the nations withdrew from participating in the measurement of Global Competence. The OECD’s claim that it has successfully devised a universal and accurate measure capturing the essence of both western and non-western views of Global Competence is not supported. On the contrary, we suggest that the OECD’s view of a globally competent student is one that is rooted in an elite western liberal tradition that privileges the privileged. In brief, it has failed its own assessment.

The OECD’s definition of Global Competence shifted markedly from 2014 and the final version was notable for its inclusion of ‘sustainable development’ and ‘collective wellbeing’. We interpret this as a late attempt by the OECD to position itself as the primary agency responsible for measuring and monitoring progress on the SDGs in education, extending its new paradigm for development through the OECD Learning Framework 2030. Unlike earlier OECD assessments, the move into Global Competencies is now promoted through a humanitarian discourse and is not framed primarily in economic terms, though many of the same assumptions regarding improved job prospects and future economic growth remain key aspects of the framework. As a one-off exercise, we argue its key role and significance is to legitimise the ‘conceptual underpinnings’ of its framework by demonstrating its capacity to measure Global Competence.

Dill (2013) argues that there are two competing features in global citizenship education: (1) a global consciousness that includes an awareness of other perspectives, a vision of oneself as part of a global community, and a moral conscience to act for the good of the world; and (2), global competencies that include skills and knowledge for economic success in global capitalism. We suggest the OECD has adopted the language of the former in pursuit of the latter, but that the OECD’s agenda and assessments are in turn being reshaped by its decision to adopt this discursive theme. Caution should be exercised when the results of the assessment are released and the OECD proceeds to identify policies and practices associated with ‘Global Competence’. We anticipate that the OECD will present its assessment of global competence as the ‘world’s premier yardstick’ of internationalisation in schooling, recommending schools integrate PISA components into curricula to enhance students’ global competence.

Such a move will allow policy makers to ignore those aspects of schooling (e.g. the promotion of instrumental and nationalistic values) that undermine the promotion of global citizenship and what goes on beyond the school gates (UNESCO/MGIEP (2017)). Therein lies another conundrum, are global competencies such as tolerance, cooperation and interdependence enhanced by encouraging nations to compete with and outdo each other on a questionable metric?

## References

- Addey C (2017) Golden relics & historical standards: how the OECD is expanding global education governance through PISA for Development, *Critical Studies in Education* 58(3): 311-325.
- Auld E and Morris P (2014) Comparative education, the ‘New Paradigm’ and policy borrowing: constructing knowledge for educational reform, *Comparative Education* 50(2): 129-155.

- Auld E and Morris P (2016) PISA, policy and persuasion: translating complex conditions into education ‘best practice’, *Comparative Education* 52(2): 202-229.
- Auld E, Rappleye J and Morris P (2018) PISA for Development: how the OECD and World Bank shaped education governance post-2015. *Comparative Education*. Epub ahead of print <http://dx.doi.org/10.1080/03050068.2018.1538635>.
- Barrows TS (1981) *College students’ knowledge and beliefs: A survey of global understanding*, Change Magazine Press, New Rochelle, NY.
- BBC (2018) *England and US will not take PISA test in Tolerance*, January 24th 2018. <https://www.bbc.com/news/business-42781376>
- Dill, J. S. (2013) *The Longings and Limits of Global Citizenship Education: The Moral Pedagogy of Schooling in a Cosmopolitan Age* New York:Routledge.
- Engel LC (2014) Global citizenship and national (re)formations: Analysis of citizenship education reform in Spain, *Education, Citizenship and Social Justice* 9(3): 239-254.
- Engel LC and Orloff DH (2009) From the local to the supranational: curriculum reform and the production of the ideal citizen in two federal systems, Germany and Spain, *Journal of Curriculum Studies* 41(2): 179-198.
- Freedman DH (2010) *Wrong: Why Experts Keep Failing Us*, Little: Brown and Company
- Goren H and Yemeni M (2017) Global citizenship education redefined – A systematic review off empirical studies on global citizenship education, *International Journal of Educational Research* (82): 170-183.
- Gorur R (2011) ANT on the PISA Trail: Following the statistical pursuit of certainty, *Educational Philosophy and Theory*, 43(1): 76-93/
- Gorur R (2014) Towards a sociology of measurement in education policy, *European Educational Research Journal*, 13 (1), 58-72.
- Grey S and Morris P (2018) PISA: multiple ‘truths’ and mediatised global governance, *Comparative Education*, 54(2): 109-131
- Grotlischen A (2017), Global Competence – does the new OECD competence domain ignore the Global South? *Studies in the Education of Adults* DOI: 10.1080/02660830.2018.1523100
- Kallo, J. (2009). *OECD education policy: a comparative and historical study focusing on the thematic reviews of tertiary education*. Jyväskylä: Finnish Research Association.
- Komatsu, H. & Rappleye, J. (2017) “A New Global Policy Regime Founded on Invalid Statistics? Hanushek, Woessmann, PISA, and economic growth.” *Comparative Education*, 53(2): 166-191.
- Kraess K (2018) The cross-Atlantic knowledge divide, or PISA for Development: Should one size ever fit all? *Atlantic Studies* 15(3): 349-364.
- Hopmann ST and Brinek G (2007) Introduction, in Hopmann G, Brinek G and Retzl M (eds) *PISA according to PISA: does PISA keep what it promises?* Berlin: LIT Verlag.
- Maxwell C and Yemeni M (2018) Discourses of global citizenship education: the influence of the global middle-classes, in A Peterson, G Stahl, H Soong (Eds), *The Palgrave Handbook of Citizenship and Education*, Basingstoke: Palgrave Macmillan.
- OECD (2011a) *Highlights of the OECD 50<sup>th</sup> Anniversary Ministerial Council Meeting*. Paris: OECD. Available online at: <https://www.oecd.org/mcm/48748605.pdf>.
- OECD (2011b) Framework for an OECD Strategy on Development. *Meeting of the OECD Council at Ministerial Level*, Paris, 25–26 May 2011. <https://www.oecd.org/development/48106820.pdf>.
- OECD (2012) *Lessons from PISA for Japan, Strong Performers and Successful Reformers in Education*. Paris: OECD.
- OECD (2014) *PISA 2018 Framework Plans: 38th Meeting of the PISA Governing Board*. EDU/PISA/GB(2014)16 24-Nov-2014. Dublin. Retrieved from OECD website: <https://www.uvm.dk/-/media/UVM/Filer/Om-os/PDF16/160315-Bilag-16,-d,-PISA-2018-Framework-Plans.ashx?la=da>.
- OECD (2016a) *Global competency for an inclusive world: Programme for the International Student Assessment*. Paris: OECD. Retrieved from <https://www.oecd.org/pisa/aboutpisa/Global-competency-for-an-inclusive-world.pdf>.

- OECD, 2016b. OECD Economic Outlook. *OECD Economic Outlook*. (1). Retrieved from DOI: 10.1787/eco\_outlook-v2016-1-en
- OECD (2018a) *Preparing our youth for an inclusive and sustainable world. The OECD PISA global competence framework*. Paris. Retrieved from OECD website: [www.oecd.org/pisa/Handbook-PISA-2018-Global-Competence.pdf](http://www.oecd.org/pisa/Handbook-PISA-2018-Global-Competence.pdf).
- OECD (2018) *The Future of Education and Skills: Education 2030*, Paris: OECD.
- OECD (2018c) *The OECD Internship Programme*, available at: <http://www.oecd.org/careers/internshipprogramme.htm>
- Oxley L and Morris P (2013) Global Citizenship: A Typology for Distinguishing its Multiple Conceptions, *British Journal of Educational Studies*, 61:3, 301-325, DOI: 10.1080/00071005.2013.798393
- Rapplee J, Komatsu H, Uchida H, Kuba YK and Markus H (forthcoming) Happiness, Self, Pedagogy: Constructive Critique of the OECD's (mis)measure of student well-being.
- Rauner M (1999) UNESCO as an organizational carrier of civics education information, *International Journal of Educational Development*, 19:91-100
- Rautalin M and Alasuutari P (2009) The uses of the national PISA results by Finnish officials, *Journal of Education Policy* 24(5): 539-556.
- Reimers (2013) Assessing Global Education: an opportunity for the OECD. Available at: <https://www.oecd.org/pisa/pisaproducts/Global-Competency.pdf>
- Schleicher A (2009) Securing Quality and Equity in Education: Lessons from PISA, *Prospects* 39: 251–263.
- Schleicher A (2016) PISA tests to include 'global skills' and cultural awareness, *BBC* (27<sup>th</sup> May 2016). Available at: <https://www.bbc.com/news/business-36343602>
- Schleicher A (2018) *World Class: How to build a 21<sup>st</sup>-Century School System*. Paris: OECD.
- Sellar S and Lingard B (2014). The OECD and the expansion of PISA: New global modes of governance in education. *British Educational Research Journal*, 40(6): 917-936.
- Swales JM (1990) *Genre analysis: English in academic and research settings*. Cambridge: Cambridge University Press.
- UNESCO (2012) *Global Education First Initiative: An initiative of the United Nations Secretary-General*, Paris: UNESCO. Available at: [https://issuu.com/globaleducationfirst/docs/gefi\\_brochure\\_eng](https://issuu.com/globaleducationfirst/docs/gefi_brochure_eng)
- UNESCO (2013) *Global Citizenship Education: An emerging perspective, Outcome Document of the Technical Consultation on Global Citizenship Education*, Paris: UNESCO, available at: <http://unesdoc.unesco.org/images/0022/002241/224115E.pdf>
- UNESCO (2014) *Global Citizenship Education: Preparing learners for the challenges of the 21<sup>st</sup> century*, Paris: UNESCO
- UNESCO (2016) *Education 2030: Incheon declaration and a framework for action for the implementation of sustainable goal 4*, Available online at: [http://uis.unesco.org/sites/default/files/documents/education-2030-incheon-framework-for-action-implementation-of-sdg4-2016-en\\_2.pdf](http://uis.unesco.org/sites/default/files/documents/education-2030-incheon-framework-for-action-implementation-of-sdg4-2016-en_2.pdf)
- UNESCO/MGIEP (2017) *Rethinking Schooling for the 21<sup>st</sup> Century*. Mahatma Gandhi Institute for Peace and Sustainable Development.
- UIS (2016) *Sustainable Development Data Digest: Laying the Foundation to Measure Sustainable Development Goal 4*. Montreal: UNESCO. <http://uis.unesco.org/sites/default/files/documents/laying-the-foundation-to-measure-sdg4-sustainable-development-data-digest-2016-en.pdf>.
- UIS (2017) *Mind the Gap: Proposal for a Standardised Measure for SDG 4- Education 2030 Agenda*, Information Paper No. 46, October 2017. UNESCO. [http://uis.unesco.org/sites/default/files/documents/unesco-infopaper-sdg\\_data\\_gaps-01.pdf](http://uis.unesco.org/sites/default/files/documents/unesco-infopaper-sdg_data_gaps-01.pdf).
- UIS (2018) *SDG 4 Data Book: Global Education Indicators 2018*. Montreal: UNESCO-UIS.
- Ward, M. 2016. "PISA for Development" Presentation given at the (February 2016). All Materials, Including Audio. <http://bangkok.unesco.org/content/capacity-development-workshop-pisa-development-cambodia-march-2016>.
- Woodward. R. (2009). *The Organisation for Economic Co-operation and Development (OECD)*. London and New York: Routledge.

