



**Queensland University of Technology**  
Brisbane Australia

This may be the author's version of a work that was submitted/accepted for publication in the following source:

Engel, Laura, Rutkowski, David, & [Thompson, Greg](#)  
(2019)

Toward an international measure of global competence? A critical look at the PISA 2018 framework.

*Globalisation, Societies and Education*, 17(2), pp. 117-131.

This file was downloaded from: <https://eprints.qut.edu.au/131405/>

**© Consult author(s) regarding copyright matters**

This work is covered by copyright. Unless the document is being made available under a Creative Commons Licence, you must assume that re-use is limited to personal use and that permission from the copyright owner must be obtained for all other uses. If the document is available under a Creative Commons License (or other specified license) then refer to the Licence for details of permitted re-use. It is a condition of access that users recognise and abide by the legal requirements associated with these rights. If you believe that this work infringes copyright please provide details by email to [qut.copyright@qut.edu.au](mailto:qut.copyright@qut.edu.au)

**Notice:** *Please note that this document may not be the Version of Record (i.e. published version) of the work. Author manuscript versions (as Submitted for peer review or as Accepted for publication after peer review) can be identified by an absence of publisher branding and/or typeset appearance. If there is any doubt, please refer to the published source.*

<https://doi.org/10.1080/14767724.2019.1642183>

## **Toward an International Measure of Global Competence? A Critical Look at the PISA 2018 Framework**

Laura C. Engel<sup>a\*</sup>

David Rutkowski<sup>b\*\*</sup>

Greg Thompson<sup>c\*\*\*</sup>

<sup>a</sup>International Education Program, The George Washington University, Washington, DC, United States

<sup>b</sup>School of Education, Indiana University, Bloomington, IN, United States

<sup>c</sup>Faculty of Education, Queensland University of Technology, Australia

\*Laura C. Engel, Associate Professor of International Education and International Affairs, International Education Program, 2134 G Street, NW Washington, DC 20052 USA, Email: [Lce@gwu.edu](mailto:Lce@gwu.edu)

\*\*David Rutkowski, Associate Professor, School of Education, Indiana University, Bloomington, IN, United States

\*\*\*Greg Thompson, Associate Professor, Faculty of Education, Queensland University of Technology, Australia

**Abstract:** This paper focuses on the OECD's framing of global competence measured in the PISA 2018 assessment cycle and the issues that arise from having an international economic policy organisation define global competence within multiple countries. Given the growing national and international attention on educating for global competence, and in the absence of other measures, it is highly likely that stakeholders in local, national, and international spaces will turn to this international measure as an objective and neutral tool. We think, given this possibility, there is an urgent need to scrutinise the framework that underlies global competence. Our critical analysis is conceptually framed by academic literature related to (a) the OECD's influential role in facilitating neoliberal education policy trends, (b) points of disjuncture and debate surrounding global competence, and (c) the ways in which influence is garnered through measurement technologies. In our last section, we focus on the implications of the OECD leading the development of such a measure, encouraging the OECD to be transparent in the reporting of results and educational stakeholders to exercise caution in their interpretation of the results.

Keywords: Global competence, OECD, PISA, global citizenship

As a dynamic and multifaceted organization, the Organisation for Economic Co-operation and Development (OECD) has expanded its reach in education by including more countries, age groups and topics into its assessment, development, and warehousing work. One recent example is the introduction of a global competence measure in the OECD's Programme for International Student Assessment (PISA). The OECD and the Asia Society argue that the need for an assessment of global competence expresses "a remarkable moment of global consensus" (Asia Society/OECD, 2018, p. 4). The OECD's measurement of global competence is a function of growing enthusiasm for global "21<sup>st</sup> century skills" within national school systems and aligns with the United Nations' Sustainable Development Goals' (SDGs) focus on global citizenship. However, given that many countries, including Japan, the U.S., England, Scotland, Germany, France, and Finland have decided not to participate in this aspect of PISA 2018, it seems the claim of a consensus may be premature (Coughlan, 2018; Sälzer & Roczen, 2018). In fact, as will be shown in this paper, the conceptual space surrounding global competence remains at best amorphous and at worst divisive, making valid cross-national measurement difficult if not impossible.

By developing frameworks and subsequent measures, however problematic, the OECD uses its global position as an international policy organization to influence education policy around the world. To that end, this paper examines the OECD's international framework for global competence and asks what it means to allow an international economic policy organisation to define and measure global competence across a diverse set of countries. We operate from the perspective that when something is measured, values are both assumed and claimed, such that over time what is measured often becomes what is valued. Furthermore, given the political, institutional and expert investment required for nations and organisations to commit to an assessment, future changes to that assessment can be difficult because of the political cost of admitting that a measure is sub-optimal and/or fears that change compromises the comparability of the data across years. In short, measures matter. This is especially relevant for 'global competence' given the political enthusiasm for the Sustainable Development Goals (SDGs), ongoing concerns around the health of democratic institutions, and the status of

citizenship within many countries amid a refugee crisis. In the absence of cross-national measures of global citizenship and global competence, it is highly likely that stakeholders in local, national, and international spaces will adopt the OECD's measure as an objective and neutral tool, regardless of whether they have participated or not. Given this likelihood, there is an urgent need to scrutinise the OECD's global competence framework.

We develop our argument in four parts: We first focus on the OECD as a leading international policy actor, able to wield influence vis-a-vis its work in international large-scale assessment (ILSA). We then focus on the measurement of amorphous constructs, like global competence, and the ways in which influence is garnered through measurement technologies. Third, we explore the academic literature on global competence to elaborate the points of disjuncture and debate, suggesting these as leading challenges in the OECD's attempt to develop a single cross-national measure of global competence. Against these bodies of literature, we describe and critically analyse the OECD's framework document of global competence. We conclude with a discussion of the implications of the OECD's international measure of global competence, encouraging the OECD's full transparency in reporting of results and caution of educational stakeholders in their interpretation of the forthcoming results, and ranking, regarding global competence.

### **The OECD and “soft governance”**

One of the OECD's significant foci is education, and specifically assessment and evaluation, with prominent examples of its work being PISA, the Programme for the International Assessment of Adult Competencies (PIAAC) and the Teaching and Learning International Survey (TALIS). While there is not room in this paper to give an adequate treatment of the copious literature that criticises the OECD's education work, in broad terms many critics see the OECD as a driving force of neoliberal education policy that produces significant, and often perverse, effects within education systems (see, e.g., Bieber & Martens, 2011; Grek, 2009; Meyer & Benavot, 2013). Scholars argue the OECD facilitates neoliberal policy reforms across systems largely through the production and reporting of league tables, as well as its assistance to systems in determining targets, goal-setting, and directly providing advice to education policy-makers on what actions to take to enhance PISA performance. In doing so, Grek (2012) argued PISA has both created an interdependence among education systems and a dependence on PISA produced evidence. More than a simple set of objective measures, an assessment like PISA operates as a “social phenomena” rousing emotion, shifting public ideas about the well-being of education systems, redirecting policy priorities, and initiating action (Meyer & Benavot, 2013). Concern is also raised about the OECD's role as a new centre of global governance outside that of the traditional nation-state, steering education policy formation toward neoliberal principles associated with enhanced competitiveness in a global marketplace (Rizvi & Lingard, 2009).

Many of these characterisations seem to be rejected by the OECD. In fact, it has been pointed out that the original design of ILSAs like PISA were to merely act as “thermometers,” intended to take the temperature of education systems, rather than their current uses as reform “whips” (Lockheed & Wagemaker, 2013). What is of interest in this article is less about how we should categorise the OECD's education work, or the uses/misuses of PISA, rather our focus is on a new dimension of the OECD's education work that is concentrating on identifying new essential ‘skills’ for the worker-citizen to possess and, therefore, for systems to inculcate to

enable societies to flourish. The new global competence assessment might be seen as part of the OECD's commitment to human capital theory that they define as "the knowledge, skills, competencies and attributes embodied in individuals that facilitate the creation of personal, social and economic well-being" (Brian, 2007, p. 29). For the OECD "economic success relies on human capital" (Brian, 2007, p. 3) and global competence is a critical element. Global competence models "a 'wider' human capital" around non-cognitive skills and capacities (Sellar, 2015, p. 425).

Measuring global competence is a means to understand how to assist education systems in the creation of globally competent citizens fit for future social and economic challenges. In this, the OECD individualizes global competence as a core concern of education systems and ensures its own prominent position as a leader in measuring progress in addressing such a core concern. As argued by Auld and Morris (2019), who examined the historical development of the PISA 2018 assessment of global competence, the OECD is actively positioning itself as the major assessor of the UN SDGs, a move that (1) may undercut the UN's broader notion of global citizenship and (2) may result in simply propagating global elites and global elitism. Our focus is on the ambiguity of such an amorphous construct from the perspective on the design and framing of measurement, and how such ambiguity can be advantageous as it affords an organization, like the OECD, the power to shape and lead future conversations about developing global competence in individuals and societies.

### **The Measurement of Global Competence**

In its most basic form, measurement is understood as the assignment of numbers to objects or events according to rules (Stevens, 1946). The measurement process in education, as well as any field in social science, requires that the resulting numbers are reflective of the attribute that we intend to measure. In other words, because the attribute, construct, or latent trait will be represented by numbers, there is an explicit assumption that the thing being measured can be understood numerically. These numerical ratings are often useful and easily understood but only when ratings represent simple and discrete behaviours or attributes that manifest themselves similarly across subjects, context, and time.

According to Thorndike and Thorndike-Christ (2010) the process of measurement involves three common steps: "1) identifying and defining the quality or the attribute that is to be measured 2) determining the set of operations by which the attribute may be isolated and displays for observation, and 3) establishing a set of procedures or definitions for translating our observations into quantitative statements of degree or amount" (p. 10). These general steps, which are reliant on one another, begin to highlight the difficult and time-consuming process that needs to take place before we measure constructs internationally. For example, if the construct and its attributes are not defined nor widely agreed upon, those doing the measuring have nothing to isolate and display. On the other hand, when there is agreement concerning the construct, the measurement process is more straightforward. For instance, the physical attribute of weight is rarely disputed and although we can use different tools to do the measuring and units to express weight, the underlying concept remains consistent. However, when the concept of interest is amorphous or poorly defined, we violate initial and important assumptions about the fundamental task of measurement, thereby introducing error and limiting or invalidating the usefulness of the results. Further, when the construct is poorly defined there is a danger that statistical findings, rather than the underlying theory, will determine what indicators ultimately enter the measurement model. While choosing indicators based on statistical fit may ensure

statistical validity it does not necessarily lead to an acceptable construct unless it is supported by a compelling theory that has been clearly articulated and taken into account in the design of the study.

International assessment rankings based on poorly defined constructs are especially problematic. For example, inaccurate rankings provide misinformation to participating systems who often use the data to understand, compare and reform their educational systems. Further, over time a poorly defined construct becomes normalized in discourse through the ways it is measured and reported, which is a problem if we are not measuring what we claim to be measuring, or we are measuring it poorly. Lingard and Sellar (2013) argued in the case of PISA that the rankings from the literacy, science literacy and numeracy ILSAs often become “catalyst data” that “pressure politicians, policy-makers and systems to respond to comparative measures of performance and which have real and multiple effects beyond such measurement” (p. 652). Once results and rankings emerge in a public realm, how the actual construct is defined and measured is rarely discussed. In other words, at the national and international level, what is measured becomes the focus of political actors regardless of the quality and/or theoretical soundness of the measure.

The philosopher Ian Hacking (1986) argues that the categories that emerge from measurement and classification technologies, particularly when they are taken up by governments, effectively “make up people” so that they are knowable and subsequently governable. Hacking (1986) refers to this as dynamic nominalism, the process whereby the naming of things, particularly abstract concepts associated with human dispositions or characteristics that are assumed to be measurable, comes to determine how we understand the construct and the actions that we take as a result. Extending Hacking’s problematisation, we are interested in the ways that the frameworks, constructs, items and administration of ILSAs effectively “make up systems” as homogenous entities that can be understood and acted on. There is power afforded by measurement technologies, often through ranking and categorisation, in shaping how people come to understand the characteristics of that are measured. This lends itself to an obvious question regarding drawing inferences regarding global competence from the assessment – what will it mean for a system to be ranked as having a high global competence or a low global competence? ILSA categorisations of educational systems (e.g. “failing”, “low quality” or “low equity”) continue to influence national and sub-national policy and practice. Given the force with which ILSAs can punctuate national policy discussions, it is important to scrutinize the assumptions, claims and presuppositions that go into the OECD’s measurement of global competence.

## **Defining Global Competence**

Global competence is often associated with larger national and global discourses expressing concern that education systems are not adequately preparing students for a modern, fast-paced and interconnected world. For instance, the growing focus on “internationalized schooling” (Engel, Maxwell & Yemini, 2019; Engel & Siczek, 2018) explicitly targets the need to cultivate the globally competent citizen and worker (Pashby, 2011). Albeit not a new concept, this more recent emphasis on global competence within schools and school systems brings a new focus and energy to the perceived need to reform education systems to better take into account the needs of a global economy – a common reference point for organizations like the OECD which are committed to viewing fields like education through a predominant lens of human

capital theory (Rizvi & Engel, 2009; Sellar & Lingard, 2014). These needs include fostering skills for a highly flexible, competitive, and technologically advanced society, citizens who are poised to take action on global problems, and systems able to respond to ever more diverse student populations, which Mitchell (2003) saw as a shift away from the liberal “multicultural self” toward the neoliberal inspired “strategic cosmopolitan”.

While the OECD may have settled on an orientation to its work, definitions of global competence, though sharing some similarities, are not consistent. Table 1 provides an overview of the primary components of three common frameworks that focus on education for global citizenship or education for global competence, developed by UNESCO (2015), Asia Society (Boix Mansilla & Jackson, 2011), and the OECD (2018).

[Insert Table 1 about here]

Although the three organizations differ in their aims and goals, Table 1 suggests some commonality across their approaches, including the need to develop specific knowledge, dispositions, values, and behaviours needed in a globalized world. Additionally, there is a specific focus on taking action in each of the frameworks illustrating that it is not enough for individuals to think globally, they must also identify means to appropriately act on global problems. However, the OECD deviates substantially in terms of the components identified as global competence (see also Auld & Morris (2019) in their discussion of how the OECD’s more limited definition of global competence may undermine the wider UN conception of global citizenship, as elaborated by UNESCO). In fact, the OECD provides no justification as to why these components were selected, and the extent to which these are universal, rather than contextual, features of competence. Moreover, while the first two frameworks offer succinct definitions, illuminated through specific target dimensions, the OECD’s definition and the four target dimensions are one and the same. We elaborate this further in our analysis of the OECD’s framework of global competence.

### *Challenges to defining global competence*

Despite the frequently “slogan-like” (Popkewitz, 1980) use of the term global competence by these policy focused organizations, academic literature points to important debates and a lack of consensus around the concept of global competence. Specifically, academic literature focuses on four key points of critique regarding the contested nature of global competence, which have clear implications for constructing a cross-national measure: the overlap and conflation with other terms; the narrow individualistic and skills-based orientation; the multitude of definitions that are often geographically oriented and dependent on who, or indeed which organisation, is doing the defining; and the implicit assumptions about who in fact can develop such global competences. The following discussion will take up these critiques in further detail.

First, a key challenge in defining global competence, a necessity for measurement, is its considerable overlap with other frequently used concepts, including global citizenship, cosmopolitanism, multiculturalism, intercultural competence, education for democratic citizenship, and internationalisation, all of which have their own definitions albeit some more ambiguous than others. Indeed, as Pashby (2009) has pointed out, there is often a conflation of global, intercultural, and multicultural education discourses, leading to confusion about exactly

what each term means in different contexts. Rather than a single construct, these frameworks act instead as a kind of “hub” for various orientations and understandings (Mannion, Biesta, Priestley, and Ross; 2011; see also Frey & Whitehead, 2009). For example, discourses of global citizenship entail a wide range of agendas, including education for sustainability, economic competitiveness, equality and human rights, social justice, and intercultural understanding (Marshall, 2011), thus challenging any attempt to provide concrete definition for measurement purposes.

Second, debate continues over the individualistic skills-orientation rooted within global competence. Some scholars have defined global competence as a set of gleaned skills from a more expansive understanding of global citizenship (Mannion et al., 2011). The literature on global competence refers to the specific aptitudes and actions of individual citizens (or workers), thereby embodying more of a skills focus -- i.e., what a person can and knows to do. Frequently the emphasis is on the specific proficiencies an individual possesses that provide “a competitive edge” for upward social and economic mobility (Weenink, 2008, p. 1093). This might include, for example, the ability to speak a world language with proficiency, adaptability and flexibility in new circumstances, or to understand and behave appropriately in intercultural environments.

There is considerable debate about whether it is appropriate to distil broad notions of global citizenship into a set of recognizable, agreed upon, and assessable competencies. For example, critics point out that it is impossible to pre-define global competence as a set of knowledge, skills and attitudes, and map those onto “a set of particular and predetermined activities” (Bamber, Lewin & White, 2018, p. 224). These critiques place global competence into a larger culture of performativity that “propagates the pre-specification of easily identifiable and measurable outcomes from curriculum interventions” (p. 225). Additionally, the tendency to prioritize the actions and achievements of the individual citizen “individualises citizenship by seeing it in terms of what individuals have, rather than in terms of what individuals do together,” a contrast with more expansive global citizenship orientations (Mannion et al., 2011, p. 454). These features are often seen to be at odds as it is not possible to reconcile global consciousness rooted in collaboration with the advancement of skills for advancing individual competitiveness (Dill, 2013).

These debates lead us to our third line of critique, which is the lack of a universal *international* definition of global competence. Instead the definition “depends on the geopolitical standpoint” of the individual (Baumgratz, 1995, p. 445). In fact, despite its frequent use in Western contexts, there are differences between North American and European conceptions of global competence (Baumgratz, 1995). Global competence in the U.S. tends to refer to the professional relations of individuals and companies in the U.S. with other global market competitors, and the preparation of American workers in the global marketplace (Watkins & Cseh, 2009). In fact, a solid proportion of the North American literature on global competence is rooted in human resource management and organisational learning, specifically “refer[ring] to economic performance and the optimal way of qualifying American human resources to be up to the challenges of international economic competition” (p. 445). This includes what Lambert (1994) referred to as “task performance” in relation to organisational cultures, where communication, cooperation, and negotiation abroad or with diverse partners are regular occurrences in professional settings, and part of employee performance. In contrast, European conceptions have tended to highlight more intercultural conceptions within the region, as European employees are tasked with working across European member-states with multiple cultural and linguistic differences (Baumgratz, 1995).



Connected to the above geopolitical differences in global competence, earlier research in the 1990s suggested considerable variance in the ways that global education is perceived and practiced in different systems (Hicks, 2003). One leading example is Tye's (1999) study of the perceptions of global education in over 50 countries, which revealed multiple orientations, including environmental considerations, development, intercultural relations, peace, economics, and human rights, which each embraces its own set of questions and concerns. Another example is Pike's (2000) study of the differences in the UK, the U.S., and Canada, which although shared similar "big ideas," the national orientations varied from common interest in human beings and the planet over national development (Canada, the UK) to building general knowledge of specific countries or places (the US). Within a single national context, there are diverse definitions of global education, often shaped by the views that national citizens hold about "their relationship with the rest of the world" (Frey & Whitehead, 2009, p. 273). These differences within and across systems would most likely mean major variance in what is thought to constitute global competence.

We might also consider other ILSAs, like the International Civic and Citizenship Study (ICCS), which introduced regional modules to assess variance across Latin American, Asian, and European systems. ICCS findings continue to reveal considerable regional differences in the values that inform civic and citizenship education. For instance, the ICCS 2009 regional modules revealed a Latin American orientation toward civic knowledge and rule of law, an Asian focus on self-cultivation and moral development, and European concentration on equal rights and regional harmonisation. Other research similarly suggests that both regional and national variance in citizenship values and dispositions challenges the development of universal definitions (Veugelers, 2011).

Lastly, literature raises concern about implicit assumptions built into frameworks of global competence and how inclusive these frameworks may or may not be (Dower, 2008). Related to global competence, Weenink (2008) described cosmopolitan capital as "a propensity to engage in globalizing social arenas... in which the struggle is for privileged positions" (p. 1092). Cosmopolitan capital is more than simply the proficiencies required to collaborate and broker deals in a multinational context, but also includes the display of knowledge, attitudes, dispositions, and tastes aligned with dominant globalized societal spaces. It is a "competitive edge, a head start vis-à-vis competitors" (p. 1092). Seen as an integral outcome (Yemini, 2014) of global competence, cosmopolitan capital has been frequently criticized as propagating largely liberal democratic views and ultimately privileging the already dominant transnational capitalist classes (Balarin, 2011; Brooks & Waters, 2015; Dower, 2008; Marshall, 2011; Maxwell & Yemini, 2019; Pashby, 2011; Weenink, 2008; Yemini, 2014). There are implications then for the OECD's international measure of global competence, and whether ultimately this assessment will benefit liberal democratic systems and/or global elite classes (Auld & Morris, 2019).

In its framing as "a new social qualification... in the context of the global economy and global interdependence" (Baumgratz, 1995, p. 444), global competence seems like an entirely contemporary idea. Yet, some scholars, like Lambert (1994), Carter (1994), and Baumgratz (1995) argue global competence has deeper historical roots in white European colonial traditions related to internationalisation. Here, global competence refers to the kinds of concrete knowledge, aptitudes, and behaviours needed to successfully negotiate relationships with local or native populations on behalf of colonial interests. This bears some similarities to the literature on global citizenship, which as Pashby (2011) argues, has an inherent tendency to simply widen the scope of the liberal democratic orientations of the national citizen "upward" to the global scale,

furthering the hegemonic orientation of the Northern/Western national citizen. The core debate is whether there even exists a truly global conception of global competence and if not, whose global competence is prioritized and who benefits from such an international measurement. The integration of theories, perspectives, and scholarship from the Global South with those of Western traditions in the Global North are essential to an integrated “global” conception of global competence, otherwise priority is given to late-stage capitalist, Westernized, and global North discourses of global competence (Grotlüschen, 2018).

Overall, this diverse and growing body of literature suggests that considerable debates remain on the specific focus and clear components aligned with global competence. Although some broad agreements exist, definitions appear largely driven by different agendas and orientations -- human rights and equality for all; sustainability and environmental awareness; economic competition and upward social mobility -- as well as geopolitical contexts, all which create a challenge for the development of a single internationally agreed upon measure. Yet, as we discuss in the next section, the OECD has developed a tool that claims to assess global competence in a diverse set of countries.

### **PISA 2018 Global Competence Frame**

The OECD’s (2018) position paper, *Preparing our Youth for an Inclusive and Sustainable World: The OECD PISA Global Competence Framework*, defines global competence as “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” (p. 7). The framework argues that the aim of global competence is “to live harmoniously in multicultural communities; to thrive in a changing labour market; to use media platforms effectively and responsibly; to support sustainable development goals” (OECD, 2018, p. 4). Thriving in an interconnected world and managing the increasing prevalence of daily intercultural encounters is heavily stressed. For example, the word intercultural is mentioned 74 times in the text portions of the 48 page handbook.

Importantly, the OECD defines competence as much more than a specific skill. It is “a combination of knowledge, skills, attitudes and values successfully applied to face-to-face, virtual or mediated encounters with people who are perceived to be from a different cultural background, and to individuals’ experiences of global issues (i.e. situations that require an individual to reflect upon and engage with global problems that have deep implications for current and future generations)” (p. 7). The OECD stresses that “acquiring global competence is a lifelong process -- there is no single point at which an individual becomes completely globally competent. PISA will assess at what stage 15-year-old students are situated in this process, and whether their schools effectively address the development of global competence” (p. 7).

PISA’s assessment of global competence includes both a cognitive portion taken by students, and background questionnaires completed by students, teachers and school leaders. The main cognitive assessment is “designed to elicit students’ capacities to critically examine global issues; recognise outside influences on perspectives and world views; understand how to communicate with others in intercultural contexts; and identify and compare different courses of action to address global and intercultural issues” (p. 6). The student background questionnaire asks students to answer questions on “how familiar they are with global issues; how developed their linguistic and communication skills are; to what extent they hold certain attitudes, such as respect for people from different cultural backgrounds; and what opportunities they have at

school to develop global competence” (p. 6). Teacher and school background questionnaires focus on the integration of “global, international and intercultural perspectives throughout the curriculum and in classroom activities” (p. 6).

The OECD’s (2018, p. 7-8) position paper outlines four “target dimensions” of global competence:

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.

Each of these four target dimensions “are supported by four inseparable factors: knowledge, skills, attitudes and values” (p. 11). Intriguingly, the framework identifies a series of skills outside of the inseparable factors that are necessary to enable these target dimensions including “reasoning with information, communication skills in intercultural contexts, perspective taking, conflict resolution skills and adaptability” (p. 14). Further complicating the framework is the role of attitudes or key dispositions that exemplify and drive forward global competence. Attitudes are “the mind-set that an individual adopts towards a person, a group, an institution, an issue, a behaviour, or a symbol” that “integrates beliefs, evaluations, feelings and tendencies to behave in a particular way” (p. 16). The framework identifies an “attitude of openness, respect for people from different cultural backgrounds” and a belief that one is a citizen of the world with commitments and obligations (i.e. global mindedness) as key dispositions for global competence (p. 16). After attitudes comes values, which “are more general beliefs about the desirable goals that individuals strive for in life, reflecting modes of conduct or states of being that an individual finds preferable to all other alternatives” (p. 17). Two values are identified as central to global competence that can be influenced by education: Valuing human dignity and valuing cultural diversity (p.18).

The OECD’s framing of global competence works like this (see Figure 1): Knowledge and cognitive skills will be assessed in the cognitive test, while knowledge, cognitive skills, and social skills and attitudes will be assessed in the student background questionnaire. Values are considered to be beyond the scope of the PISA 2018 assessment, although no justification is given for this. Thus, the OECD PISA 2018 is not assessing global competence, but rather claims instead to be assessing what it refers to as global understanding. The OECD explains global understanding as: Knowledge + Cognitive Skills + Social Skills and Attitudes - Values.

[Insert Figure 1 about here]

Curiously, after establishing their case for assessing global understanding as a proxy for global competence, the OECD states that the cognitive test itself (see Figure 2) that measures knowledge and cognitive skills/processes associated with global understanding is actually assessing the four key “target dimensions” of global competence. The assessment includes four content domains: (1) Culture and intercultural relations; (2) Socio-economic development and interdependence; (3) Environmental sustainability, and (4) Institutions, conflicts, and human

rights. Many of the components of these content domains (e.g., identity in multicultural societies; cultural expressions) are abstract concepts that relate to human dispositions and characteristics. This seems to imply that by assessing global understanding, PISA 2018 will be assessing global competence after all. It is entirely unclear how and why values are important in the framework of global competence in the first place.

[Insert Figure 2 about here]

This issue, then, speaks to one of the key problems with the PISA 2018's assessment of global competence. The lack of an agreement within the research community about what global competence is confuses the measurement frame. The OECD framework states that it is building on these different global education models, which, while they have "differences in their focus and scope (cultural differences or democratic culture, rather than human rights or environmental sustainability), these models share a common goal to promote students' understanding of the world and empower them to express their views and participate in society" (p. 7). The OECD explicitly states that "PISA contributes to the existing models by proposing a new perspective on the definition and assessment of global competence" (p. 7). The evident problem, as elaborated above, is that some of the differences found within these models and frameworks are not easily reconciled. The difference, for example, between an orientation toward economic competitiveness versus one of social justice and intercultural understanding, can be considerable (Mitchell, 2003; Tarc, 2009; Torres, 2015).

Throughout the framework, there is a conflation of terminology of global and intercultural competence, with frequent mention of "global and intercultural issues," "global or intercultural problems," and developing students' "global and intercultural outlooks." For example, on page 19 of the framework document is mention of the different cultural orientations and understandings of global competence, and yet the literature and examples cited are drawn explicitly from research on intercultural competence. In doing so, the assumption made is that these two approaches – intercultural and global – work in tandem. What is overlooked is the ways in which national contexts shape how students understand and respond to scenarios focused on global issues. For example, Pashby (2009, 2011), Kymlicka (2003) and Dower (2008) have argued that there can be serious contradictions between ideas of national and global belonging, and that it is impossible for students to simultaneously articulate a universal idea of global citizenship while being intolerant toward a particular group within a local or national culture. Without clear measures to assess this apparent contradiction we can only deduce that PISA may assess aspects of intercultural competence and not global outlooks of students.

The OECD provides a clear perspective on the policy rationales behind its efforts and what it sees as the core outputs of its assessment of global competence. For instance, the OECD states that PISA 2018 global competence measures will serve 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" (p. 38). As such, the organization claims it will "provide insights on which policy approaches to global education are most commonly used in school systems," as well as stimulate policy prescriptions on how to build teacher global competence, adapt curricula, and inspire new school-level approaches (p. 38). Despite the lack of consensus around the definition of global competence, there is a clear aim to shape the actions of governments. While allowing an international organization to selectively choose and misinterpret academic literature in order to

develop its own definition is clearly problematic, it is even more problematic when we consider the potential of global competence rankings to influence political decisions. A general notion of global competence may be desirable but as with any other complex concept, the idea requires a well-reasoned and exacting definition before it can be accurately measured. In this regard, the OECD has fallen well short. By moving forward without a generally accepted definition, the OECD implies that it is an authoritative source with the ability to define and measure constructs it deems important. Further, by producing a framework on global competence the organization appears to be engaging in a research process while at the same time ignoring the research community's apparent disagreements on the concept.

We should also extend this critique to the categorizations and biases inherent in the framework, and the undiscussed impact of this on people and the social systems with which they engage. Over time, the outcomes of many educational measurement systems such as ILSAs come to represent the system itself. For example, Australia no longer has an education system as much as it has a system 'in decline' (Sellar, Thompson, Rutkowski, 2015). Measuring constructs is essentially a process of defining, displaying, then quantifying, so that the construct can be understood numerically. Over time, the numerical output of the measurement becomes the thing-in-itself, at least as far as the concept is in use in everyday communication. One thinks here of the ways that intelligence tests took a cultural construct of European analytic problem-solving and turned it into the (supposed) concept of universal intelligence. Now, when we talk about intelligence we invariably think of someone's numerical IQ score and historically this has had direct consequences for many people especially in the ways that they have been governed, and encouraged to govern themselves. In other words, "the things that we ourselves do are intimately connected to our descriptions" (Hacking, 1986). Describing a system as having low, mid or high global competence may have repercussions to and for people within systems.

## **Conclusion**

In this paper, we have focused on the PISA 2018 measure of global competence in order to consider what it has proposed and the implications of allowing an international economic policy organisation to lead the development of such a measure. A well-established body of literature regularly suggests that the OECD is an influential policy actor in education, furthering a primarily neoliberal agenda (cf. Meyer, 2014). It has been argued that it does this through steering evidence-based policy dialogues through the creation and regulation of the evidence (Grek, 2009). The OECD's power as an objective and neutral global coordinator of educational measurement means that it can define terms and assign values to them. We are not simply arguing that cross-national measurement in education is on its own problematic. Rather we are pointing toward the potential dangers of an international economic policy organization leading this charge.

For many stakeholders, the OECD signifies collective wisdom, power, resources, and expertise centrally located in an international space outside of national borders. It is therefore often considered a neutral global space to develop cross-national educational measures. As an influential technology, however, the OECD's PISA does much more than provide neutral data points. Once the OECD develops a measure and systems accept it, it can create momentum around an issue that was not previously significant. This is particularly meaningful in a conceptual space like global competence education, which similar to other amorphous concepts

like grit and creativity, seems to remain open, porous, and malleable, where there is considerable conceptual room for a multitude of definitions, orientations, and practices.

The OECD has suggested that there is “global consensus” on global competence suggesting the OECD’s position is to simply meet this demand and supply a product to countries so that they can measure a universally agreed upon concept. Yet, we question the extent to which there is global consensus about these concepts as there is no single, agreed upon definition. Instead, scholars have pointed to the conflation of multiple and at times conflicting rationales and orientations (Marshall, 2011; Torres, 2015). Moreover, there is not a global consensus about who is imagined to be and gets the opportunity to become a globally competent citizen, with a concern that a Western liberal tradition built into global competence may exclude orientations that do not fit the profile and values of the Northern/Western national citizen (Balarin, 2011; Pashby, 2011; Yemini, 2014).

To summarize, global competence as defined by the OECD’s framework might be thought of as a set of desired dispositions that have been pulled together in a form to create meaning, that will construct value and over time and ultimately become the authoritative definition of global competence. And, as Hacking (1986) reminds us, intentional human action is always rooted in description; when “new modes of description come into being, new possibilities for action come into being as a consequence” (p. 231). Without a consensus definition, particularly when the reasons for this are cultural, geopolitical and/or historical factors, the power of testing regimes like PISA to impose new normative definitions remains a critical problem. In other words, systems have given the OECD considerable power to define global competence, and in this definition to shape the horizons of action for nations and jurisdictions in regard to their educational systems (see, e.g., Bieber & Martens, 2011; Grek, 2009; Lewis, Sellar & Lingard, 2015; Sellar & Lingard, 2014). It would therefore be important to ask what does it mean to be globally competent at a system or at an individual level? For the actual system participants, what is it that the categorisation, indeed a ranking as being either #1 or #20, enable? What can a country do as a result of those rankings – is global competence receptive to educational intervention and if so, in what ways?

Although many systems have reportedly declined to participate, the very development of such a framework and subsequent measures can be influential in education policy-making. For example, SDG Goal 4; Target 4.7, articulates a need for education systems worldwide to ensure that students have skills and knowledge to promote sustainable development through global citizenship, indicating that there is a growing mandate for policy-makers to measure progress on meeting such a goal (Auld & Morris, 2019). Given the circulation of global discourses about the need to educate for 21<sup>st</sup> century interconnected world and the international pressure to monitor progress, a range of local, national, and global stakeholders, likely eager to develop avenues of advocacy, may become enthusiastic users of such a measure, including in ways that the measure was not necessarily intended for. Some indication of this is already evident in the U.S. Although the U.S. is not participating in the global competence assessment, several organizations have used the framework questionnaires as a non-validated assessment circulated to school districts across the country (see e.g., World Affairs Council Dallas Fort Worth, n.d.).

Educational stakeholders and policy-makers may, of course, generate insightful ideas from the PISA measure of global competence. For example, the background questionnaires aimed at understanding whether and to the extent young people are learning about global issues, like climate change, immigration, or digital literacy in schools, are interesting cross-national and comparative data points. The findings may well offer educational stakeholders at local and

national levels new insights in determining how these issues or topics are being addressed in their respective education systems. Notwithstanding these potentially positive outcomes, by ignoring the inclusion of “values,” the OECD even under the most ideal circumstances is not measuring global competence. As such, the OECD should only report specific constructs it is measuring (e.g. student’s self-report of tolerance) and be forthcoming with both the research and policy community by not claiming to have a universal assessment of global competency. Perhaps, given the problems that we raise, there is no possibility of a meaningful global assessment of global competence, and the OECD would be better served isolating key questions their members would like answered and including these in the background questionnaires administered as part of their already existing assessments. Finally, in highlighting the problems around measuring global competence, we find ourselves echoing the sentiments of Mark Schneider, the director of the U.S. Department of Education’s Institute of Education Sciences, who argued in 2019 that one of the problems with PISA is that the OECD does not invest in research to ensure the quality of the assessments (Schneider, 2019). Prior to administering the assessment, the OECD should have been more methodical and transparent regarding which aspects of global competence they consider to be universal, and which may well be better defined and measured at a local level.

## References

Asia Society/OECD (2018) *Teaching for global competence in a rapidly changing world*. Available online at: <https://asiasociety.org/sites/default/files/inline-files/teaching-for-global-competence-in-a-rapidly-changing-world-edu.pdf>

Auld, E., & Morris, P. (2019). Science by streetlight and the OECD’s measure of global competence: A new yardstick for internationalisation? *Policy Futures in Education*.

Auld, E. & Morris, P. (in press). The OECD’s assessment of global competence: Measuring and making global elites. Engel. L. C., Maxwell, C. and Yemini, M. 2019. (Eds.), *Beyond the established boundaries: the machinery of school internationalization in action*. London: Routledge.

Balarin, M. (2011) Global citizenship and marginalisation: contributions towards a political economy of global citizenship, *Globalisation, Societies and Education*, 9(3-4), 355-366.

Bamber, P., Lewin, D. & White, M. (2018) (Dis-) locating the transformative dimension of global citizenship education, *Journal of Curriculum Studies*, 50, 204-230.

Baumgratz, G. (1995) Language, culture and global competence: an essay on ambiguity, *European Journal of Education*, 30(4), 437-447. doi:10.2307/1503516

Bieber, T. & Martens, K. (2011) The OECD PISA study as a soft power in education? Lessons from Switzerland and the US, *European Journal of Education*, 46(1), 101–116. doi:10.1111/j.1465-3435.2010.01462.x

Boix Mansilla, V. & Jackson, A. (2011) Preparing our youth to engage the world: educating for global competence. Available online from: [papers2://publication/uuid/CB6743CB-9C89-4AAF-831E-5124907F4569](https://papers2://publication/uuid/CB6743CB-9C89-4AAF-831E-5124907F4569).

Brooks, R. & Waters, J. L. (2015) The hidden internationalism of elite English schools, *Sociology*, 49, 212-228.

Brian, K. (2007). *OECD Insights Human Capital How what you know shapes your life: How what you know shapes your life*. Paris: OECD Publishing.

Carter, H. M. (1994) Multiculturalism, diversity and global competence, in: R.D. Lambert (Ed) *Educational exchange and global competence* (New York, Council on International Educational Exchange).

Carroll, P., & Kellow, A. (2011) *The OECD: A study of organisational adaptation*. (Cheltenham, UK: Edward Elgar Pub).

Coughlan, S. (2018, January 24), England and US will not take PISA tests in tolerance, *BBC News*. Available online from <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. Dower, N. (2008) Are we all global citizens or are only some of us global citizens?, in: A. Abdi & L. Shultz (Eds.), *Educating for human rights and global citizenship* (pp. 39–54) (Albany, NY: State University of New York Press).

Engel, L. C., Maxwell, C., & Yemini, M. (2019) *The machinery of school internationalisation in action: Beyond the established boundaries*. New York: Routledge.

Engel, L. C. & Siczek, M. (2018) Framing global education in the United States: policy perspectives, in: L. D. Hill & F. J. Levine (Eds) *Global perspectives in education research* (London, Routledge).

Frey, C. J. & Whitehead, D. M. (2009) International education policies and the boundaries of global citizenship in the US, *Journal of Curriculum Studies*, 41(2), 269-290.

Grek, S. (2009) Governing by numbers: the PISA “effect” in Europe, *Journal of Education Policy*, 24(1), 23–37. <https://doi.org/10.1080/02680930802412669>

Grek, S. (2012) What PISA knows and can do: Studying the role of national actors in the making of PISA. *European Educational Research Journal*, 11(2), 243–254. <https://doi.org/10.2304/eeerj.2012.11.2.243>

Grotlüschen, A. (2018). Global competence – Does the new OECD competence domain ignore the global South? *Studies in the Education of Adults*, 50(2), 185-202

Hacking, I. (1986) Making up people, in: T. Heller, M. Sosna & D. Wellbery (Eds) *Reconstructing individualism: autonomy, individuality and the self in Western thought* (Stanford, CA, Stanford University Press).



Hicks, D. (2003) Thirty years of global education: A reminder of key principles and precedents, *Education Review*, 55(3), 265-275

Kymlicka, W. (2003) Multicultural states and intercultural citizens. *Theory and Research in Education*, 1(2), 147–169.

Lambert, R. D. (1994) *Educational exchange and global competence* (New York, Council on International Educational Exchange).

Lewis, S., Sellar, S. & Lingard, B. (2016) PISA for Schools: topological rationality and new spaces of the OECD's global educational governance, *Comparative Education Review*, 60(1), 27–57.

Lingard, B., & Sellar, S. (2013) 'Catalyst data': Perverse systemic effects of audit and accountability in Australian schooling. *Journal of Education Policy*, 28(5), 634-656. <https://doi.org/10.1086/684458>

Lockheed, M. E., & Wagemaker, H. (2013) International large-scale assessments: Thermometers, whips, or useful policy tools? *Research in Comparative and International Education*, 8(3), 296-306.

Mannion, G., Biesta, G., Priestley, M. & Ross, H. (2011) The global dimension in education and education for global citizenship: genealogy and critique, *Globalisation, Societies and Education*, 9, 443–456.

Marshall, H. (2011) Instrumentalism, ideals and imaginaries: theorising the contested space of global citizenship education in schools, *Globalisation, Societies and Education*, 9(3-4), 411–426.

Maxwell, C., & Yemini, M. (2019). Modalities of cosmopolitanism and mobility: parental education strategies of global, immigrant and local middle-class Israelis. *Discourse: Studies in the Cultural Politics of Education*, 1-17.

Meyer, H. D., & Benavot, A. (2013) *PISA, power, and policy: the emergence of global educational governance* (Oxford: Symposium).

Meyer, H. D. (2014). The OECD as pivot of the emerging global educational accountability regime: How accountable are the accountants. *Teachers College Record*, 116(9), 1-20.

Mitchell, K. (2003) Educating the national citizen in neoliberal times: from the multicultural self to the strategic cosmopolitan. *Transactions of the Institute of British Geographers*, 28(4), 387–403.

OECD. (n.d.) *Beyond PISA 2015: a longer-term strategy of PISA*. Available online from <http://www.oecd.org/pisa/pisaproducts/Longer-term-strategy-of-PISA.pdf>

OECD (2018) *Preparing our youth for an inclusive and sustainable world: the OECD PISA global competence framework*. Available online from <http://www.oecd.org/pisa/Handbook-PISA-2018-Global-Competence.pdf>

- Pashby, K. (2009) *Related and conflated: A theoretical and discursive framing of multiculturalism and global citizenship education in the Canadian context*, PhD dissertation, University of Toronto. Available online from <https://tspace.library.utoronto.ca/handle/1807/35921>
- Pashby, K. (2011) Cultivating global citizens: planting new seeds or pruning the perennials? Looking for the citizen-subject in global citizenship education theory, *Globalisation, Societies and Education*, 9(3-4), 427-442.
- Pike, G. (2000) Global education and national identity: in pursuit of meaning, *Theory into Practice*, 39(2), 64–74.
- Popkewitz, T. (1980) Global education as a slogan system, *Curriculum Inquiry*, 10(3), 303-316. doi:10.2307/1179617
- Rizvi, F. & Engel, L. C. (2009) Neo-liberal globalization, educational policy, and the struggle for social justice, in: W. Ayers, T. Quinn & D. Stovall (Eds) *The handbook of social justice in education* (Rowman & Littlefield Publishers).
- Rizvi, F., & Lingard, B. (2009) *Globalizing education policy*. (London: Routledge).
- Sälzer, C., & Roczen, N. (2018) Assessing global competence in PISA 2018: Challenges and approaches to capturing a complex construct. *International Journal of Development Education and Global Learning*, 10(1): 5–20. DOI <https://doi.org/10.18546/IJDEGL.10.1.02>
- Schneider, M. (2019, 31<sup>st</sup> January) Is PISA a Victim of Its Own Success? IES Head Calls for Change. *Education Week*. Available online from <https://www.edweek.org/ew/articles/2019/02/01/is-pisa-a-victim-of-its-own.html>
- Sellar, S. (2015) A strange craving to be motivated: Schizoanalysis, human capital and education. *Deleuze Studies* 9.3 (2015): 424–436.
- Sellar, S., & Lingard, B. (2013) The OECD and global governance in education. *Journal of Education Policy*, 28(5), 710-725.
- Sellar, S. & 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. <https://doi.org/10.1002/berj.3120>
- Sellar, S., Thompson, G., & Rutkowski, D. (2017) *The global education race: Taking the measure of PISA and international testing* (Canada: Brush Education Inc).
- Stevens, S. S. (1946) On the theory of scales of measurement, *Science*, 103(2684), 677-680.
- Tarc, P. (2009). *Global dreams, enduring tensions: International Baccalaureate in a Changing World*. New York: Peter Lang.
- Thorndike, R. M. & Thorndike-Christ, T. M. (2010) *Measurement and evaluation in psychology and education* (8th edition). Boston: Pearson.

Torres, C. A. (2015) Solidarity and competitiveness in a global context: comparable concepts in global citizenship education?, *The International Education Journal: Comparative Perspectives* 14(2), 22–29.

Tye, K. A. (1999) *Global Education: a worldwide movement* (Orange, CA, Interdependent Press).

UNESCO (2015) *Global citizenship education: Topics and learning objectives* (Paris, UNESCO).

Veuglers, W. (2011) The moral and the political in global citizenship: Appreciating differences in education, *Globalisation, Societies and Education*, 9(3-4), 473-485.

Watkins, K. E. & Cseh, M. (2009) Competence development in the United States of America: limiting expectations or unleashing global capacities, in: K. Illeris (Ed) *Competence development* (London, Routledge).

Weenink, D. (2008) Cosmopolitanism as a form of capital: Parents preparing their children for a globalising world, *Sociology*, 42(6), 1089-1106.

Woodward, R. (2009) *The organisation of economic cooperation and development* (London: Routledge).

World Affairs Council Dallas Fort Worth (n.d.). How globally aware are you? Put your global knowledge to the test with a free 15 minute global competence survey: Brochure/Flyer.

Yemini, M (2014) Internationalization of secondary education: lessons from Israeli Palestinian-Arab schools in Tel Aviv-Jaffa, *Urban Education*, 49, 471-498.