

A GLOBAL SET OF DISPOSITIONS? APPLYING DISCRETE-CHOICE  
METHOD TO MEASURE GLOBAL CITIZENSHIP DISPOSITIONS  
OF SECONDARY-SCHOOL STUDENTS IN TWO NATIONS

by

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## DISSERTATION ABSTRACT

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Title: A Global Set of Dispositions? Applying Discrete-Choice Method to Measure Global Citizenship Dispositions of Secondary-School Students in Two Nations

Global citizenship education is a fast-growing reform of crucial domestic and international importance. Unfortunately, schools that aim to offer global citizenship education have no way to determine if they are providing anything besides a traditional approach. Moreover, communities that want to join this burgeoning movement lack an evidence-generating mechanism to lobby for needed funds or approvals. Among nearly 150 extant measures relating to global citizenship, each has troubling limitations that could undermine their uses in secondary schools, such as being designed (a) for respondents at universities or multinational corporations; (b) absent rigorous psychometric testing; (c) without accounting for multidimensionality confounds (i.e., global citizenship featuring dispositions, knowledge, skills, and behaviors); or (d) as self-reports, which can invite social desirability bias.

Seeking reliable data that would enable global citizenship educators' valid inference-making for improving pedagogical practices or scaling up those that show promise, I designed this dissertation to develop a discrete-choice measure of global citizenship dispositions. Following an exploratory sequential design, this three-phase dissertation began with nominal group technique focus groups with 11 alumni/ae of

International Baccalaureate Diploma Programmes in Sweden and the United States. Alumni/ae demonstrated social validity of eight consensus-defined global citizenship dispositions. Second, I drafted 120 items to operationalize four socially valid dispositions (Appreciation of Multiple Perspectives, Intercultural Sensitivity, Interest in Diversity, and Plural Geographic Allegiance), which an international panel of 18 global citizenship scholars vetted for content validity. Third, I pilot-tested content-valid items from socially valid dispositions with 182 Year 9 and 10 students. A confirmatory factor analysis and strong correlational evidence of items' susceptibility to social desirability bias led me to construct a triadic discrete-choice measure that has demonstrated initial utility for assessing secondary-school students' global citizenship dispositions and mitigating effects of social desirability.

This dissertation—designed to reconcile practical and scholarly tensions about global citizenship—did not solve all the problems of measuring its dispositions among secondary-school students. But it did yield a self-report alternative that has shown proof of concept based on data from diverse participants who have experienced, who have thought deeply and written about, and who engage daily in global citizenship education.

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## CHAPTER I: INTRODUCTION

In the United States alone, more than 1,200 public secondary schools follow missions of global citizenship education (International Baccalaureate, 2020; Thier & Beach, under review), a reform movement of crucial domestic and international importance (Wilkinson et al., 2015). Among its many definitions, global citizenship education is an attempt to guide students toward the dispositions, knowledge, skills, and behaviors they will need to live, learn, and work on an increasingly interdependent planet where they will encounter people from various national and cultural backgrounds. On that planet, we all face climate change, sustainability threats, wealth inequalities, permeable borders, and ever-intricate geopolitical conflicts. Given the enormity of these challenges, global citizenship education is becoming one of the fastest-growing and perhaps most useful reform movements (Dill, 2012).

Unfortunately, schools that purport to offer global citizenship education have no way to determine if they are providing anything besides a traditional approach. Moreover, communities that want to join this burgeoning movement lack a mechanism to generate evidence they would need to lobby for funds or approvals. Consequently, global citizenship educators require reliable data to make valid inferences about how to improve their relevant pedagogical practices or scale up practices that show promise.<sup>1</sup> Although, nearly 150 extant measures relate to global citizenship, each suffers from one or more troubling limitations that would undermine its use in secondary schools.

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<sup>1</sup> As I describe in my reflexivity statement for this research project (Appendix A), I both taught in and led global citizenship education programs, all the while feeling confident that our programs were benefiting students and our school community. But I could not identify any data to authenticate those feelings.

First, such measures were designed typically for use at universities or in multinational corporations, not secondary schools (Zhao, 2016). Second, those measures rarely underwent rigorous psychometric testing (Deardorff, 2014; 2015). Third, those measures do not distinguish or account for the confounds that can arise with complex constructs that incorporate multiple dimensions (e.g., dispositions, knowledge, skills, and behaviors; Deardorff, 2006; Goren & Yemini, 2017a; Kuokkanen & Sun, 2016; Osterlind, 2009). Fourth, most such measures rely on self-reporting, a common approach that is especially susceptible to self-presentation biases (Brown & Maydeu-Olivares, 2013; Deardorff, 2015; Duckworth & Yeager, 2015). For example, social desirability bias can yield fake responses due to participants' real or perceived social pressures, such as what might occur when global citizenship educators ask their students about the extent to which they self-describe as global citizens (Huws et al., 2009; Lagattuta et al., 2012).

To counteract these problems, I designed this dissertation to develop a measure that global citizenship educators in multiple nations could use to ensure that when they invest real resources on behalf of real students, they would know if they are producing any real effects. In subsequent sections of this chapter, I have elaborated upon (a) global citizenship framings that thwart its measurement; (b) social desirability bias and discrete-choice measures as a tactic to control for it; (c) International Baccalaureate schools as contexts of interest; (d) the research questions that guided this dissertation's design; and (e) this dissertation's goal of benefitting global citizenship educators and researchers.

### **Global Citizenship Framings that Thwart its Measurement**

Scholars continue to cast an ever-expanding umbrella around global citizenship's definitions (Davies, 2006; Myers, 2016; Rapoport, 2010; Schattle, 2009), perhaps



because global citizenship scholars tend to have expertise in developing theory more so than measures. Therefore, I have grounded this dissertation in both the global citizenship literature and Deardorff's (2006) theory of intercultural competence measurement. Her field is distinct from global citizenship but likewise contends with construct ambiguity and overlap, as well as their implications for assessment. In this section, I have organized claims from peer-reviewed articles and reputable scholars' books or white papers that bring two key aspects of this dissertation to the surface:

1. Like Deardorff's notions of intercultural competence, global citizenship features dispositions,<sup>2</sup> knowledge, skills, and behaviors, with dispositions as its foundation. I posit that dispositions' foundational nature suggests a need to prioritize them when developing a useful measure for secondary schools.
2. Theories of global citizenship range from cultural universalism to cultural relativism. Only adherents of cultural universalism tend to endorse the possibility and appropriateness of measuring global citizenship. Taking a hybrid position, I expect that some of global citizenship's dispositions have potential for cultural universality, and therefore, measurability.

Using the following process, I aimed to capture the depth and breadth of extant scholarship on global citizenship. Beginning in October 2016, I first searched eight digital databases in education and other social sciences. I called for all peer-reviewed research articles with "global citizenship" in their titles and/or keywords/identifiers. I set no time-oriented boundaries, seeking to avoid systematic exclusion of early writings in

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<sup>2</sup> I endorse dispositions as a more inclusive term than attitudes, which Deardorff (2006) and others have employed. Although the term 'attitudes' has a longer paper trail in global citizenship literature, attitudes cannot capture foundational aspects of global citizenship due to this metaconstruct's overlapping identities, orientations, values, characteristics, and attitudes (Reysen & Katzarska-Miller, 2018).

the field. I did not restrict by language but expected that publication bias would favor English (Curry & Lillis, 2010).

Second, when my search produced 330 initial hits, I arrayed each citation and abstract in a Microsoft Excel file, examining rows to remove redundancies. Third, I followed Kerkhoff's (2016) application of Braun and Clarke's (2006) thematic content analysis to synthesize key findings from abstracts of remaining articles. I coded each abstract for two dimensions: (a) education sector (K-12, higher education) and (b) methods used (qualitative, quantitative, mixed/multi-method, or none as in the case of conceptual articles) to identify relevant measures that have been used with secondary-school populations. I added two codes to the schema, returning to each abstract to track (a) whether scholars defined global citizenship explicitly, implicitly, or not at all; and (b) ontological orientation for how the scholar(s) described global citizenship (i.e., as cultural universalists, cultural relativists, or as hybrids). I compared codes to identify themes.

Fourth, I examined the extent to which articles in the pool influenced other research by tracking the number of GoogleScholar citations each article had received. Fifth, I sorted articles by author to ensure that my pool did not inadvertently omit essential scholars. Sixth, I excluded 50 articles that did not make unique conceptual or methodological contributions to this dissertation. Seventh, I excluded 166 articles that (a) emphasized global citizenship exclusively via studying abroad or other features that would more likely suit global citizenship education as implemented at universities or well-resourced independent schools, rather than public secondary schools: the focus of this dissertation; and/or (b) did not deepen understanding of global citizenship or how to measure it. Ultimately, my literature review featured 54 articles from the initial pool.

From those articles, I concluded that developing a reliable measure of global citizenship dispositions for students in public secondary schools would require deep and broad understanding of a rapidly growing, nebulous, and contested literature base. Given the field's dearth of rigorous quantitative (Chui & Leung, 2014) or mixed methods designs, a researcher seeking to develop a measure of a construct as complex as global citizenship would need to explore a literature base that is broader than it is deep.

Accordingly, the first published, systematic literature review on global citizenship described an "elusive subject matter" that is "quite difficult to isolate" (Goren & Yemini, 2017a, p. 173). Global citizenship had also been called a loose association of varying agendas (Marshall, 2011) or a "floating signifier" that many disciplines "attempt to cover with meaning" (Mannion et al., 2011, p. 134). Within such a convoluted definitional space, how should practitioners or researchers know which definition(s) to endorse (Shultz, 2007)? Perhaps global citizenship had become too diffuse for coherency, relying on broad designations of rights and responsibilities, the sum of which limit practice and scholarship (Clark & Savage, 2017; Schattle, 2009). This dissertation cannot resolve this issue entirely, but my review of the literature led me to stipulate a testable position: global citizenship features several dispositions, some of which are culturally universal, thus making them measurable within and across national populations.

### ***Toward Five Key Global Citizenship Dispositions***

Global citizenship, as other constructs that are too broad to encapsulate with a single, holistic assessment (Deardorff, 2009), might be best organized within a framework that recognizes the unique contributions of its individual dimensions. Providing initial justification for distinctly measuring dispositions rather than

confounding them with knowledge, skills, and behaviors, Osterlind (2009) parses differences between unidimensionality and multidimensionality, noting that tests can reflect either, but items must be unidimensional. Each item format presents respondents with a distinct mental activity, thereby “stimulat[ing] a different aspect of mental functioning or cognition” (p. 222). As I show in Table 1.1, dispositions, knowledge, skills, and behaviors have categorical meanings; therefore, each should correspond to a distinct assessment approach. Principally, crucial differences exist between behaviors that can be observed directly and dispositions that require indirect methods of observation. Relatedly, recent debates among psychology researchers have repeatedly questioned why self-reports and behavioral measures correlate so weakly, seemingly due in part to distinct response processes involved in each measurement type (Dang et al., 2020).

Table 1.1  
*Defining and Exemplifying Disposition, Knowledge, Skill, and Behavior*

Category	Definition adapted from Oxford English Dictionary	Non-exhaustive examples of terms used to signal	Typical approach to measurement
Disposition	indirectly observable qualities of character	attitudes, beliefs, commitments, consciousness, feelings, inclinations, identities, orientations, perceptions, tendencies, values, views	Self-reports
Knowledge	theoretical or practical understanding of a subject	awareness, understanding, curricular topics and concepts, ways to be informed	Cognitive assessments
Skill	ability to do something well or with expertise	abilities, capabilities, capacities, competencies	Performance tasks
Behavior	directly observable example of how one acts or conducts oneself	actions, applications of knowledge, engagements, practices	Observational protocols

Problematically, scholarly definitions of global citizenship rest loosely upon poorly articulated, often uncategorized notions of a construct that has been described overlappingly as dispositional, knowledge-based, skills-based, and/or behavioral.

Distinguishing among these categories is especially important in schools. Traditional measures or observational protocols can reveal if a student has acquired the desired knowledge, mastered the requisite skills, or demonstrated the appropriate behaviors. The indirect nature of dispositional measurement can invite artificial responses, leaving educators little way of knowing whether they are influencing students at a foundational level (Brown & Maydeu-Olivares, 2013; Cao, 2016; Deardorff, 2006; Huws et al., 2009).

For two reasons, I focus this dissertation on global citizenship dispositions. First, Deardorff (2006) sets dispositions as the foundation of her seminal work operationalizing intercultural competence. Second, scholarly descriptions of global citizenship dispositions reveal wide variation, suggesting a need for a project that brings clarity to these definitional and methodological issues. Deardorff (2006; 2015) has called for deeper inquiry into a field that depends upon “subtle differences” and terms used interchangeably in pursuit of “haphazardly defined outcomes” (2006, p. 247). Such imprecision has raised questions about even the most prominent global citizenship measures, as their items often tap into multiple discrete dimensions, thereby exacerbating conceptual overlaps and compromising the validity of findings (Ledger et al., 2019).

As I have shown in Figure 1.1, global citizenship conceptualizations often vary across dispositions, knowledge, skills, and behaviors, either explicitly or by implication based on scholars’ frequently imprecise use of terms. I have also shown eight instances in which scholars confound their definitions of global citizenship, murkily crossing over categories. For example, Stoner et al. (2014) framed global citizenship alternatively as a skill *and* a combination of dispositions, knowledge, and behaviors, without explaining any meaningful, operational differences between those categories.

Author(s)	Disposition	Knowledge	Skill	Behavior
Andreotti (2011)	x	x	x	x
Choi et al. (2011)	x	x		x
Chui & Leung (2014)	x			
Davies & Pike (2009)		x		x
Dill (2013)	x		x	
Engel (2014)	x		x	x
Girard & Harris (2013)		x		
Maguire et al. (2012)			x	
Mannion et al. (2011)	x		x	x
Pallas (2012)	x			x
Reilly & Niens (2014)	x	x	x	x
Sklad et al. (2016)	x	x	x	
Conflating Dispositions (D), Knowledge (K), Skills (S), and Behaviors (B) Within Conceptualizations				
Citation	Conflation			
Appleyard & McLean (2011)	K-S or D-K-B			
Boetto & Bell (2015)	D-K-B or D-K-S			
Coryell et al. (2014)	K-B or D-K-S			
Heilman (2008)	K, S, or D-B			
Henderson et al. (2011)	S or K-S-B			
Hu et al. (2014)	K-B or D-K-S-B			
Misiaszek (2015)	D-B or K			
Stoner et al. (2014)	D-K-B or S			

*Figure 1.1. Global Citizenship Scholarship Disentangling and Conflating Dispositions, Knowledge, Skills, and Behaviors*

As I have shown in Table 1.2, there are 12-of-14 global citizenship domains that multiple scholars have ascribed variously as dispositions, knowledge, skills, and behaviors. It seems that operationalizing global citizenship in a way that distinguishes these four categories could help reduce disorder in the literature. In one example, Myers and Zaman (2009) constructed, but did not report validating items from, their instrument for students in secondary schools. Their self-report, intended to assess the knowledge and attitudes of global issues, used a 4-point rating scale (1 = not very competent to 4 =

extremely competent). Competence suggests skills or behaviors, but Myers and Zaman's items targeted dispositions, knowledge, and skills within a single measure and often confounded those categories within individual items.

Table 1.2

*Global Citizenship Domains Framed as Dispositions (D), Knowledge (K), Skills (S), and Behaviors (B)*

Domain	Primary DKSB	Additional DKSBs
Addressing cross-border issues	B: Chui & Leung (2014); Engel (2014)	S: Coryell et al. (2014)
Non-discriminatory	B: Ahn (2015); Andreotti (2011)	K: Woolley (2008) D: Günel & Pehlivan (2016)
Cultural sensitivity	D: Dill (2012); Rapoport (2010)	K-S-B: Coryell et al. (2014) S: Engel (2014); Günel & Pehlivan (2016)
Diversity	D: Engel (2014)	D-K: Ortloff (2011) D-S: Heilman (2008) B: Andreotti (2011) D-B: Appleyard & McLean (2011)
Empathy & tolerance	D: Dill (2012); Engel (2014)	B: Ukpokodu (2006) S; Günel & Pehlivan (2016); Heilman (2008)
Peacefulness	D: Engel (2014)	B: Ebbeck (2006)
Plural allegiance	D: Dill (2012); Ortloff (2011); Rapoport (2010); Woolley (2008)	D-K-B: Günel & Pehlivan (2016) D-K: Appleyard & McLean (2011) D-S-B: Heilman (2008) B-D: Misiaszek (2015)
Social justice	D: Appleyard & McLean (2011); Engel (2014); Günel & Pehlivan (2016)	D-S: Heilman (2008) D-B: Pallas (2012)
Geography	K: Rapoport (2010); Woolley (2008)	NONE
Global / intercultural awareness	K: Appleyard & McLean (2011); Coryell et al. (2014); Engel (2014); Girard & Harris (2013); Heilman (2008); Henderson et al. (2011); Misiaszek (2015); Ortloff (2011); Rapoport (2010); Silman & Çağlar (2010); Stoner et al. (2014); Witteborn (2010); Woolley (2008)	K-B: Günel & Pehlivan (2016); Chui & Leung (2014)  D-K: Ahn (2015)
Human rights	K: Myers (2006); Rapoport (2010); Silman & Çağlar (2010)	D: Witteborn (2010)
Perspective taking	S-B: Günel & Pehlivan (2016); Heilman (2008)	D-S-B: Cornwell & Stoddard (2006)
Global competence	S: Coryell et al. (2014); Dill (2012); Engel (2014)	NONE
Respecting differences	No primary	D-B: Engel (2014) K-S-B: Günel & Pehlivan (2016) K-B: Silman & Çağlar (2010)

Relatedly, the Organisation for Economic Cooperation and Development (OECD) introduced a self-report to assess global competence within its 2018 Programme for

International Student Assessment (PISA) for 15-year-olds in 70-plus nations that represent about 80% of the world’s economies. In the foremost attempt to date to measure a global citizenship-adjacent construct, OECD did not reconcile the dimensional issue at the center of this dissertation (Ledger et al., 2019). Recognizing that global citizenship research often implies the construct’s multidimensionality, but measures it holistically, I am proposing a dispositions-knowledge-skills-behaviors framework (see Figure 1.2) to resolve some conceptual clutter in the measurement of global citizenship.<sup>3</sup>

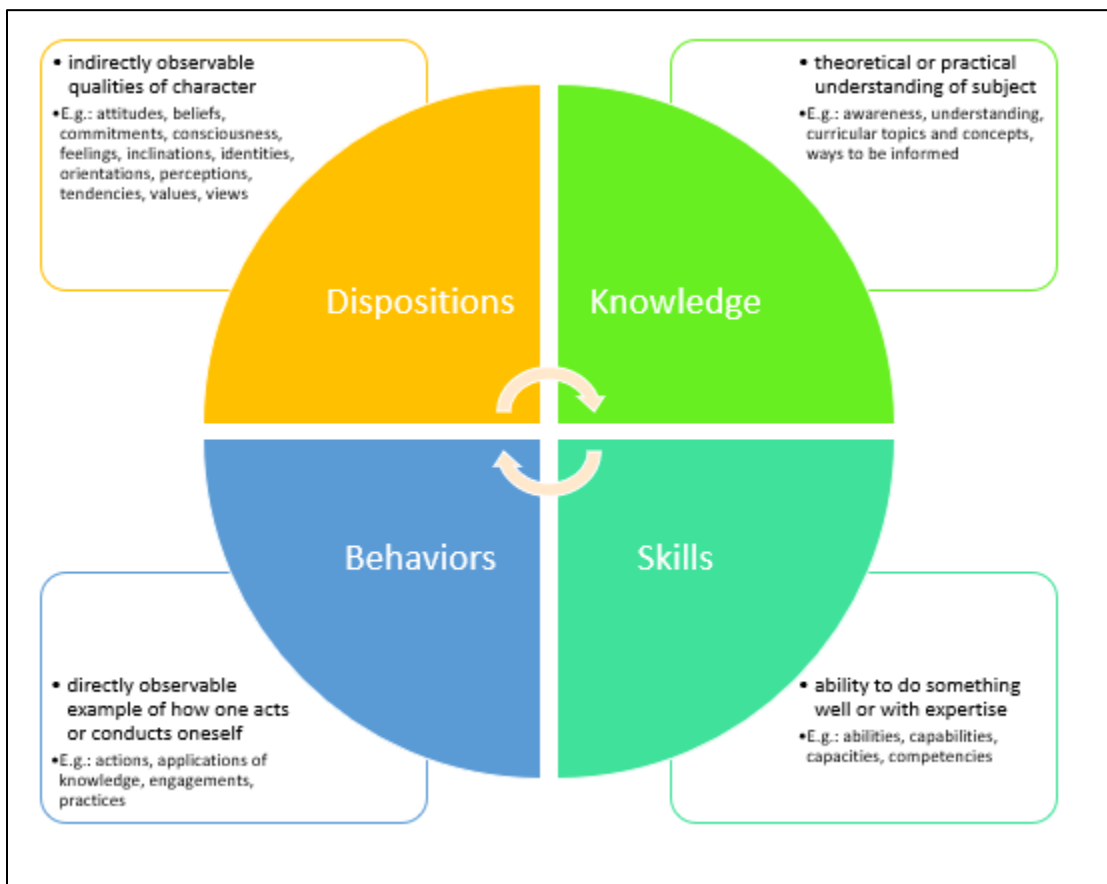


Figure 1.2. Four-Dimensional Model of Dispositions, Knowledge, Skills, and Behaviors

<sup>3</sup> In a study that parallels this dissertation, Thier et al. (in preparation) coded items and subscales for three prominent global citizenship measures—Global Citizenship Scale (Morais & Ogden, 2011), Global Citizen Scale (Reysen & Katzarska-Miller, 2013), and Global Perspective Inventory (Braskamp et al., 2014). That research team found considerable evidence of overlap for dispositions, knowledge, skills, and behaviors, further supporting this four-dimensional framework.



### *The Cultural Universality-to-Relativity Continuum*

In another important divide, most global citizenship scholars seemed to fall into 1-of-2 camps: cultural relativists or cultural universalists. Relativists tended to argue that global citizenship dispositions are not measurable (e.g., Abdi, 2011). By contrast, universalists tended to endorse a construct that they expected to maintain its properties across nations, sexes, or other demographics (e.g., Morais & Ogden, 2011). I join Deardorff (2015) in a hybrid camp, expecting that some global citizenship dispositions would vary demographically, though others relate constantly across demographic factors.

Therefore, I aim to provide evidence for two core ideas that I have illustrated in Table 1.3. First, global citizenship includes some dispositions that are each culturally universal and some that are culturally relative. Dispositions in the former group are more appropriate for measurement and can facilitate valid comparisons both within a nation and across national boundaries. Some scholars have adopted a universalist stance that has recognized global citizenship as a unitary, borderless concept (Wilkinson et al., 2015). To relativists, global citizenship features ever-changing demands and different national inflections (DeWit, 2009; Dolby, 2008; O'Shea, 2013). As I have demonstrated, a dozen typologies that global citizenship scholars have put forth distribute their types across a cultural universality-to-relativity continuum, suggesting that a hybrid view might provide the best fit for developing a relevant measure.

Table 1.3

*Global Citizen Typologies Plotted on a Cultural Universality-to-Relativity Continuum*

Culturally universal	Hybrid	Culturally relative
Skills-based (Engel, 2014)	Values-based (Engel, 2014)	Reflexive (Engel, 2014)
Congruence with democratic citizenship (Gaudelli & Heilmann, 2009)	Narrative imagination (Nussbaum, 2002)	Socratic ability (Nussbaum, 2002)
Citizen of the world (Nussbaum, 2002)	Global activists; Global managers (Schattle, 2009)	Advocacy manifestation (Oxley & Morris, 2013)
Cosmopolitan manifestation (Oxley & Morris, 2013)	Vertical (Shukla, 2009)	Relational genealogists (Roman, 2003)
Intellectual tourists, voyeurs, and vagabonds; Consumers of multicultural and inter-(national) difference; Democratic civilizers and nation-builders (Roman, 2003)	Transformationalist (Shultz, 2007)	Horizontal (Shukla, 2009)
Global cosmopolitans; Global capitalists; Global reformers (Schattle, 2009)	Borderless; Mindset; Wide open (Streitwieser & Light, 2011)	Radical (Shultz, 2007)
Neoliberal (Shultz, 2007)	Transformationalists (Torres, 2015)	Skeptics (Torres, 2015)
Predetermined (Streitwieser & Light, 2011)	Moral (Veugelers, 2011)	Social-political (Veugelers, 2011)
Hyperglobalisers (Torres, 2015)		
Open (Veugelers, 2011)		

*Note.* Engel's (2014) Traditional type is not included because it indicates an overall rejection of global citizenship, thus explicitly opposing neoliberal, critical, and middle ground framings.

As with global citizenship scholars' varied and sometimes jumbled accountings of dispositions, knowledge, skills, and behaviors, the cultural universality-to-relativity continuum floods the literature with myriad elegant descriptions, but minimal operationalization. Even in the field's most cited paper, Davies (2006) questioned if global citizenship is too abstract for meaningful inclusion in education, though she ultimately endorses its importance. Similarly, Rapoport (2009) named citizenship as "one of the most contested concepts in the social sciences" (p. 23). In that I could not rely exclusively on the scholarly literature to define global citizenship and its dispositions, I

expected my dissertation to benefit from assessing social validity via alumni/ae opinions and balance such experiential understanding by assessing content validity via expert opinions. I expected the experts I would recruit to vary across the cultural universality-to-relativity continuum, so they could critically interrogate the items I drafted to operationalize the following five global citizenship dispositions, which I hypothesized as having potential for cultural universality: Intercultural Sensitivity, Interest in Diversity, Peacefulness, Plural Geographical Allegiance, and Social Justice Orientation.

My review of items from six prominent measures of global citizenship or closely adjacent constructs (see Table 1.4) show that five such measures relate to Intercultural Sensitivity: specifically within the affect subscale of Braskamp et al.'s (2013) intrapersonal domain, the self-awareness subscale of Morais and Ogden's (2011) global competence domain, and three stand-alone domains: attitudes (Hunter et al., 2006); cultural openness (Türken & Rudmin, 2013); and intergroup empathy (Reysen & Katzarsak-Miller, 2013). Conceptualizations of associated dispositions also supported my inclusion of Intercultural Sensitivity in this dissertation, such as cultural sensitivity (Dill, 2012; Rapoport, 2010) or values that are non-discriminatory (Günel & Pehlivan, 2016), empathetic, and tolerant (Dill, 2012; Engel, 2014). Importantly, terms such as cultural sensitivity (Coryell et al., 2014; Engel, 2014; Günel & Pehlivan, 2016), empathy, and tolerance (Günel & Pehlivan, 2016; Heilman, 2008; Ukpokodu, 2006) have been described variously as knowledge, skills, and behaviors, not simply as dispositions. Scholars also use behavioral, and skills-based language, as well as dispositional language, for concomitant terms such as perspective-taking (see Cornwell & Stoddard, 2006) and respecting differences (see Engel, 2014).

Table 1.4

*Global Citizenship-Relevant Measures as Dispositions (D), Knowledge (K), Skills (S), and Behaviors (B)*

Author (Year)	Domain	Subscale	D	K	S	B
Braskamp et al. (2013)	Cognitive	Knowing	x			x
		Knowledge		x	x	
	Intrapersonal	Affect	x			x
		Identity	x	x		x
	Interpersonal	Social responsibility	x			x
		Social interaction	x			x
Hunter et al. (2006)	Knowledge			x		
	Skills / Experiences		x		x	x
	Attitudes		x		x	x
Morais & Ogden (2011)	Social responsibility		x			
	Global civic engagement	Involvement in civic organizations				x
		Glocal civic activism				x
		Political voice	x		x	x
	Global competence	Self-awareness	x		x	
		Intercultural communication				x
Global knowledge		x	x	x		
Reysen & Katzarska- Miller (2013)	Normative environment		x			
	Global citizenship identification		x			
	Social justice		x			
	Environmental sustainability		x			
	Intergroup empathy		x		x	x
	Valuing diversity		x			x
	Intergroup helping		x			x
	Global awareness		x	x		x
Responsibility to act		x	x	x	x	
Türken & Rudmin (2013)	Non-nationalism		x			
	Cultural openness		x		x	x
Van Dyne et al. (2008)	Knowledge			x		
	Behavior				x	
	Motivation		x			x
	Strategy		x	x		x

I found all six measures featured in Table 1.4 to include one or more items that aligned operationally with Interest in Diversity: the knowing subscale of Braskamp et

al.'s (2013) cognitive domain, the global knowledge subscale of Morais and Ogden's (2011) global competence domain, and five stand-alone domains: attitudes (Hunter et al., 2006); valuing diversity and global awareness (Reysen & Katzarska-Miller, 2013); cultural openness (Türken & Rudmin, 2013); and motivation (Van Dyne et al., 2008). Interest in Diversity also cohered with Engel's (2014) dispositional framing of diversity. By contrast, diversity was dispositional and knowledge-based (Ortloff, 2011), dispositional and skills-based (Heilman, 2008), and dispositional and behavioral (Appleyard & McLean, 2011) for other global citizenship scholars. Andreotti (2011) described diversity with behavioral language only. Relatedly, Ahn (2015) framed global/intercultural awareness with dispositional and knowledge-based aspects, resembling other framings of Interest in Diversity.

Peacefulness also appeared in operational definitions and conceptualizations but received less treatment than the other four dispositions that I have hypothesized as conceptually important for a global citizenship measure. Some items from the social interaction subscale of Braskamp et al.'s (2013) interpersonal domain, as well as items from Hunter et al.'s (2006) skills/experiences domain and Van Dyne et al.'s (2008) strategy domain align with a peaceful disposition. Engel (2014) recognized Peacefulness as a disposition, but Ebbeck (2006) cast it as a behavior.

Four measures that I reviewed had operationalized Plural Geographic Allegiance as a global citizenship disposition. A central aspect of the Global Citizen Scale, Plural Geographic Allegiance aligned with three of its domains: normative environment, global citizenship identification, and intergroup helping (Reysen & Katzarska-Miller, 2013). Likewise, the identity subscale of Braskamp et al.'s (2013) intrapersonal domain aligned

with an inclination to identify with the wider world rather than, or in addition to, a specified geographic area. This dimension also corresponded with Hunter et al.'s (2006) attitudes and what Türken and Rudmin (2013) called 'non-nationalism.' In conceptual literature on global citizenship education, several scholars framed Plural Geographic Allegiance as dispositional (Dill, 2012; Ortloff, 2011; Rapoport, 2010; Woolley, 2008). Other scholars conflated its dispositional aspects with knowledge (Appleyard & McLean, 2011; Günel & Pehlivan, 2016), behaviors (Günel & Pehlivan, 2016; Heilman, 2008; Misiaszek, 2015) and skills (Heilman, 2008). Witteborn (2010) framed human rights as a disposition that paralleled other scholars' descriptions of Plural Geographic Allegiance.

Three of the measures I reviewed contained items that aligned operationally to Social Justice Orientation. Braskamp et al. (2013) and Morais and Ogden (2011) included social responsibility subscales that encapsulate dispositions of social justice. Reysen and Katzarska-Miller (2013) featured one seemingly behavioral domain called "responsibility to act," another that focused explicitly on social justice, as well as one about environmental sustainability, which carries a Social Justice Orientation. Within Morais and Ogden's (2011) domain of global civic engagement, which otherwise emphasized behaviors such as global and local civic activism, its political voice subdomain featured dispositional items that associated with social justice. Among conceptualizations, scholars typically described social justice in dispositional terms (Appleyard & McLean, 2011; Engel, 2014; Günel & Pehlivan, 2016), although some scholars highlighted skill-based (Heilman, 2008) or behavioral aspects (Pallas, 2012) of social justice.

Perhaps the field of global citizenship—so scattered with various claims of what the construct is and is not, of what global citizenship can and cannot do—has not yet

asked the right people in the right ways, a gap this dissertation aimed to address. Scholars throw the metaphorical kitchen sink at definitions of global citizenship, a construct that means “everything and nothing at the same time” (Clark & Savage, 2017, p. 419).

Without a clearer understanding of its meaning, based on insights from experiential and technical experts (Olsen, 1982; Osterlind, 2009; Rubio et al., 2003), challenges for measuring global citizenship will remain. Based on my examination of global citizenship literature that detected needs to (a) unpack dispositions from other dimensions and account for scholarly disagreements along a cultural universality-to-relativity continuum, I have put forth five dispositions that seemed essential for a global citizenship measure in secondary schools. I preliminarily defined five dispositions as follows:

**Intercultural Sensitivity:** respect for and acceptance of cultural perspectives different from one’s own (i.e., promoting values that are non-discriminatory, empathetic, tolerant, and respectful of differences).

**Interest in Diversity:** desire to experience the complexities of various cultures’ norms, expectations, and contexts.

**Peacefulness:** inclination to approach conflict such that no party is made to be wrong.

**Plural Geographic Allegiance:** inclination to identify with the wider world rather than, or in addition to, a specified geographic area, which includes recognitions that one’s worldview is not universal and of cultural interdependence.

**Social Justice Orientation:** belief in our shared responsibility to preserve the human rights of all people and the planetary environment where we cohabitate.

Of course, defining global citizenship dispositions would not do much to contribute to generating a reliable measure if that measure leaned on the same methodology that has threatened reliability when assessing this construct previously. So, I examined the potential threat of, and a possible remedy for, social desirability bias.

### **Social Desirability Bias and Discrete-Choice Measures**

Increasingly, researchers are questioning whether measures account appropriately for self-presentation biases, especially those that can occur when respondents perceive socially desirable response options (Kuokkanen & Sun, 2016). Biases from independent ratings of items can also include central tendency responding (i.e., selecting median values only), acquiescence responding (i.e., defaulting repeatedly to certain response levels), or responses that are artificially inflated or deflated (Brown & Maydeu-Olivares, 2011; 2012; 2013; Kopcha & Sullivan, 2007; Lagattuta et al., 2012). Regarding social desirability, the combination of measuring dispositions indirectly, human need for social approval, and preference for embarrassment avoidance might all lead some respondents to overreport traits deemed desirable or underreport traits that are not (Krumpal, 2013; Kuokkanen & Sun, 2016; Tourangeau & Yan, 2007).

According to Duckworth and Yeager (2015), self-report measures are particularly susceptible to self-presentation biases, even more so when high stakes accompany a measurement occasion. Some scholars argue that potential social desirability biases should be interrogated situationally when measuring any sensitive topic (Tourangeau & Yan, 2007). Miller (2012) calls for *all* self-reports to be vetted for that possibility.

No prior study has provided evidence of social desirability bias in measures that explicitly purport to tap into global citizenship, but studies of related constructs have



shown clear associations. For example, measures of global identity have been correlated positively with measures of social desirability (Phelps et al., 2011; Türken & Rudmin, 2013). Relatedly, the Identification with All Humanity Scale has been shown to correlate positively with impression management, a concept that is at least adjacent to social desirability (McFarland et al., 2012). Qualitatively, Palasinski et al. (2012) found that Polish Catholic men living in the United Kingdom applied a lens of common humanity, not for its societal benefits, but to manage their self-impressions.

Given that some global citizenship educators tend to tout the benefits of their educational model without empirical support (Shrimpton, 2016), one might expect social desirability bias to be a potential concern when measuring students for their degrees of global citizenship within schools that carry that concept in their mission statements. Consider the cases of students who attend such schools. Some proportion of those students do not value global citizenship or do not desire to participate in that pedagogy. They might do so only for external reasons (e.g., parental pressure) or legitimately do not perceive any difference between global citizenship education and their other experiences. Such students might want to avoid embarrassment or repercussions from educators or other assessors who seem bound by a global citizenship educational agenda.

Krumpal (2013) characterized “unsocial attitudes such as racism” (p. 2,025) as one likely source of social desirability bias. Although one cannot declare racism as necessarily antithetical to global citizenship, anti-racist views have links to global citizenship (Günel & Pehlivan, 2016; Woolley, 2008). Therefore, if racist dispositions can trigger social desirability concerns, one might assume that low levels of global citizenship might present similar social desirability confounds when attempting to

measure students within schools that extol global citizenship. Moreover, for students who identify as members of marginalized groups within contexts that are hostile to their group, a self-report item about “my own country” or “my own culture,” as in the Global Identity Scale (Türken & Rudmin, 2013), can create further and exceptional self-presentation risks. Understandably, such students might feel compelled to self-report in ways that mask their actual dispositions.

Ultimately, respondents who desire conformity—a salient feature of many students in secondary schools—tend to respond how they think an authority might want them to respond. Accordingly, Deardorff (2015) noted how social desirability bias limits many self-reported measures of dispositions for constructs with intercultural loadings such as global citizenship. Tangentially, artificial responses to self-reports have also been touted as a key source of the wild polling inaccuracies that preceded Brexit and the 2016 U.S. presidential election (Li & Perkins, 2016), both events that have been connected to racism and opposition to global citizenship (Reysen & Katzarska-Miller, 2018).

Discrete-choice measures offer an alternative approach to combat biases that can arise when using self-report instruments to assess dispositions with socially desirable aspects (Kuokkanen & Sun, 2016). Discrete-choice measures feature blocks of Likert-type statements.<sup>4</sup> Within the triadic or triplet versions of such blocks, respondents can identify 1-of-3 statements that is “most like” and 1-of-3 “least like” them, instead of rating each statement individually on a relatively arbitrary numerical scale as with typical self-reports. Discrete-choice measures compel respondents to wrestle with complexity in a time-efficient manner. By contrast, self-reports are designed for ease of response (i.e.,

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<sup>4</sup> In his dissertation that produced his seminal rating scale, Likert (1932) was examining attitudes on internationalism, which can be thought of as a precursor to global citizenship dispositions.

lower cognitive load) rather than to facilitate thoughtful examination of a construct's intricacies (Brown & Maydeu-Olivares, 2011). Discrete-choice measures have been shown to more accurately represent respondents' levels of constructs that invite self-presentation biases (Anguiano-Carrasco et al., 2015; Cao, 2016; Drasgow et al., 2012).

Traditional self-report measures often use Likert-type or other rating scales, presenting respondents with individual statements and requesting numerically arbitrary responses (e.g., 1 = strongly disagree to 5 = strongly agree) that facilitate the selection of socially desirable responses, regardless of whether they reflect true dispositions. By contrast, discrete-choice measures enable respondents to rate statements against one another, forcing choice among complex options to reveal dispositional traits across multiple domains. Scales for traditional measures typically provide no reference points for ratings (Anderson et al., 2017). Thus, arbitrary scales can make traditional measures susceptible to response-style biases (Drasgow et al., 2012). How would a researcher know if Respondent A's rating of "5 = strongly agree" for a given statement is equally as strong as Respondent B's rating of "5 = strongly agree" for the same statement? The same concern could apply for one or more respondents across statements or across measurement occasions (Türken & Rudmin, 2013).

Instead, a discrete-choice context invites respondents to make comparative judgments rather than evaluating items independently. By presenting blocks of statements that cluster equally desirable statements, designers can reduce effects of self-presentation biases (Brown & Maydeu-Olivares, 2013). Once respondents state preferences by rank or selection, analysts can draw statistical estimates from weights placed on ranked or selected preferences (Kennelly et al., 2014). Working in discrete-choice contexts, several

scholars have concluded that asking respondents what is ‘more like them’ can impede self-presentation biases because such measures establish bases for comparison per judgment (Brown & Maydeu-Olivares, 2011; 2012; 2013). Through careful block composition, discrete-choice measures can also limit acquiescence bias and extreme/central tendency responding (Leenen et al., 2017).

Developing discrete-choices measures stipulates that (a) all blocks compel respondents to engage in a discrimination process of evaluating statements within those blocks that represent multiple domains (i.e., dispositions); (b) blocks enable respondents to choose the statement that reflects their largest (and least) utility value at the moment of comparison; and (c) statements reflect utility that corresponds to unobserved (continuous) variables that distribute normally in a population of respondents (Brown & Maydeu-Olivares, 2011). When finalized, discrete-choice measures can provide reliable information about multiple domains of a complex construct.

Even as they reported the development of a self-report of global identity, Türken and Rudmin (2013) endorsed discrete-choice, mainly due to temporal, contextual, and situational fluidities of respondents’ identities that the scholars believed their measure could not capture. Although Deardorff (2015) does not specify discrete-choice measures in her call for assessments that increase learner engagement, she opines that the inventories the field uses cannot sufficiently measure constructs of this type.

### **International Baccalaureate Schools as Contexts of Interest**

No single organization can lay a larger claim to global citizenship education than International Baccalaureate, which has authorized more than 5,000 schools in nearly 160 nations to serve students with this educational model. Other schools certainly implement

small-scale or school-wide global citizenship education, but International Baccalaureate was a logical contextual proxy in this dissertation because its schools are expected to place global citizenship at the forefront of their pedagogical decisions. Therefore, International Baccalaureate schools allow for an atypical opportunity for comparability, even across nations, because they follow a common set of standards and practices for philosophy, organizational leadership and structure, expected resources and support, collaborative planning, written curriculum, teaching and learning, and assessment.

Founded in 1968 in Switzerland, International Baccalaureate offers four programmes<sup>5</sup> for students aged 3 to 19. Each of its programmes shares a mission: to develop inquiring, knowledgeable and caring young people who help to create a better and more peaceful world through intercultural understanding and respect. To this end the organization works with schools, governments and international organizations to develop challenging programmes of international education and rigorous assessment. These programmes encourage students across the world to become active, compassionate and lifelong learners who understand that other people, with their differences, can also be right.

Of interest for this dissertation is International Baccalaureate's reputation for an intercultural, global approach to education, which its schools do not assess formally (Conley et al., 2014; Shrimpton, 2016).

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<sup>5</sup> International Baccalaureate's Primary Years Programme serves students in pre-K or K through the equivalent of U.S. Grade 5. Its Middle Years Programme serves students in the equivalents of U.S. Grades 6-10. Its Diploma Programme and Career-Related Programmes each serve students in their final two years of high school. The Diploma Programme aims to prepare students for success at university and in their lives beyond school. The Career-Related Programme features a joint focus on university-level material and a well-articulated vocational pathway.

Deardorff (2006; 2015) has called for measurement-focused definitional research that includes a greater variety of perspectives, especially when aiming to assess constructs with intercultural loadings. One such perspective that has been nearly absent from the literature is that of students who participated previously in global citizenship education. Horn and Fry (2013) offered a rare retrospective global citizenship education study, gathering alumni/ae perceptions of experiences that helped them develop as global citizens. But those scholars focused on students who accrued such experiences at universities, not at secondary schools. Furthermore, findings from global citizenship studies in high schools suggest that the universe of secondary-school alumni/ae would be too generic a sampling frame for this dissertation. For example, students who attended public secondary schools that did not offer global citizenship education recognized the importance of global citizenship but could not unpack its meaning (Myers, 2006).

Importantly, global citizenship education shares jargon with International Baccalaureate schools, making them important sites for research in this area (Lee et al., 2012). Of course, narrowcasting a sample such that it only includes certain school types does run the risk of excluding a breadth of perspectives. But studying students to whom global citizenship education is salient due to their experience with it might be the best way to define its dispositions and their social validity (Goren & Yemini, 2017a; Goren & Yemini, 2017b; Olsen, 1982; Wolf, 1978), essential for constructing a relevant measure.

Therefore, this dissertation began its data collection procedures by asking alumni/ae to prioritize dispositions they did and did not develop during secondary-school global citizenship education and how those dispositions have influenced their personal and professional lives since. It seems that alumni/ae of secondary-school global

citizenship education programs are an essential, yet overlooked, data source because they can offer specific content knowledge and field experience, both of which enable construct operationalization (Osterlind, 2009). Practically speaking, the absence of alumni/ae perspectives about global citizenship would deny us evidence to conclude that anyone found real-world value from this type of education. Thus, retrospective consensus of alumni/ae is essential given one's normative environment's role in predicting global citizen identity and status as an "invisible component" in global citizenship research (Reysen & Katzarska-Miller, 2018, p. 58).

### **Research Questions and Design**

Global citizenship scholarship remains rife with theoretical divides, most of which have been tested empirically. Such divides are not mere fodder for arcane academic discussions. As Deardorff (2009) notes, "interculturally competent global citizens generally do not occur naturally. If this phenomenon were naturally occurring, programs would not need to address this" (p. 351). Therefore, consequences of schools' inability to detect whether they are instilling global citizenship dispositions will only grow as more schools lean on global citizenship advocates' value-laden assumptions.

To help alleviate this concern, I followed an exploratory sequential design (Creswell & Plano Clark, 2011) for this dissertation, emphasizing coherency across its three phases. My mixed method approach allowed me to connect typically disparate methodologies, capitalize on mutually reinforcing strengths, address several types of research questions, collect data that are contextually rich, and enhance the credibility of my findings for the widest possible audience. Recognizing that the five dispositions I have hypothesized as culturally universally (Intercultural Sensitivity, Interest in

Diversity, Peacefulness, Plural Geographical Allegiance, and Social Justice Orientation) reflected my *a priori* assumptions, I considered three potential barriers: (a) empirical overlap of two or more of these dispositions that I hypothesized as distinct; (b) unearthing additional dispositions that scholars have not yet considered prominently; and/or (c) validating too few items to reliably measure some or all of the hypothesized dispositions.

Within my exploratory frame, I designed this dissertation to first establish social validity for the identified global citizenship dispositions, according to insights from alumni/ae of global citizenship education in secondary schools. I aimed to conclude Phase 1 of this dissertation with 3-5 socially valid global citizenship dispositions that might be measurable. Second, I sought to develop a pool of items to operationalize those 3-5 socially valid global citizenship dispositions and then recruit an internationally diverse panel of global citizenship experts to vet the items for content validity. I aimed to conclude Phase 2 of this dissertation having retained enough content-valid items per socially valid global citizenship dispositions to test their factor structure.

Third, I set out to pilot test the retained items and examine their factor structure based on data from students at the same secondary schools as the Phase 1 alumni/ae. I also intended to examine the items for the possibility of social desirability bias and, if warranted, design a discrete-choice measure that could reliably assess items that operationalized the socially and content-valid global citizenship dispositions while mitigating the potential for social desirability bias. The following research questions guided this dissertation, with each question corresponding to a phase.

1. To what extent do these five global citizenship dispositions demonstrate social validity based on perspectives of alumni/ae from global citizenship education



- secondary-school programs: Intercultural Sensitivity, Interest in Diversity, Peacefulness, Plural Geographical Allegiance, and Social Justice Orientation?
2. To what extent does the operationalization of global citizenship demonstrate content validity based on scholars' expert ratings of its ability to tap into culturally universal dispositions?
  3. To what extent is the factor structure identified based on this dataset consistent with the proposed theoretical model, and can results provide utility to inform valid inferences about secondary-school students' global citizenship-related dispositions?<sup>6</sup>

### **Cui Bono? Who Benefits from This Dissertation?**

Before transitioning to the methodology that I developed to address these three research questions, it is important to emphasize possible beneficiaries of this global citizenship education-focused dissertation, a topic largely understudied despite its rapid growth and centrality for schooling in a modern democracy (Myers, 2016). At a societal level, failure to exude global citizenship would invite dire consequences such as population-level clashes of ignorance (United Nations, 2013). An explicit global citizenship focus is one reason the United Nations shifted from eight Millennium Development Goals to 17 Sustainable Development Goals in 2015. Reviewing the new goals, Wilkinson et al. (2015) cast global citizenship as “*basic*” education’s most important outcome, a 21<sup>st</sup>-century necessity to participate in “all facets of the public

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<sup>6</sup> When originally proposed, this dissertation featured a fourth research question—To what extent can the proposed discrete-choice-measure be calibrated with item-response theory models?—and a corresponding phase with empirical testing of the developed discrete-choice measure. Due to inadequate sampling in 1-of-2 nations included in this dissertation, which I discuss in subsequent chapters, I opted to exclude the fourth research question in consultation with my committee.

sphere and private enterprise” (p. 23, emphasis added). Of course, global citizenship is not part of the basic menu of education available to public school students in the United States and most other nations. About 2% of students in U.S. public schools can access global citizenship education (Thier & Beach, under review).

Meanwhile, many schools claim to infuse global citizenship education into student experiences, but the lack of a viable measure has raised questions about whether such schools are truly developing students into global citizens. Might educators be telling themselves and their communities feel-good narratives based on anecdotes? How can teachers in these schools identify which practices, if any, exert influence on students’ actual dispositions? How can they know what to do more of, less of, or in what sequence, without a reliable measure of the foundational aspect: dispositions?

Therefore, I designed this dissertation to produce a measure for practical significance, supplying educators with formative data to study their practices for possible improvements in the instructional methods they use to foster global citizenship among students. These data can also enable global citizenship-interested schools to support claims about local needs for implementing models to prepare their students as global citizens and help make cases to scale-up practices that they identify as promising. The presence of such a measure offers potential to expand the number of schools that offer global citizenship, an opportunity that currently privileges some communities above others based on demographic factors both in the United States (Thier & Beach, under review) and internationally (Dickson et al., 2017; Gardner-McTaggart, 2016).

Both the dispositions-knowledge-skills-behaviors framework and the measure that aims to tap into that first dimension should also be able to provide researchers with

qualitative and quantitative tools to address the lack of clarity regarding what global citizenship entails from an evaluation standpoint. This dissertation can help the field determine impacts and effectiveness of a rising tide of global citizenship education programs, potentially enabling researchers to capture core operationalized aspects of the construct for possible application across several national and cultural contexts.

Ultimately, a project of this kind can help raise the technical adequacy of dispositional measures. Until more examples of discrete-choice measures or other alternatives to assess dispositions, innovative measures will remain on the sidelines of the battery of tests educators use to make consequential decisions about school priorities (Conley, 2013). Therefore, this dissertation can have important methodological implications both for global citizenship and other research areas. Last, this dissertation can be informative for anyone whose work relies upon self-reports but seeks more robust approaches to mitigate the self-presentation biases that such measures can invite. In the next chapter, I fully articulate the overall design for this dissertation and outline the methodology I followed for each of its three phases.

## CHAPTER II: METHOD

To address the three research questions that I presented in the previous chapter, I based this dissertation on an exploratory sequential design, a useful approach for developing theory and constructing instruments (Creswell & Plano Clark, 2017). In three phases (Phase 1: social validity; Phase 2: content validity; Phase 3: factor structure), I collected, combined, and analyzed qualitative and quantitative data from more than 200 respondents who represented more than a dozen nations. Respondents (a) experienced global citizenship education, (b) published peer-reviewed articles on global citizenship, or (c) were experiencing global citizenship education during the period under analysis.

Following DeVellis' (2003) approach to measure development, I first surveyed relevant literature to understand known and unknown properties of global citizenship (see Chapter I: Introduction). Synthesizing that literature led me to hypothesize five global citizenship dispositions as having the potential to be culturally universal and, therefore, measurable: Intercultural Sensitivity, Interest in Diversity, Peacefulness, Plural Geographical Allegiance, and Social Justice Orientation. Predicating Phase 1 on those five dispositions, I used the nominal focus group technique (Delbecq & Van de Ven, 1971) with alumni/ae ( $n = 11$ ) of secondary-school global citizenship education programs (i.e., International Baccalaureate) in Sweden and the United States. Then, I integrated qualitative and descriptive quantitative data about the social validity of those five dispositions and three others that the alumni/ae nominated (Bazeley, 2017; Wolf, 1978), allowing me to retain four dispositions for a further trial of content validity in Phase 2.

For each retained disposition, I generated a sufficiently large number of Likert-type items, mainly adapting from extant measures (DeVellis, 2003). I recruited an

international panel of global citizenship scholars ( $n = 18$ ) to quantify their endorsement of the items' content validity according to multiple criteria and to provide qualitative suggestions for item improvement (Rubio et al., 2003). During Phase 3, I piloted content-valid items that operationalized socially valid dispositions with students ( $n = 182$ ) who were attending the same secondary schools that the Phase 1 alumni/ae had attended, emphasizing internal validity by establishing coherence across phases. After attempting to fit student data to a hypothesized measurement model using confirmatory factor analysis and analyzing items for the presence of social desirability bias, I transformed retained items into a triadic discrete-choice measure. In this chapter, I have audited this dissertation's procedures, measures, and its attempts to combat validity threats, describing the design and three phases that each addressed distinct research questions.

### **Mixed Methods: Extending the Exploratory Sequential Design**

Mixed method designs vary by how they interact methodological traditions (i.e., qualitative and quantitative), the priority they accord each tradition, and both the timing and type of mixing (Creswell & Plano Clark, 2011). Typical exploratory sequential designs begin with a qualitative phase that informs a concluding quantitative phase, but I extended the basal design, developing tactics to integrate descriptive quantitative and qualitative data each within Phases 1 and 2, respectively, and by employing a third phase (Bazeley, 2017). Both data types offered compensatory strengths (Creswell & Plano Clark, 2011), informing development and refinement of measurement items in the first two phases so I could test them quantitatively in Phase 3. Consequently, I prioritized findings from Phase 3 to construct and report upon a discrete-choice measure.

In the first phase, I reconciled instances where nominal groups' descriptive quantitative data converged with, complemented, or contradicted its qualitative data (Greene et al., 1989). In doing so, I harnessed the nominal group technique's unique ability to provide actionable data from each major methodological tradition, a rare opportunity to integrate within a single method. Typically, mixed method studies involve separate (parallel or sequential) data collection from two or more distinct methods. In Phase 2, global citizenship scholars rated the Likert-type items I developed and provided open-ended commentary on those items and the entire measure (Rubio et al., 2003). Rather than rely exclusively on numerical cut scores for a singular, summative judgment of content validity (Ayre & Scally, 2014; Lawshe, 1975), I triangulated ratings and comments for each item, embracing the subjectivity that expert ratings can demonstrate (Rubio et al., 2003). In Chapter IV: Discussion, I have explored benefits that this dissertation derived from these integrations, which relied upon established tactics to enhance the internal validity of mixed method studies (see Creswell & Plano Clark, 2011).<sup>7</sup> Additionally, I have concluded Phase 1 and 2 sections by describing any additional attempts to mitigate potential validity threats following typical approaches that govern each tactic's data collection and analysis. Moreover, I made every feasible attempt to avoid compromising connections between data strands, which would otherwise

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<sup>7</sup> First, I drew data for Phases 1 and 3 from equivalent populations: alumni/ae who had attended and students who were attending the same secondary schools that emphasized global citizenship education, increasing comparability across phases' distinct data collection and analytical procedures. Second, I provided numerical counts of qualitative data, where possible, to boost reliability when juxtaposing datasets (e.g., synching Phase 1 participants' comments with their ratings of global citizenship dispositions; criteria-specific counts of items that Phase 2 participants rated as content valid). Third, I have described psychometric qualities of any measures I used or developed, specifying how one might analyze data from them and showing how their findings might expand upon qualitative ones. Fourth, I have produced joint displays, where appropriate, to enable comparisons of qualitative and quantitative in a single table or figure, thereby explicitly integrating data (Guetterman et al., 2015).

undermine conclusions within and between phases of a mixed methods study (Creswell & Plano Clark, 2017), Next, I have described the Phase 1: Social Validity Trial.

### **Phase 1: Social Validity Trial**

This dissertation required collection and analysis of data from students who had experienced global citizenship education when they attended secondary school (i.e.,  $n = 11$  alumni/ae in Phase 1) and who were experiencing it during the period under analysis (i.e.,  $n = 182$  Year 9 and 10 students in Phase 3). Therefore, I began this dissertation by purposively identifying and recruiting leaders of secondary schools in multiple nations that offered International Baccalaureate education programs in English. Specifically, I sought public, coeducational, day schools in urban areas. Although school-level sampling pertained to both Phases 1 and 3, this section has principally described tactics regarding Research Question 1: *To what extent do these five global citizenship dispositions demonstrate social validity based on perspectives of alumni/ae from global citizenship education secondary-school programs: Intercultural Sensitivity, Interest in Diversity, Peacefulness, Plural Geographical Allegiance, and Social Justice Orientation?*

In this section, I have described (a) procedures for sampling and recruiting qualifying secondary schools, (b) how leaders of those schools (and others) aided recruitment of alumni/ae from those schools, (c) procedures used to collect and analyze nominal group technique data, (d) a description of the participants in this phase; and (e) further checks on the validity of my approach to this phase.

#### ***Sampling and Recruiting International Baccalaureate Secondary Schools***

Focusing on International Baccalaureate programming due to its long-standing global citizenship emphasis, I explored characteristics that would help identify which

International Baccalaureate secondary schools might most benefit from and best contribute to this multinational study. Schools that offer International Baccalaureate's Diploma or Career-Related Programmes share a pedagogical mission, but as I show in Table 2.1, such schools' characteristics can vary tremendously. These schools can instruct in several languages but must correspond with International Baccalaureate in at least one of the following: English, French, or Spanish. Moreover, International Baccalaureate schools can receive funding from state governments and/or private

Table 2.1

*Despite Global Variation, International Baccalaureate Schools in Sweden and the US Show Similarities*

School-level variable	Percentages			Differential percentages		
	Global	Sweden	US	Global & Sweden	Global & US	Sweden & US
DP and/or CP (N)	3559	29	960			
English	85.47	100.00	100.00	14.53	14.53	0.00
State	46.16	86.21	86.56	40.04	40.40	0.36
Day	85.87	82.76	96.88	3.11	11.01	14.12
Coed	96.07	96.55	98.02	0.49	1.95	1.47
English & State	37.37	86.21	86.56	48.84	49.19	0.36
English & Day	72.86	82.76	96.88	9.90	24.02	14.12
English & Coed	82.55	96.55	98.02	14.00	15.47	1.47
State & Day	42.71	72.41	85.83	29.71	43.12	13.42
State & Coed	45.49	82.76	86.25	37.27	40.76	3.49
Day & Coed	83.48	82.76	95.31	0.72	11.83	12.55
English, State, & Day	34.95	72.41	85.83	37.46	50.88	13.42
English, State, & Coed	36.95	82.76	86.25	45.81	49.30	3.49
English, Day, & Coed	71.20	82.76	95.31	11.56	24.11	12.55
State, Day, & Coed	42.46	72.41	85.63	29.96	43.17	13.21
English, State, Day, & Coed	34.79	72.41	85.63	37.63	50.84	13.21

*Note.* Global = all International Baccalaureate schools worldwide for the given variable; US = United States; DP = International Baccalaureate Diploma Program; CP = International Baccalaureate Career-Related Program; English = primary or at least one of a school's language(s) of instruction; State = funded by a state government or other public entity; Day = no boarding students; Coed = coeducational



sources. They can be day and/or boarding locations, functioning as coeducational or single-sex environments.

Initially, I prioritized schools with English as the language of instruction (85.47% globally, 100.00% each among such schools in Sweden and the United States)<sup>8</sup> for two reasons. First, I could not find enough global citizenship measures in languages other than English from which to derive and adapt Likert-type items for use in Phase 2. Second, I lacked the linguistic capacity to conduct research in contexts that educated students in languages other than English, Italian, or the most basic Spanish. This linguistic inability placed some boundaries around where I could engage independently in this multinational study. Next, I sought to facilitate inference-making for the potential measure's utility within public schools, so I aimed to recruit only schools that received their funding from states or other jurisdictions, but not via private means (46.16% globally, 86.21% in Sweden, 86.56% in the United States). Furthermore, I sought to control for the phenomenon of boarding schools, where staff might exert outsized influences on students as their 24/7 caretakers *in loco parentis*. Thus, I aimed to recruit only day schools (85.87% globally, 82.76% in Sweden, 96.88% in the United States).

To enable examinations of any participants' individual differences based on sex, I aimed to recruit only co-educational schools (96.07% globally, 96.55% in Sweden, 98.02% in the United States). Last, prior studies revealed extreme differences in school-level access to International Baccalaureate opportunities in the United States (Thier & Beach, under review) and 160 other countries (Thier et al., 2016). In nearly all cases,

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<sup>8</sup> Descriptive statistics for each school-level characteristic for International Baccalaureate programmes globally, in Sweden, and the United States can be found in Table 2.1 based on data that are publicly available and constantly subject to update (see International Baccalaureate, 2020).

access disparities favored students in cities over peers in peripheral areas, so I aimed to recruit schools in cities, seeking to avoid any location-based, sociocultural confounds.

I sought a nation to pair with the United States, having assumed that U.S. schools would be more convenient for recruitment and data collection. Thus, I aimed to identify as many nations as possible with multiple qualifying schools (i.e., offered an International Baccalaureate programme in English, public, coeducational, day-only, and located in a city), preferring nations with multiple qualifying schools within a given city. I expected single-city data collection to aid data comparability and ease of accessing multiple schools in single trips, given this dissertation's budget limitations. Sixteen such nations presented possibilities: Australia, Canada, Finland, Germany, Hong Kong, Hungary, Japan, Latvia, New Zealand, Norway, Poland, Russia, Singapore, Sweden, Switzerland, and the United Kingdom. Among those 16 nations, 13 used English as at least one of their instructional languages for all or most students, as did qualifying schools in the United States. In Hungary, Latvia, and Russia, qualifying schools instructed in English, but only for some portions of their curricula and/or student bodies.

I could offer USD \$1,000 to as many as six schools that agreed to participate and would meet two recruitment benchmarks: (a) identifying 3-4 alumni/ae to consent and be available for participation in an online nominal technique focus group (Phase 1); and (b) recruit  $\geq 60\%$  of Years 9 and Year 10 students to assent (with passive or active parental permission, as determined by the jurisdiction) for participation that would include responding to survey items (Phase 3).<sup>9</sup> I anticipated challenges of recruiting secondary

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<sup>9</sup> Had the originally proposed version of this dissertation been feasible, I would have also asked participating schools to recruit students in Years 11 and 12 to respond to the discrete-choice measure I developed during Phase 3.

schools given their many competing demands—both typical demands and those due to implementing a university-level program with many facets<sup>10</sup>—especially for recruiting internationally at sites where I lacked prior connections (Türken & Rudmin, 2013). So, I depended upon professional relationships. Within the United States, a colleague and former administrator of a district in the Pacific Northwest with three qualifying schools introduced me to school and district personnel. An information sheet I sent about this dissertation (see Appendix B) prompted initial interest in participation (100.00%).

To aid recruitment outside the United States, International Baccalaureate’s research department agreed to email heads and programme coordinators at 43 schools on my behalf, introducing them to my dissertation (see Appendix C).<sup>11</sup> I followed with an information sheet, initially receiving favorable responses from 14-of-43 schools (32.56%). Although, I could not successfully recruit some of those schools because:

- Interested schools in Finland, Germany, and Switzerland could not participate because the timing of the dissertation did not align with their school calendars.
- I could not accommodate three interested schools in Russia with student populations that were much fewer in number than this dissertation would require.

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<sup>10</sup> For example, International Baccalaureate students seeking to earn the full diploma must complete university-level exams in six subject groups (language and literature, language acquisition, individuals and societies, sciences, mathematics, and the arts), at least three of which, but not more than four, at Higher Level (240 teaching hours) that occur over two academic years. The rest are taken at Standard Level (i.e., 150), which can be one or two years in duration. Students sit for summative examinations (mostly essay-based) that the school must proctor and they also complete internal assessments in each subject that their teachers assess locally. Then, an international team of examiners mark the summative examinations and moderate teachers’ scores for internal assessments. Diploma candidates have three additional requirements: a university-level Extended Essay on a chosen topic; an epistemology course called Theory of Knowledge; and Creativity, Action, Service, which is a series of student-initiated projects.

<sup>11</sup> International Baccalaureate’s research department agreed to do so based on what was, at the time, my 10-year history of teaching in International Baccalaureate schools, coordinating multiple programmes, leading its professional development workshops, conducting site visits on the organization’s behalf, and completing four research projects that the organization had commissioned.

- Schools in Latvia and New Zealand had begun programme implementation too recently to have alumni/ae eligible for Phase 1.
- Within Hong Kong, I could not find a second interested school.

One school in Spain showed interest in participating. Its coordinator was a part of an online network of International Baccalaureate coordinators and learned about the dissertation from a professional connection at a school that I had contacted. But the school in Spain did not qualify for this dissertation. Ultimately, an interested school leader in Sweden agreed to participate and to recruit another school in Sweden, one with which her school had previously collaborated on pedagogical projects.

Normative cases of International Baccalaureate schools in Sweden and the United States shared more characteristics with each other than they did with typical International Baccalaureate schools globally (see Table 2.1). Furthermore, although social conventions in Sweden promote its national language, nearly 90% of its population speaks English as a first or second language. Both at schools that offer International Baccalaureate and not, English is frequently taught as a core subject, just like Swedish and mathematics.

Consequently, I launched this dissertation having formed initial agreements with two qualifying schools in Sweden and three from a district in the Pacific Northwest of the United States. Early in Phase 1, one U.S. school declined to continue due to competing local initiatives. Mid-Phase 1, another U.S. school dropped out due to its school leader's prolonged absence (bereavement leave). In consultation with my dissertation committee, I resolved to proceed with a design that was unbalanced at the school level: two smaller schools in Sweden and one large school in the United States. These school-level attritions also contributed to the eventual removal of what would have been Research Question 4.

### ***Recruiting Alumni/ae for Nominal Group Technique Focus Groups***

At each of the three qualifying schools that persisted through this dissertation, school leaders, programme coordinators, and/or teachers recruited 3-4 alumni/ae on my behalf for nation-specific focus groups. School staff direct messaged and posted announcements on social media platforms (e.g., Facebook) or sent emails to contact lists to recruit participants. Schools sent interested alumni/ae recruitment materials that prompted them to contact me via email (see Appendix D).<sup>12</sup> Each participating alumnus/a received a USD \$25 electronic gift card. Describing a benefit of participation, recruitment materials and informed consent documents (see Appendix E) featured the opportunity to interact with, learn from, and share views with others who experienced global citizenship education in the same country. During the informed consent process, I made potential participants aware that a pre-condition of participation would entail permission to have their voice, not image, recorded electronically during a focus group.

### ***Collecting and Analyzing Nominal Group Technique Focus Group Data***

I used the nominal group technique: a structured focus group approach meant to reach consensus judgments, rank-order group priorities, and minimize biases that could stem from high-status participants' or external processors' tendencies to dominate conversations (Bailey, 2013; Delbecq & Van de Ven, 1971; Moore, 1987). Despite many variations in how the technique is conducted (McMillan et al., 2014), seemingly all varieties feature (a) a generation of ideas, (b) participant discussion to allow further ideas to emerge, (c) narrowing an exhaustive list of ideas into key themes, and (d) a final ranking or rating of respondents' preferences or perceptions of importance (Denning et al.,

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<sup>12</sup> When recruitment lagged in the United States following schools' attrition, I enlisted additional support to raise awareness of the study through an alumni/ae network that International Baccalaureate maintains.

2013). Because the final step of a nominal group portion typically involves a rating or ranking, some researchers have described the nominal group technique as a quantification of qualitatively collected data (Gill et al., 2012). Reviewing scoring schemata for the nominal group technique, Thier and Mason (2019) found considerable variation in how researchers have conducted such groups. Thus, I have described the steps I followed in this dissertation to collect data with the nominal group technique.

**Collecting Nominal Group Technique Focus Group Data.** First, I emailed each consenting participant a weblink to access Inflexion’s Consensus-Building Tool (see Appendix F).<sup>13</sup> I chose that platform for this dissertation because it enabled participants to nominate ideas asynchronously without seeing nominations from fellow participants (Task 1 in my nominal group process), then allowed a facilitator to lead a synchronous focus group (Task 2), and later engaged a mechanism for participants to numerically rate consensus ideas from the focus group meeting in an asynchronous manner (Task 3). Once groups agreed upon their suitable dates and times for synchronous meetings, I invited them to attend nation-specific focus groups (i.e., Task 2). I also emailed instructions (see Appendix G) to each participant for the asynchronous work in Task 1. Those instructions included the following questions that prompted participants to brainstorm initial responses:

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<sup>13</sup> Inflexion’s Consensus-Building Tool was in beta testing at the time of Phase 1 in this dissertation, so I piloted its relevant functions with two experienced researchers and two computer-language coders to ensure the platform’s accessibility on laptops and tablets, whether they operated Android or Mac systems.

1. Which of these,<sup>14</sup> or other global citizenship dispositions, did you develop **most directly due to your experiences** in global citizenship education during secondary school?
2. Which of these, or other global citizenship dispositions, have **helped you most in your professional life?**
3. Which of these, or other global citizenship dispositions, have **limited you most in your professional life?**
4. Which of these, or other global citizenship dispositions, have **helped you most in your personal life aside from work?**
5. Which of these, or other global citizenship dispositions, have **limited<sup>15</sup> you most in your personal life aside from work?**

Along with these questions, I emailed to participants operational definitions for each of the five hypothesized dispositions (see Figure 2.1, a Construct Display that also included sample descriptions of high and low levels per disposition). The instructions also included definitions of differences among dispositions, knowledge, skills, and behaviors.

Second, I convened the Task 2 focus group in which alumni/ae of qualifying schools in Sweden met synchronously to examine and build upon each other's contributions from the prior asynchronous task. Using Zoom, I recorded participants' audio responses but only recorded video from my laptop camera (see Appendix H) to maximize participant anonymity. In concert, the Consensus-Building Tool and Zoom

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<sup>14</sup> Each question mentions "these" global citizenship dispositions, referring to this dissertation's initially hypothesized dispositions: Intercultural Sensitivity, Interest in Diversity, Peacefulness, Plural Geographical Allegiance, and Social Justice Orientation.

<sup>15</sup> In designing these questions, I considered an admonishment for designers of measures seeking to tap into psychological domains with high potential for social desirability bias (Sheehy-Skeffington, 2013). Such measures should attempt to account for a construct's less-desirable traits.

Disposition	Operational definition	Indicator of high-scorer	Indicator of low-scorer
Intercultural sensitivity	Respect for and acceptance of cultural perspectives different from one's own (i.e., promoting values that are non-discriminatory, empathetic, tolerant, and respectful of differences)	I feel empathy when people from countries other than mine experience struggles.	I struggle to understand how other groups of people see the world.
Interest in cultural diversity	Desire to experience the complexities of various cultures' norms, expectations, and contexts	I am interested in getting to know people from different countries.	I care about our similarities instead of our differences to keep us united.
Peacefulness	Inclination to approach conflict such that no party is made to be wrong	To me, the occurrence of violence means that conflict resolution failed or has not been attempted.	Violence is an unavoidable result of some interactions between people or groups.
Plural geographic allegiance	Inclination to identify with the wider world rather than, or in addition to, a specified geographic area, which includes recognitions that one's worldview is not universal and of cultural interdependence	What I do here affects people in other countries.	People should first care about their own nations before caring about others.
Social justice orientation	Belief in our shared responsibility to preserve the human rights of all people and the planetary environment where we cohabitate	I feel responsible to involve myself in global issues that affect others more directly than they affect me.	Many people around the world are poor because they do not work hard enough.

*Figure 2.1. Construct Display for Five Hypothesized Global Citizenship Dispositions.*

afforded multiple advantages to adapt the nominal group technique within an online space, about which I have elaborated upon in Chapter IV: Discussion. Alumni/ae of qualifying schools in United States could not find a meeting time to serve all participants' needs, so I improvised asynchronous formats for the Consensus-Building Tool and GoogleDocs instead of Zoom (see Appendix I).

I facilitated Task 2 groups with a goal of generating the greatest possible degree of consensus for any given disposition that a participant raised in response to a Task 1



question. I began Task 2 sessions by reminding participants of the procedures that I had emailed to them prior to each group's commencement. I facilitated periods of questioning and reflection to deepen ideas and generate additional ones. During that period, the group followed pre-randomized orders for spoken responses, allowing all participants equal opportunity to contribute additional ideas in response to questions once they were able to review other participants' Task 1 responses. Group conversation continued in order until participants exhausted any new ideas about a given Task 1 question. Participants would indicate a lack of novel responses by saying "Pass." Once all participants had passed, I facilitated group examinations of key themes, which included determining whether any nominated dispositions seemed redundant or could be combined to develop common language that would unify overlapping ideas. This process also followed pre-randomized response orders. When consensus has been reached for a given Task 1 question, the group repeated the process for each of the other questions.

As a final step, I prompted participants to use the Consensus-Building Tool to rate consensus dispositions as being socially valid (Wolf, 1978). For this dissertation, I defined the social validity of global citizenship dispositions according to three criteria: being (a) personally beneficial/limiting; (b) professionally beneficial/limiting; and (c) attributable to global citizenship education (see Figure 2.2). Participants rated each of those criteria on 9-point, bidirectional scales that I adapted from Rubin et al. (2006). Participants also had the option to accompany ratings for each disposition and criterion with qualitative rationales that elaborated upon their ratings.

Rating	Personally beneficial/limiting	Professionally beneficial/limiting	Attributable to global citizenship education (GCE)
1	Definitely limiting to my personal life	Definitely limiting to my professional life	Definitely not a direct result of my secondary-school GCE experiences
2	Very likely to limit my personal life	Very likely to limit my professional life	Very unlikely to be a direct result of my secondary-school GCE experiences
3	Likely to limit my personal life	Likely to limit my professional life	Unlikely to be a direct result of my secondary-school GCE experiences
4	Somewhat likely to limit my personal life	Somewhat likely to limit my professional life	Somewhat unlikely to be a direct result of my secondary-school GCE experiences
5	Unsure of impact on my personal life	Unsure of impact on my personal life	Unsure of the likelihood of being a direct result of my secondary-school GCE experiences
6	Somewhat likely to help my personal life	Somewhat likely to help my personal life	Somewhat likely to be a direct result of my secondary-school GCE experiences
7	Likely to help my personal life	Likely to help my personal life	Likely to be a direct result of my secondary-school GCE experiences
8	Very likely to help my personal life	Very likely to help my personal life	Very likely to be a direct result of my secondary-school GCE experiences
9	Definitely helpful in my professional/personal life	Definitely helpful in my professional/personal life	Definitely a direct result of my secondary-school GCE experiences

Figure 2.2. Nominal Group Technique Focus Group Rating Scales: Global Citizenship Dispositions.

**Analyzing Nominal Group Technique Focus Group Data.** Like typical focus groups, the nominal group variety produces qualitative data, but the method's distinct output is a numerical accounting, often as a ranking, regarding whatever a group finds most important or desirable (Aspinal et al., 2006; Gill et al., 2012; Graffy et al., 2008; Robinson et al., 2003). Without numerical data, a nominal group would forego its important contribution of actionable information within a single session that can jointly reflect a group's consensus and priorities (Aspinal et al., 2006; Carney et al., 1996; Gill et

al., 2012; Porter, 2013). Therefore, I adhered to guidelines for analyzing and reporting data from Thier and Mason (2019), such as stating explicitly:

- whether an analysis is meant to emphasize consensus, prioritization, or both;
- the chosen analytical technique, including any calculations it requires; and
- implications of that choice, regarding what is gained and what is lost.

This dissertation required consensus to ensure production of dispositional domains that would best suit interpersonal measurement during subsequent phases. Prioritization would also be necessary to support development of a triadic discrete-choice measure, which would need to conform in several, specific ways to suit secondary schools' needs.

On one hand, a fit-for-purpose discrete-choice measure would need to limit its number of dispositions, accounting for (a) adolescent respondents' greater susceptibility for cognitive overload (Anderson et al., 2017; Anguiano-Carrasco et al., 2015; 2017); (b) schools that could not allocate time for an overly lengthy measure (Dillman et al., 2014); and/or (c) threatening computational efficiency and ability to discriminate if domains inter-correlated too highly (Anguiano-Carrasco et al., 2015; De Ayala, 2013; Embretson & Reise, 2000). On the other hand, too few dispositions could yield a discrete-choice measure that inadequately represented the construct of interest (Spurgeon, 2017) or rendered impossible the creation of triads that might usefully discriminate among participants (Anguiano-Carrasco et al., 2015; 2017).

Therefore, the final measure would require 3-5 dispositions (Anguiano-Carrasco, personal communication), leading me to employ a hybrid approach to consensus and prioritization during this phase that involved triangulating descriptive quantitative and qualitative data. Moreover, nominal group results can be enhanced by researchers

considering multiple indicators of priority such as the magnitude of mean scores, as well as frequencies across distributions (McMillan et al., 2014). Therefore, I designated as the highest degree of consensus in this dissertation  $\geq 80\%$  of participants rating a given disposition in the same three-point band (i.e., 1-3 as a solidly negative endorsement, 4-6 as an ambivalent endorsement, or 7-9 as a solidly positive endorsement) for a given criterion of social validity. I sought dispositions that demonstrated high degrees of positive or negative consensus (see Sheehy-Skeffington, 2013), applying this approach to dispositional ratings for each of the three criteria under evaluation. Although I also sought to prioritize retention of any disposition that demonstrated consensus for all three criteria, I recognized that a diverse, cross-national sample held enough potential for variability to perhaps necessitate the retention of dispositions that achieved consensus for some, but not all, criteria. For example, some dispositions might be more socially valid from a personal than a professional standpoint, or vice versa.<sup>16</sup>

Consequently, I examined both typical responses and outliers from participants who were rating dispositions only after they left the shared space of a focus group to minimize any influence of conformity (Chapple & Murphy, 1996). Thus, I reviewed proportions of responses per criterion and disposition that participants rated in the same three-point band, but also aggregated respondent ratings to examine *M*, *SD*, and distributions, seeking multiple indicators of the degree to which participant data indicated consensus and prioritization. Recognizing that the presence of multiple descriptive quantitative indicators across three criteria would not necessarily provide obvious

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<sup>16</sup> In some nominal group technique applications, scoring schemata enable participants to rank outcomes from the focus group or to rank outcomes that had already achieved consensus qualitatively through discussion. Other studies have used the rankings themselves to demonstrate consensus quantitatively after the discussion concluded (Wainwright et al., 2014; Willis, 1979).

rankings of the dispositions under evaluation, I employed an integrated analysis plan (Bazeley, 2017). I triangulated participants' numerical ratings with exemplars of their qualitative data (i.e., spoken comments during Task 2 and rationales that participants typed alongside their Task 3 ratings) because over-emphasizing rankings can yield contradictory viewpoints that thwart consensus (Aspinal et al., 2006).

Given this dissertation's cross-national approach and aim to produce a measure that was stable and reliable for as many contexts as possible, I made comparisons within and between nations for each of this phase's descriptive quantitative and qualitative data points. If I detected extreme international variation for a disposition, I excluded it from further consideration. In such instances, I attempted to formulate a relevant hypothesis about that disposition's seemingly limited potential for cultural universality (McMillan et al., 2014) and developed a plan within a future program of research to interrogate that disposition further (see Chapter IV: Discussion).

### ***Participating Alumni/ae***

All participants ( $n = 11$ ) were adults, alumni/ae of a secondary school that emphasized global citizenship education. The schools they attended were in Sweden ( $n = 7$  participants; two schools) or the United States ( $n = 4$  participants; one school). The alumni/ae were disproportionately female (90.91%). In samples from schools in Sweden and the United States, multiple alumni who originally agreed to participate dropped out prior to data collection, furthering the sex-based disproportionality in the sample. There was a 15-year range of secondary-school graduation dates for alumni/ae in the sample: 2004 to 2018. Although I did not ask participants to report their current home locations, comments from some alumni/ae indicated that they were living and working in nations as

varied as Colombia, Japan, New Zealand, and the United Kingdom, but most seemed to live in the nation of their secondary schools.

### ***Further Validity Checks***

Following strategies from Merriam (2009), I first included in this dissertation a statement of my reflexivity relative to this area of research (see Appendix A). Second, I have been providing in this chapter a thorough audit of all procedures and decision points. Third, I sampled for maximum variation (i.e., 11 alumni/ae who graduated across a span of 15 years and represented three secondary schools in two nations, as they lived in six or more). Fourth, I sought data saturation during focus groups by using wait-time strategies, randomizing response orders, and facilitating as many rounds of responses per question that enabled all participants to contribute every idea that they could muster. Fifth, I compared descriptive quantitative data cross-nationally. Sixth, I incorporated as many rich, thick descriptions to contextualize participants' insights as possible.

### **Phase 2: Content Validity Trial**

I linked data strands from the first two phases by developing an initial pool of 120 Likert-type items, which I constructed such that 30 each operationalized the socially valid dispositions retained from Phase 1: Appreciation of Multiple Perspectives, Intercultural Sensitivity, Interest in Diversity, and Plural Geographic Allegiance. Predominantly, I developed the pool by adapting from 437 extant items found in 32 measures<sup>17</sup> that had

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<sup>17</sup> Primarily, the University of Oregon's library collection and those of its wide network of partner institutions enabled my access to articles that featured all items for a measure of interest. For some measures, only sample items were publicly available. Thus, I have provided citations for both articles that included all items or articles that only referenced sample items from measures that informed my item pool: Barth et al., 2015; Braskamp et al., 2014; Buchan et al., 2011; Chen et al., 2016; Cho & Chi, 2015; Chui & Leung, 2014; Cleveland et al., 2014; Lawthong, 2003; Leung et al., 2015; McFarland et al., 2012; McFarland et al., 2019; Morais & Ogden, 2011; Myers & Zaman, 2009; Reese & Kohlmann, 2015; Reese et al., 2014; Renger & Reese, 2017; Reysen & Katzarska-Miller, 2013; Salgado & Oceja, 2011; Sevincer et al., 2017; Shadowen et al., 2015; Tarrant et al., 2013; Türken & Rudmin, 2013; Walker et al., 2015; World

undergone an array of validity trials (Anguiano-Carrasco et al., 2017; DeVellis, 2003). The institutional affiliations for scholars who developed those measures reflected at least 16 nations, including Australia, Canada, Germany, Hong Kong, Japan, Korea, Luxembourg, New Zealand, Norway, Poland, Portugal, Saudi Arabia, Singapore, Spain, Thailand, the United Kingdom, and the United States.<sup>18</sup>

Such international diversity materialized a cornerstone of this dissertation's goal: to develop a measure that could tap into culturally universal dispositions. Moreover, a systematic literature review detected stark geographic differences in how scholars have described global citizenship, even between adjacent nations that share many sociocultural and sociohistorical traits (e.g., Canada and the United States; Goren & Yemini, 2017a). As I reviewed extant items to adapt or draft new ones, I made every attempt to avoid replicating concerns that might render items unfit for purpose such as assumed universality (i.e., idioms that might privilege native speakers of a given language) or exclusionary framing such as referring to groups as "foreign" or as an "other."

I recruited a diverse panel of global citizenship scholars ( $n = 18$ ) to rate and comment upon the content validity of items I developed as an attempt to address Research Question 2: *To what extent does the operationalization of global citizenship demonstrate content validity based on scholars' expert ratings of its ability to tap into culturally universal dispositions?* In the remainder of this section, I have described (a)

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Values Survey Association (2016). It should also be noted that many scholars who developed items that I reviewed for my initial pool might work in one national context but claim citizenship, naturalization, or other salient connection to one or more other national contexts.

<sup>18</sup> One measure I reviewed, the World Values Survey, reflected more than 30 years of international collaboration among social scientists from more than 100 countries on five continents. Because it is unclear which scholars developed which World Values Survey items, I did not include those authors' institutional affiliations in this calculation.

procedures for sampling and recruiting scholars and (b) for collecting and analyzing descriptive quantitative and qualitative data that the scholars provided, as well as (c) Phase 2 participants and (d) further checks on the validity of my approach to this phase.

### ***Sampling and Recruiting Global Citizenship Scholars***

I began to formulate my internationally diverse content validity panel by conducting an expansive, ancestral search upon the citation list of this dissertation's literature review (see Chapter I: Introduction). In doing so, I identified 306 scholars that had published at least one peer-reviewed article on global citizenship's substance and/or measurement. Although content validity scholarship features wide disagreement on the number of content experts needed—ranging from at least two to more than 20—soliciting more feedback from more experts seems certain to provide more useful information for measure development (Rubio et al., 2003). Thus, the number of content experts should depend upon the depth and diversity of knowledge that a measure's design and refinement might require (Grant & Davis, 1998). Seeking to emphasize cutting-edge thinking on a definitionally fraught concept that has produced a glut of measures with varying strengths and weaknesses (Deardorff, 2015), I invited 68 research-active global citizenship scholars. Culling from the list of 306, I sought (a) wide geographic range among scholars who had (b) first-authored multiple relevant publications and (c) roughly equal contributions from substantive and methodological scholars. For the latter consideration, I recognized that some scholars would fit both groups.



I sent each scholar<sup>19</sup> an invitation (see Appendix J) with (a) this dissertation's purpose; (b) why I selected the scholar to participate; (c) names of organizations that approved or sponsored this dissertation, aiming to enhance perceptions of its legitimacy; (d) an estimate of time needed for participation: 60 minutes; (e) a primer on the novelty of discrete-choice measurement (see Appendix K); and (f) an incentive: access to this dissertation's final revised measure, following successful completion of the defense of this dissertation (Dillman et al., 2014; Rubio et al., 2003). I sent non-respondents as many as two reminder emails (see Appendix L; Dillman et al., 2014). Per guidelines for emailed survey invitations (Saldivar, 2012), I expected a response rate  $\geq 60\%$ .<sup>20</sup> For respondents who expressed interest, I conducted via email a University of Oregon Institutional Review Board-approved informed consent process (see Appendix M).

### ***Collecting and Analyzing Expert Item Review Data***

I loaded into Qualtrics (a) 120 Likert-type items that I randomized in blocks to avoid order effects (Dillman et al., 2014); (b) an open-ended item for aspects of global citizenship that these items did not account (Rubio et al., 2003), and (c) indicators for whether the participant wanted updates about the dissertation and access to the final revised measure (see full Phase 2 instrument: Appendix N). For each Likert-type item, I asked participants to make three criterion ratings using the same four-level scale (1 = strongly disagree to 4 = strongly agree). Participants would rate:

1. an item's overall relevance to global citizenship as a construct

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<sup>19</sup> For 63-of-68 scholars (92.65%), I procured institutional emails from university or research center webpages. For scholars who did not seem to have public email addresses, I used LinkedIn Messenger for four and one scholar's personal email address (i.e., a Hotmail account).

<sup>20</sup> In concert, Dillman et al. (2014) and Saldivar (2012) raise questions about the reliability of studies that fail to meet, and especially fail to report, overall or mode-specific response rates. Furthermore, their scholarship highlights an overwhelming majority of studies failing to reach relevant response thresholds.

2. the degree to which an item featured a disposition rather than knowledge, skills, or behaviors
3. the degree to which an item featured a culturally universal, rather than a culturally relative, component of global citizenship.

For any item that a scholar rated  $< 4$ , for one criterion or more, the survey instrument prompted an open-ended response, allowing suggestions for improvements or comments on the item overall and how it pertained to the criteri(a) of interest. Because Qualtrics auto-saves<sup>21</sup> responses periodically, participants had the option of completing the entire review task at once or in portions.

Content validity trials feature various analytical approaches (Rubio et al., 2003) with Lawshe's (1975) ratio seeming to be the most common.<sup>22</sup> More recently, Ayre and Scally (2014) determined empirically that their thresholds for counts of expert votes relative to a panel's number of participants offer a more conservative standard. Seeking the most robust and defensible combination of methods, I first dichotomized participants' ratings to distinguish endorsement of an item's content validity for a given criterion (i.e., rating  $\geq 3$ ) from the absence of such endorsement ( $\leq 2$ ), as in Rubio et al. (2003). Second, I counted the numbers of participants who endorsed content validity per item-criterion pair and compared that number to the Ayre and Scally (2014) threshold. In this dissertation ( $n = 18$  participants),  $\geq 13$  scholars endorsing an item with a rating of 3 or 4

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<sup>21</sup> At my request, a survey specialist with expertise in Qualtrics and international education piloted the survey instrument to detect any potential malfunctions.

<sup>22</sup> *Content validity ratio* =  $[(R - (N/2))/(N/2)]$ , where  $R$  = number of panelists rating a statement as valid and  $N$  = total number of panelists

for each of three criteria would demonstrate that item's content validity from a descriptive quantitative standpoint.

By providing participants with a mechanism to offer qualitative feedback (Rubio et al., 2003)—even for items they rated at a 3 for even a single criterion—I was able to look beyond mere cut scores. In so doing, I could improve items that were above and below the cut score for one criterion or more. This mixed methods approach engendered a holistic view to item analysis, thus optimizing the representation of relevant content based on varied perspectives from my internationally diverse panel of scholarly experts. As additional indicators to describe and contextualize participants' response data, I calculated ratings' *M* and *SD* per item per criterion.

### ***Participating Global Citizenship Scholars***

I narrowly exceeded the expected response rate (60.29%), featuring 18 global citizenship scholars who consented and completed the content validity trial. Another 15 respondents agreed informally to participate but withdrew prior to data collection for scheduling constraints or without having completed the informed consent procedure. Eight respondents declined outright. I received no response from 27 invitees (39.71%).

In Table 2.2, I have presented indicators regarding counts of each of four invitee group's GoogleScholar citations to approximate their research prominence.<sup>23</sup> The participant group had the lowest citation average but the highest reporting percentage. Taken together, these indicators suggest that the participant group was composed, more so than the other groups, of early career scholars who might be more engaged with

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<sup>23</sup> Before GoogleScholar tracks one's citations, the scholar must create a profile page. Then, Google analytics begins to calculate citations for that scholar's work found in peer-reviewed journals, books, government reports, and other research-based knowledge products.

Google tools, but have somewhat shorter curricula vitae to date. As such, they could be either less influential or closer to the cutting edge.<sup>24</sup>

Table 2.2

*GoogleScholar Counts Suggest Participants as Somewhat Less Prominent than Non-Participants*

Invitee group	GoogleScholar citations		
	<i>M</i>	<i>SD</i>	<i>Page %</i>
Participants ( <i>n</i> = 18)	1903.86	2027.93	77.78
Agreed to participate, but withdrew due to time constraints or never signed for consent ( <i>n</i> = 15)	5533.10	5971.54	66.67
Declined to participate ( <i>n</i> = 8)	3369.25	148.371	50.00
Non-respondents ( <i>n</i> = 27)	3720.00	3164.36	55.56
All invitees ( <i>n</i> = 68)	3517.72	3890.82	63.24

*Note.* Page % = percentage of scholars in a group with a GoogleScholar page that provided counts of citations of that scholar's work

My 18-scholar panel reflected considerable diversity of ontologies, epistemologies, and geographies. For example, their institutional affiliations represented eight nations, although the sample accounted for at least another four through the participants' nations of citizenship and/or upbringing.<sup>25</sup> Half the sample seemed to identify as female.<sup>26</sup> One third of the sample authored one or more of the extant measures I used to develop my initial item pool. Although not necessarily the mother tongue for all,

<sup>24</sup> The agreed-to-participate group were most heavily cited, including two scholars who withdrew from the 120-item review task due to time limitations, each of whom instead met with me informally for about an hour at conferences to provide overall advice on the current study. When comparing citations and percentages of scholars with GoogleScholar pages, the responding group that declined to participate (*n* = 8) seemed very similar to the non-respondents (*n* = 27), though the latter group demonstrated more variability.

<sup>25</sup> I have declined to report participating scholars' nations of institutional affiliation and intentionally did not collect data formally regarding their citizenship status, location of upbringing, or other characteristics that might detail the sample's geographic representation. Doing so would have likely compromised participant anonymity, due to a relatively small universe of global citizenship scholars.

<sup>26</sup> Although I did not formally collect data on participants' sex for this phase, I have based this determination on observed traits such as the pronouns scholars have used in their work, photos from their scholarly pages, and self-presentation for those I have met or seen present at scholarly conferences.

every participant published in English, often a *lingua franca* in many fields within the social sciences (Curry & Lillis, 2010; Thier et al., 2020).

### **Further Validity Checks**

The design of this content validity trial follows a joint recognition of the importance of learning from an array of experts and using mixed methods to combine distinct strengths of objectivity and subjectivity. Doing so invites valuable information regarding critiques of item clarity and a measure's overall representativeness (Rubio et al., 2003). In that vein, I first recruited a relatively large and diverse panel to screen in various viewpoints on a topic rife with scholarly debates, especially regarding global citizenship's implications across populations and sociocultural realities (Andreotti, 2011; Reysen & Katzarska-Miller, 2018). Second, although some analysts might employ less-conservative standards with larger panels because more experts invite more opportunity to disagree (Rubio et al., 2003), I opted for more-conservative cut scores (Ayre & Scally, 2014) than typical (e.g., Lawshe, 1975; Walker et al., 2015). Third, I applied those heightened standards to three distinct criteria, whereas assessing a singular criterion is far more common in content validity studies. Fourth, I triangulated ratings across three criteria—all following the heightened standards—with experts' commentary on both high- and low-scoring items, enabling experts to provide more holistic feedback on items and the overall measure (Creswell & Plano Clark, 2011). Fifth, I maintained follow-up conversations at the discretion of five participants who voluntarily engaged via email with further critique, clarification of prior commentary, and/or praise (Rubio et al., 2003).

### **Phase 3: Factor Structure Trial**

A content validity trial can yield a revised instrument ready for a test of its psychometric properties (DeVellis, 2003; Rubio et al., 2003). Correspondingly, I linked data strands for the latter two phases of this dissertation, using items retained from Phase 2 to address Research Question 3: *To what extent is the factor structure identified based on this dataset consistent with the proposed theoretical model, and can results provide utility to inform valid inferences about secondary-school students' global citizenship-related dispositions?* In this section, I have described (a) partnerships with leaders and staff at the schools that Phase 1 alumni/ae attended to recruit Year 9 and 10 students in those schools, (b) collecting and analyzing data from retained Likert-type items and a standardized measure of social desirability; (c) Phase 3 participants; and (d) my steps to transition Likert-type items into a discrete-choice measure to conclude this dissertation.

#### ***Partnerships to Recruit Year 9 and 10 Students***

At the outset of this dissertation, participating schools agreed to contact parents on my behalf to seek their permission for students in Years 9 and 10 to be offered the choice of assenting to participate in survey data collection that would take 15-30 minutes during a non-instructional portion of a designated school day. Participating schools in Sweden agreed to a passive parental permission process, but the U.S. district required an active parental permission process.<sup>27</sup> In Sweden, leaders at participating schools or their designees emailed the parent(s)/guardian(s) of Year 9 and 10 students to explain the

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<sup>27</sup> Institutional review boards at the University of Oregon and the school district in the United States both deemed the dissertation to present minimal risk.

dissertation and what a child's participation would entail.<sup>28</sup> In mandating active parental permission, the U.S. school district required the school leader to email the parent(s)/guardian(s) of Year 9 and 10 students regarding the study and what a child's participation would entail, but instructed them to fill out a Qualtrics form (see Appendix O) to permit their child to receive an assent form, which was identical for potential participants in Sweden and the United States (see Appendix P). This district decision contributed to a smaller-than-desired sample at the U.S. school, deepening challenges incurred when the district's other initially interested schools withdrew.

Parental permission at the U.S. school was minimal, so the school leader sent multiple reminder emails, the final one that included an incentive: entry into a random drawing for one of three USD \$100 electronic gift cards. To avoid any parent/guardian feeling coerced into providing permission, the drawing was available to any parent/guardian who had responded to the original Qualtrics form or who responded to a revised version that included the incentive, whether or not they permitted their child to assent (see Appendix Q).<sup>29</sup> As in Phase 2, I had set response-rate expectations  $\geq 60\%$  (Dillman et al., 2014; Saldivar, 2012). In a later section, I have demonstrated how recruitment was exemplary in Sweden but much weaker in the United States.

### ***Collecting and Analyzing Data for Item Piloting***

To pilot content-valid items from socially valid dispositional domains, examining factor structure and possible social desirability bias, I first collected data with a Qualtrics-

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<sup>28</sup> To opt a child out of the opportunity to assent, a parent/guardian would only need to email me and my doctoral adviser at our publicly recorded email addresses, per the information they received about the dissertation from their school. Non-response would imply permission. We received no such emails. For the participating school in the United States, non-response from a parent/guardian did *not* indicate permission.

<sup>29</sup> I sent names of permitting parents/guardians to the U.S. school so its leader and designees could arrange data collection as detailed in the subsequent section.

based survey instrument from Year 9 and 10 students at the same secondary schools as Phase 1 alumni/ae. Then, I examined descriptive statistics and conducted confirmatory factor analysis and correlational analyses of the data they provided.

**Collecting Data from Year 9 and 10 Students.** During non-instructional time (e.g., advisory or homeroom), a school leader or designee invited students whose parent(s)/guardian(s) implicitly (Sweden) or explicitly (United States) permitted their child to choose to assent to participate or not. Those students received a link to a Qualtrics-based survey instrument (see Appendix R), the first page of which featured an informed consent procedure that both institutional review boards had approved.

Following that procedure, the Qualtrics instrument prompted participating students to rate 89 retained, Likert-type items on a 4-point scale (1 = strongly disagree; 4 = strongly agree). For any item, participating students could indicate that they found the item confusing or poorly worded rather than rate it. Guarding against order effects, I randomized the 89 items (Dillman et al., 2014), but not the 33 True/False items from a standardized social desirability<sup>30</sup> scale (Crowne & Marlowe, 1960) to which participating students were also prompted to respond. Among those items, 18 were positively indicated (e.g., I'm always willing to admit it when I make a mistake) and 15 were negatively indicated (e.g., I like to gossip at times).

The instrument also sought responses about sex (female, male, and other); students' previous experience with global citizenship education from International

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<sup>30</sup> As I have noted in Chapter I: Introduction, accounting for social desirability bias is especially important in creating a measure of a construct for which loadings can absorb societal controversies (Krumpal, 2013), whether that construct is racism or Intercultural Sensitivity. Moreover, social desirability bias seems particularly likely to be present when measuring controversial constructs among respondents who might feel compelled to conform to authority, such as adolescents in secondary schools (Miller, 2012).



Baccalaureate besides its Diploma or Career-Related Programmes, and whether a participating student identified as part of that nation's predominant racial/ethnic group (e.g., Swedish in Sweden or Caucasian in the United States). To reduce respondent burden, I pre-slugged instruments by nation and school.

**Analyzing Factor Structure and Social Desirability Data.** First, I examined descriptive statistics and visually inspected data from the 89 retained, Likert-type items. I focused on potential instances of extreme skewness i.e., ( $1.00 > \text{skewness} < -1.00$ ) and extreme kurtosis ( $3.00 > \text{skewness} < -3.00$ ), using recommendations from Jain (2018). Extreme skewness can thwart model convergence for discrete-choice measures (Anguiano-Carrasco et al., 2015). Second, I explored the proportion of students who found each item to be confusing or poorly worded, which appeared in Qualtrics as missing data. In a measurement development study around the related construct of global identity, Türken and Rudmin (2013) excluded any item that  $\geq 1\%$  of participating undergraduates found confusing or poorly worded. I relaxed that standard to an extreme missingness threshold  $\geq 10\%$  due to working with secondary-school students, who I expected to present greater variability in English-reading comprehension, especially cross-nationally. I also examined average data missingness across items, determining that imputation would be necessary at  $\geq 5\%$  data missingness, because its missingness would not likely be random. To solve a more trivial proportion of missing data, I could rely on maximum likelihood estimation (Schlomer et al., 2010).

Third, I calculated internal consistency as Cronbach's  $\alpha$  for each set of items that operationalized a disposition. To control for the sensitivity of Cronbach's  $\alpha$  to number of items, I also used a random number generator (Haahr, 2020) to identify five items per

disposition and calculated Cronbach's  $\alpha$  for each subset of five. I also computed each disposition's inter-item correlations, following guidelines about ranges for higher-order ( $r = .15-.50$ ) and narrow constructs ( $r = .40-.50$ ; Clark & Watson, 1995).

Fourth, I attempted to fit observed data to a four-factor confirmatory factor analysis using R's lavaan package (Rosseel, 2012). Although it was clear prior to analyses that recruitment limitations would violate most frequently employed ratios for sample size to numbers of free parameters (i.e.,  $q:n$  ranging from 5:1 to 20:1),<sup>31</sup> Kenny (2015) has suggested that many published studies fail to meet these ratios and that structural equation models can feature samples  $n \sim 200$ . More complex models, such as the one I have presented in Chapter III: Findings, raise considerably more problems with small samples. I defined the scale of each disposition as a latent variable, constraining to 1 its first exogenous variable (i.e., item), per Kline (2015). I estimated using maximum likelihood and employed robust standard errors.

To assess model fit, I used a popular set of criteria (Hu & Bentler, 1999):  $\chi^2, p > .05$ ; Tucker-Lewis Index  $\geq .90$ ; and Standardized Root Mean Square Residual  $\leq .08$ . I also inspected factor covariances, seeking factors that covaried significantly without raising multicollinearity concerns (i.e.,  $.20 < r < .70$ ; Anguiano-Carrasco, personal communication; Kenny, 2016). I also examined factor loadings, recognizing the absence of a standard cutoff. Nye and Drasgow (2011) established a range of .300 to .700 for factor loadings considered acceptable in peer-reviewed articles that featured two-

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<sup>31</sup> Recruitment was lower than expected for Phase 3 for three reasons: (a) multiple U.S. schools withdrew, (b) the district for the remaining U.S. school required active parental permission; and (c) individual, family, and school experienced the COVID-19 pandemic, which overlapped with Phase 3 data collection. Had recruitment occurred as anticipated, I expected that I would have produced a large enough sample to employ item-response theory methods to assess factor structure and conduct analyses pertinent to the excluded Research Question 4.

dimensional models of psychological constructs. I selected .500 as the midpoint of that range as a cutoff for my four-factor model, rationalizing that a loading threshold  $\geq .500$  for a two-factor model would apply even more rigorously to a four-factor model.

Fifth, I examined correlations between participating students' scores on items and a standardized measure of social desirability (Crowne & Marlowe, 1960). Ranking items according to the magnitudes of such correlations would facilitate construction of discrete-choice measure blocks that can control for the influence of social desirability bias.

Discrete-choice measures have been robustness in mitigating social desirability bias by removing a key facet of typical self-report measures in which respondents can present artificial responses, whether they do so consciously or not. When discrete-choice measures feature blocks with items grouped based on the degree to which they present social desirability bias, responses become relative to domains (i.e., dispositions) within a construct of interest. Respondents then rate items in competition against other items with similar degrees of social desirability bias. Thus, discrete-choice measures can be more precise than Likert-type scales due to relative, not arbitrary, judgment.

### ***Participating Year 9 and 10 Students***

As I have shown in Table 2.3, participating students who—during the data-collection period—attended the same three secondary schools as the Phase 1 alumni/ae varied in several ways. First, participation rates varied considerably: 3.61% at the school in the United States, 89.74% at one school in Sweden, and 70.67% at the other. Active versus passive parental permission procedures seemed to differentiate the contexts' participation rates. Likewise, participating students' self-identified sex was largely consistent, about evenly split for the schools in Sweden, but disproportionately male

(70.37%) in the smaller U.S. sample. Students' previous global citizenship education experience varied considerably across schools, but their tendencies toward social desirability were generally consistent. Per-school *M* ranged 13.19 to 16.74, all within the center of this measure's normative distribution (Crowne & Marlowe, 1960).<sup>32</sup>

Table 2.3

*Despite Highly Differential Participation Rates, School Samples Demonstrated Many Similarities*

	All schools	Sweden A	Sweden B	United States
<i>n</i>	182	85	70	27
<i>Participation rate (%)</i>	20.85	70.67	89.74	3.61
<b>Sex</b>				
Female %	45.86	50.00	47.14	29.63
Male %	51.38	46.43	50.00	70.37
Other %	2.75	3.57	2.86	0.00
<b>Previous global citizenship education experience</b>				
Elementary %	30.94	27.38	40.00	18.52
Secondary %	65.19	89.29	57.14	11.11
Either %	43.09	69.05	22.86	14.81
Both %	26.37	23.81	37.14	7.41
Neither %	30.39	7.14	40.00	77.78
<b>Tendency toward social desirability bias</b>				
<i>M</i>	14.64	13.19	15.60	16.74
<i>SD</i>	5.16	4.85	4.80	5.67

### ***Transitioning Likert-Type Statements into a Discrete-Choice Measure***

Although I entered Phase 3 recognizing that I would lack a robust enough sample size to test the discrete-choice measure's efficacy within the confines of this dissertation, I followed factor analysis results by constructing such a measure for potential future use. I opted for triadic discrete-choice blocks (Brown & Maydeu-Olivares, 2011), or triplets (Anguino-Carrasco et al., 2015; 2017), which enable three-way comparisons.

<sup>32</sup> Scores from the Crowne & Marlowe (1960) scale typically distribute such that 2/3 of respondents demonstrate an average level of social conformity at 9-19. Another 1/6 of respondents each score low at 0-8—answering mostly in socially *undesirable* ways—or high at 20-33, the latter demonstrating substantial conformity and seeming to avoid disapproval, perhaps based on strong adherence to social conventions.

Respondents can select one item to indicate which disposition is most like them, select another item to indicate which disposition is least like them, and omit one item to indicate which disposition is neither most nor least like them. Simply stated, each item in a triadic discrete-choice block competes against two other items, with each item operationalizing a distinct disposition. Triads are more efficient for data collection than pairs, requiring only two choices per block from a respondent to yield three measurable binary outcomes and a full rank-order informational matrix, thus stabilizing results (Anguiano-Carrasco et al., 2015; 2017; Brown & Maydeu-Olivares, 2011; 2013).<sup>33</sup>

So, I developed a triadic discrete-choice measure of the global citizenship dispositions that were retained during Phase 1 and the items retained during Phases 2 and 3. First, I outlined all possible comparisons, ensuring each of four dispositions would be compared against other dispositions multiple times, ideally  $\geq 20$  (Anguiano-Carrasco et al., 2017).<sup>34</sup> Second, I sorted items by correlations of student scores to social desirability scores (Anguiano-Carrasco et al., 2017). Third, I created an additional control by placing first in each triadic block the item among the three that had the lowest correlation with student scores from the standardized social desirability scale. I introduced this potential order effect based on an assumption that the primacy of the first item viewed in a block might prompt endorsement—especially from adolescent respondents—enabling control for potential effects from social desirability bias both within and between triadic blocks.

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<sup>33</sup> Four-statement blocks, or quads, have been tested successfully but seem likely to create too much cognitive load for adolescent respondents (Anguiano-Carrasco et al., 2017).

<sup>34</sup> An equal number of instances per comparison is preferable, but often impractical as content validity trials almost certainly result in some number of excluded items (Brown & Maydeu-Olivares, 2011).

## CHAPTER III: FINDINGS

In this chapter, I have described findings for each of my three phases: Phase 1 (social validity), Phase 2 (content validity), and Phase 3 (factor structure).

### **Phase 1: Social Validity**

I addressed Research Question 1—*To what extent do these five global citizenship dispositions demonstrate social validity based on perspectives of alumni/ae from global citizenship secondary-school programs: Intercultural Sensitivity, Interest in Diversity, Peacefulness, Plural Geographical Allegiance, and Social Justice Orientation?*—with a social validity trial involving alumni/ae from two International Baccalaureate Diploma Programmes in Sweden and one in the United States. Their data yielded eight socially valid global citizenship dispositions, confirming the hypothesized five and generating three others from alumni/ae nomination (Appreciation of Multiple Perspectives, Preference for Global Communication, and Skepticism).

The eight socially valid global citizenship dispositions (see Table 3.1) demonstrated varying degrees of promise, so I retained the four most promising (Appreciation of Multiple Perspectives, Intercultural Sensitivity, Interest in Diversity, and Plural Geographic Allegiance) into Phase 3 due to an overall goal of creating a suitable triadic discrete-choice measure. As noted in Chapter II: Method, a triadic discrete-choice measure suitable for collecting student data in secondary schools would require assessment of 3-5 dispositions, presenting a need for nominal groups to generate both consensus and prioritization. Among eight potentially viable dispositions, only two offered strong enough numerical evidence of consensus and prioritization to necessitate retention solely on that basis. A simple cut score across dispositions and social validity

Table 3.1

*Expanding Global Citizenship Dispositions from Five to Eight, Prioritizing Four for Retention*

Initiated from	Disposition	Early iteration	Consensus definition
Scholarly literature	Intercultural Sensitivity (IS) <i>[Retained]</i>	respect for and acceptance of cultural perspectives different from one's own (i.e., promoting values that are non-discriminatory, empathetic, tolerant, and respectful of differences)	non-discriminatory, empathetic respect for cultural perspectives that differ from one's own
	Interest in Diversity (iD) <i>[Retained]</i>	desire to experience the complexities of various cultures' norms, expectations, and contexts	desire to experience the complexities of various cultures' norms, expectations, and contexts <i>[Unchanged during nominal group process]</i>
	Peacefulness (P) <i>[Excluded]</i>	inclination to approach conflict such that no party is made to be wrong	inclination to approach conflict with an emphasis on mutual negotiation
	Plural Geographic Allegiance (PGA) <i>[Retained]</i>	inclination to identify with the wider world rather than, or in addition to, a specified geographic area, which includes recognitions that one's worldview is not universal and of cultural interdependence	culturally interdependent inclination to identify with the wider world rather than, or in addition to, a specified geographic area
	Social Justice Orientation (SJO) <i>[Excluded]</i>	belief in our shared responsibility to preserve the human rights of all people and the planetary environment where we cohabitate	belief in our shared responsibility to preserve the human rights of all people and the planetary environment where we cohabitate <i>[Unchanged during nominal group process]</i>
Alumni/ae contributions	Appreciation of Multiple Perspectives (AMP) <i>[Retained]</i>	desire to explore multiple perspectives of an issue to generate a more informed opinion	desire to inform one's opinions through various opinions of others
	Preference for Global Communication (PGC) <i>[Excluded]</i>	tendency to prefer speaking a widely used language (e.g., English), whether or not one's Mother Tongue	situational inclination toward endorsing a globally used language (e.g., English) over Mother Tongue
	Skepticism (S) <i>[Excluded]</i>	appreciation of questioning source of information; recognizing biases in historical narratives	inclination to question sources of, or interrogate potential biases in, information

criteria would not have sufficiently identified the requisite 3-5 dispositions, justifying the decision for holistic examination of how the dispositions' descriptive quantitative and qualitative data converged. After briefly reviewing overall strengths for eight socially valid dispositions, I have described my rationale for retaining or excluding each for Phase 3. I have presented the eight dispositions in descending order from clearest combination of evidence for retention (Appreciation of Multiple Perspectives) to clearest combination of evidence for exclusion (Social Justice Orientation):

- Retained with Limited Ambiguity (Appreciation of Multiple Perspectives, Intercultural Sensitivity)
- Retained Despite Considerable Ambiguity (Interest in Diversity, Plural Geographic Allegiance)
- Excluded<sup>35</sup> Despite Considerable Ambiguity (Preference for Global Communication, Skepticism)
- Excluded with Limited Ambiguity (Peacefulness, Social Justice Orientation).

### ***Eight Dispositions***<sup>36</sup>

For 7-of-8 dispositions, ratings for all criteria<sup>37</sup> were solidly positive or trended so (i.e.,  $M_{rating} > 5$ ). Only Peacefulness ( $M_{ratings} > 7.50$  for both personal and professional benefits/limitations) engendered a criterion rating below the scale's midpoint:  $M_{rating}$  for

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<sup>35</sup> Chapter IV: Discussion features an exploration of future steps for revisiting the four dispositions that I excluded from Phase 3.

<sup>36</sup> Such consistently high levels of endorsement and supporting qualitative evidence that I found for each of the eight dispositions underscored the importance that this dissertation has placed on controlling, where possible, for potential effects of social desirability bias. Moreover, findings in Phase 3 further raised the potential utility for a discrete-choice measure.

<sup>37</sup> Using nine-point, bidirectional scales (see Chapter II: Method), alumni/ae rated dispositions for each of three social validity criteria: (a) personally beneficial/limiting; (b) professionally beneficial/limiting; and (c) attributability to global citizenship education.



attributability to global citizenship education = 4.73 ( $SD = 1.86$ ). Overall for 22-of-24 criteria (i.e., eight dispositions each rated on three criteria),  $M_{ratings} \geq 6.27$  (i.e., above the ambivalent band). Moreover, for most criteria (14-of-24; 58.33%),  $M_{ratings} \geq 7.00$ . Taken together, these metrics demonstrated strong consensus of social validity among 11 participants from 15 graduation years among three secondary schools across two nations. Of course, such high ratings across dispositions and criteria limited prioritization.

Similarly, qualitative data also revealed participants' nearly unanimous characterizations of all eight dispositions being connected to one another "in some way" without redundancy (Sweden3), though "some more closely to others" (Sweden6). Although, a few discrepant views questioned the suitability of two alumni/ae-generated dispositions: Preference for Global Communication (US1) and Skepticism (Sweden7). More broadly, though, participants recognized each disposition's unique contribution to the overall construct of global citizenship, but they noted some conceptual overlap. For example, participants referred to an "umbrella" under which Intercultural Sensitivity and Interest in Diversity likely resided (Sweden2), and which might also cover Appreciation of Multiple Perspectives, Plural Geographic Allegiance, Skepticism, and Peacefulness. Jointly, these findings suggest that all eight dispositions the alumni/ae put forth have some degree of social validity (i.e., utility for comprehensive measurement of global citizenship). Again, the need to prioritize 3-5 dispositions for subsequent phases of this dissertation guided the interpretations and corresponding decisions that follow.

### ***Retained with Limited Ambiguity***

Descriptive quantitative<sup>38</sup> and qualitative data converged to produce Appreciation of Multiple Perspectives and converged with minor contradiction to confirm Intercultural Sensitivity as dispositions worth retaining for subsequent phases of this dissertation. Clear consensus for each disposition rendered both easily prioritized.

**Appreciation of Multiple Perspectives (AMP).** The most promising global citizenship disposition derived from alumni/ae in this dissertation, AMP resembles perspective-taking, a notion that is present in scholarly literature on global citizenship (Reysen & Katzarska-Miller, 2018). My hypotheses based on how literature has defined global citizenship revealed perspective-taking to be too behavioral for inclusion among my five *a priori* dispositions. Accordingly, alumni/ae's original nomination of what has since become AMP referred to an exploration of multiple perspectives, indicating an action rather than a disposition. Nominal groups' iterations found a consensus definition for AMP, shifting to an appreciation of informing one's opinions, now more of an orientation, inclination, or view than an observable behavior.

Numerically, AMP produced a consensus of solidly positive ratings for all three social validity criteria under examination in this dissertation (see Table 3.2). AMP was the only disposition in this dissertation to engender unanimously high ratings for either personally or professionally benefits/limitations, let alone both criteria. AMP was 1-of-2 dispositions in this dissertation to receive unanimously high ratings from alumni/ae regarding attributability to global citizenship education. The other, Skepticism, produced

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<sup>38</sup> Given the sensitivity of *M* and *SD* to outliers in a sample of this size, I have presented distributions in Appendix S. As warranted, I have explored distributional effects in this section. Percentages of ratings and rating bands in Tables 3.2, 3.3, and 3.4 also have provided some insight into distributional effects of the numerical data that alumni/ae contributed.

Table 3.2

*Definitions, Conceptual Overlaps, and Alumni/ae Ratings (n = 11) for Global Citizenship Dispositions*

Disposition	Definition	CO	Crit.	<i>M</i>	<i>SD</i>	1-3 %	4-6 %	7-9%
AMP: Appreciation of multiple perspectives	desire to inform one's opinions through various opinions of others	IiD, S, P	Pers.	8.18	0.83	0.00	0.00	100.00
			Prof.	8.45	0.78	0.00	0.00	100.00
			GCE	7.82	0.83	0.00	0.00	100.00
IS: Intercultural sensitivity	non-discriminatory, empathetic respect for cultural perspectives that differ from one's own	IiD, PGA, PGC	Pers.	8.18	1.11	0.00	9.09	90.90
			Prof.	8.09	1.24	0.00	9.09	90.90
			GCE	7.27	0.86	0.00	18.18	81.82
IiD: Interest in diversity	desire to experience the complexities of various cultures' norms, expectations, and contexts	AMP, IS, PGC	Pers.	7.73	1.14	0.00	18.18	81.82
			Prof.	7.27	1.66	0.00	27.27	72.73
			GCE	6.27	1.21	0.00	54.55	45.45
PGA: Plural geographic allegiance	culturally interdependent inclination to identify with the wider world rather than, or in addition to, a specified geographic area	IS	Pers.	6.27	1.29	0.00	63.64	36.36
			Prof.	6.55	1.62	0.00	45.45	54.55
			GCE	6.45	1.62	0.00	54.55	45.45
PGC: Preference for global communication	situational inclination toward endorsing a globally used language (e.g., English) over Mother Tongue	IS, IiD	Pers.	6.45	1.44	0.00	45.55	54.55
			Prof.	7.00	1.54	0.00	27.27	72.73
			GCE	6.73	2.00	0.00	54.55	45.55
S: Skepticism	inclination to question sources of, or interrogate potential biases in, information	AMP	Pers.	6.91	1.68	0.00	36.36	63.64
			Prof.	7.45	2.19	9.09	18.18	72.73
			GCE	8.09	0.79	0.00	0.00	100.00
P: Peacefulness	inclination to approach conflict with an emphasis on mutual negotiation	AMP	Pers.	7.55	1.44	0.00	36.36	63.64
			Prof.	7.64	1.55	0.00	27.27	72.73
			GCE	4.73	1.86	18.18	72.73	9.09
SJO: Social justice orientation	belief in shared responsibility to preserve the human rights of all people and the planetary environment where we cohabitate	<i>Not specified</i>	Pers.	7.00	1.41	0.00	45.55	54.55
			Prof.	5.82	1.64	0.00	63.64	36.36
			GCE	6.73	1.54	9.09	36.36	54.55

*Note.* CO = Conceptual overlap; Crit = criterion; % = percentage of ratings; 1-3%, 4-6%, and 7-9: = percentages of ratings (i.e., solidly negative, ambivalent, and solidly positive endorsements, respectively); Pers. = personally beneficial/limiting; Prof. = professionally beneficial/limiting; GCE = attributable to global citizenship education

inconsistent ratings regarding personal and professional benefits/limitations. The combination of consistently high *M* and relatively low *SD* further identified AMP as a disposition that could be retained with confidence. Additionally, only negligible differences distinguished AMP ratings of alumni/ae who attended secondary schools in Sweden and those from the U.S. school's alumni/ae.

Furthermore, when rationalizing ratings with optional comments (see Appendix T), alumni/ae detailed AMP's personal benefits such as enhancing cooperation (US2), its professional benefits for decision-making (US2) and driving innovation (US4), and its clear connection to their global citizenship education experiences, specifying Theory of Knowledge, or ToK, International Baccalaureate's signature Diploma Programme course, which focuses on epistemology (Sweden1; Sweden2).

**Intercultural Sensitivity (IS).** Although IS was the most promising global citizenship disposition among those derived from scholarly literature, it stimulated considerable revision from the definition I proposed initially. Starting as “respect for and acceptance of cultural perspectives different from one’s own (i.e., promoting values that are non-discriminatory, empathetic, tolerant, and respectful of differences),” alumni/ae consensus translated IS’s definition into: “non-discriminatory, empathetic respect for cultural perspectives that differ from one’s own.” Then, IS generated consensus for solidly positive ratings and mostly strong qualitative support for prioritization. Numerically, IS joined Appreciation of Multiple Perspectives as the only dispositions without any ratings that even trended negatively (i.e.,  $< 5$ ) for any of the three criteria (see Table 3.3). Across criteria,  $> 80\%$  of participants rated IS in the highest band (i.e.,  $\geq 7$ ), a consensus that only Appreciation of Multiple Perspectives matched.

Table 3.3

*Distributions of Alumni/ae Ratings (n = 11) for Each of Three Criteria with Eight Dispositions*

Disposition	% of ratings trending positively ( $\geq 6$ )	% of ambivalent rating (5)	% of ratings trending negatively ( $\leq 4$ )
Appreciation of Multiple Perspectives	100.00	0.00	0.00
Intercultural Sensitivity	93.94	6.06	0.00
Interest in Diversity	84.85	9.09	6.06
Plural Geographic Allegiance	63.64	30.30	6.06
Preference for Global Communication	63.64	27.27	9.09
Skepticism	84.85	12.12	6.06
Peacefulness	69.70	18.18	12.12
Social Justice Orientation	72.73	15.15	12.12

Negligible cross-national differences separated IS sample *M* for personal and professional benefits/limitations. A slightly larger *M* difference (0.92) regarding attributability to global citizenship education (see Table 3.4) seemed to be an ignorable discrepancy. Although alumni/ae rated IS nearly as consistently high as they did Appreciation of Multiple Perspectives, rationales for IS ratings revealed minor contradictions about its professional benefits/limitations and attributability to global citizenship education. One alumna called IS “critical to any role working with other humans” (US4). But the concept went unnoticed in the professional life of another (US2). An IS emphasis in secondary school “definitely shaped” the world view of one alumna (Sweden2). Global citizenship education joined many contributing factors toward IS for another alumna, such as being “born into a multicultural family and [... moving] from a less tolerant culturally homogenic country to a more multicultural one” (Sweden4). Despite some contradictory statements, the totality of descriptive quantitative and qualitative evidence made a strong case to prioritize IS for retention.

Table 3.4

*Comparing Disposition Ratings of Alumni/ae from Sweden (n = 7) and the United States (US; n = 4)*

Dispositions	Indicator	Personal		Professional		GCE	
		Sweden	US	Sweden	US	Sweden	US
Appreciation of Multiple Perspectives (AMP)	<i>M</i>	8.43	7.75	8.57	8.25	7.71	8.00
	<i>SD</i>	0.90	0.43	0.73	0.83	0.88	0.71
	7-9%	100.00	100.00	100.00	100.00	100.00	100.00
	4-6%	0.00	0.00	0.00	0.00	0.00	0.00
	1-3%	0.00	0.00	0.00	0.00	0.00	0.00
Intercultural Sensitivity (IS)	<i>M</i>	8.29	8.00	8.14	8.00	7.57	6.75
	<i>SD</i>	0.45	1.73	0.83	1.73	0.73	0.83
	7-9%	100.00	75.00	100.00	75.00	100.00	50.00
	4-6%	0.00	25.00	0.00	25.00	0.00	50.00
	1-3%	0.00	0.00	0.00	0.00	0.00	0.00
Interest in Diversity (IiD)	<i>M</i>	7.57	8.00	7.43	7.00	6.57	5.75
	<i>SD</i>	1.05	1.22	1.50	1.87	1.18	1.09
	7-9%	85.71	75.00	71.43	75.00	57.14	25.00
	4-6%	14.29	25.00	28.57	25.00	42.86	75.00
	1-3%	0.00	0.00	0.00	0.00	0.00	0.00
Plural Geographic Allegiance (PGA)	<i>M</i>	6.43	6.00	6.71	6.25	6.86	5.75
	<i>SD</i>	1.29	1.22	1.75	1.30	1.81	0.83
	7-9%	42.86	25.00	57.14	50.00	57.14	25.00
	4-6%	57.14	75.00	42.86	50.00	42.86	75.00
	1-3%	0.00	0.00	0.00	0.00	0.00	0.00
Preference for Global Communication (PGC)	<i>M</i>	6.86	5.75	7.86	5.50	7.43	5.50
	<i>SD</i>	1.36	1.30	0.64	1.50	1.92	1.50
	7-9%	71.43	25.00	100.00	25.00	57.14	25.00
	4-6%	28.57	75.00	0.00	75.00	42.86	75.00
	1-3%	0.00	0.00	0.00	0.00	0.00	0.00
Skepticism (S)	<i>M</i>	7.71	5.50	7.57	7.25	8.14	8.00
	<i>SD</i>	1.39	1.12	2.38	1.79	0.83	0.71
	7-9%	85.71	25.00	85.71	50.00	100.00	100.00
	4-6%	14.29	75.00	0.00	50.00	0.00	0.00
	1-3%	0.00	0.00	14.29	0.00	0.00	0.00
Peacefulness (P)	<i>M</i>	7.86	7.00	7.57	7.75	4.29	5.50
	<i>SD</i>	1.25	1.58	1.50	1.64	1.83	1.66
	7-9%	71.43	50.00	71.43	75.00	0.00	25.00
	4-6%	28.57	50.00	28.57	25.00	71.43	75.00
	1-3%	0.00	0.00	0.00	0.00	28.57	0.00
Social Justice Orientation (SJO)	<i>M</i>	6.86	7.25	5.86	5.75	7.29	5.75
	<i>SD</i>	1.64	0.83	1.73	1.48	1.16	1.64
	7-9%	42.86	75.00	42.86	25.00	57.14	50.00
	4-6%	57.14	25.00	57.14	75.00	42.86	25.00
	1-3%	0.00	0.00	0.00	0.00	0.00	25.00

*Note.* Personal = personally beneficial/limiting; Professional = professionally beneficial/limiting; GCE = attributable to global citizenship; 1-3%, 4-6%, and 7-9% = percentages of ratings (i.e., negative, ambivalent, and positive endorsements, respectively)

### ***Retained Despite Considerable Ambiguity***

Without demonstrating enough convergence to minimize ambiguity, descriptive quantitative and qualitative data were sufficiently complementary for both Interest in Diversity and Plural Geographic Allegiance, enabling interpretations for their retention.

**Interest in Diversity (IiD).** Among the five dispositional definitions that I derived from scholarly literature, IiD is 1-of-2 (Social Justice Orientation was the other) that alumni/ae adopted without any changes. Unlike Social Justice Orientation, however, the combination of data types confirmed that IiD should be retained. Alumni/ae found consensus by rating IiD's personal benefits/limitations solidly positive (81.82% in the highest band;  $M = 7.73$ ;  $SD = 1.14$ ) and neared consensus for solidly positive ratings of professional benefits/limitations (72.73%;  $M = 7.27$ ;  $SD = 1.66$ ). One alumna who rated IiD highly for its professional benefits/limitations emphasized the disposition's importance for undergirding her "understanding [of] cultural differences in business negotiations/contracts and communication" (Sweden3).

Still, a mix of complementary and contradictory evidence accompanied IiD's attributability to global citizenship education (54.55% ambivalently rated at 4-6;  $M = 6.27$ ;  $SD = 1.21$ ). Alumni/ae comments during nominal groups and in rationales that accompanied their ratings suggested that some students seek out global citizenship education based on a *predisposition* to IiD, potentially limiting its attributability (Sweden 1; US2; US3; US4). Other alumni/ae modified that assertion. For example, one alumna (US1) described herself as having "had interest in diversity entering the programme [before International Baccalaureate] expanded my knowledge on other cultures and world events and therefore continued to foster my interest in diversity (on top of the

interest I already had).” Another alumna credited global citizenship education for having “exposed me to contexts I would not have experienced otherwise” (Sweden 2). Moreover, ratings were mostly consistent between alumni/ae from schools in Sweden and the United States: no criterion’s  $M$  difference  $> 0.82$ , adding confidence to retain IiD.

**Plural Geographic Allegiance (PGA).** Despite being the most salient disposition in the scholarly literature upon which this dissertation has been designed, PGA prompted the most conceptual debate among alumni/ae. Group discussions simplified its initial definition (“inclination to identify with the wider world rather than, or in addition to, a specified geographic area, which includes recognitions that one’s worldview is not universal and of cultural interdependence”) into “culturally interdependent inclination to identify with the wider world rather than, or in addition to, a specified geographic area.” Although ratings across criteria were generally positive with no criterion  $M_{rating} < 6.27$ , PGA engendered considerable ambivalent ratings (i.e., 5 was its modal response across criteria), demonstrating the central tendency of ratings for this disposition. Negligible  $M$  differences for personal and professional benefit/limitation ratings among alumni/ae from secondary schools in Sweden and their U.S. peers showed a cross-national stability, further supporting PGA’s potential retention.

Qualitative data seemed to explain a slightly larger cross-national  $M$  difference for attributability to global citizenship education (1.11) in a complementary way, as several alumni/ae spoke to PGA’s potential for invoking ambivalence. One alumna noted that the concept of allegiance initially seemed “confusing,” but she found great personal value to “get outside our bubble” despite “unnerving and daunting” professional feelings during attempts “to acknowledge all of the world’s problems” (Sweden2). For other



alumni/ae, PGA seemed to offer “niche” professional benefits (Sweden7) that might be useful for diplomats, teachers, or civil servants, but not in most other careers (Sweden4; US1; US3). Another alumna (Sweden3) felt PGA would be most useful for United Nations employees<sup>39</sup> but she also noted how PGA prompted her to study, work in a field other than diplomacy, and live overseas, enabling her to “make multiple cities my home.”

As with Interest in Diversity, several alumni suggested that PGA might draw students to global citizenship education rather than instill the disposition in them (Sweden3; US1; US2), or perhaps that the disposition stemmed more from university, career, or other experiences in adulthood than during secondary school (Sweden2). But one alumna distilled the complexities of PGA, characterizing its “double effect” that made “life incredibly interesting but at the same time it also created some difficulties.” She suggested that her PGA created conditions that introduced her to new friends, but separated her from previous ones, and both expanding and curtailing professional horizons (Sweden4). Ultimately, I deferred to PGA’s unique status among global citizenship scholars, some of whom would further arbitrate its retention during the Phase 2 content validity trial. Exercising the utmost caution given generally positive findings from alumni/ae, I retained PGA rather than exclude a potentially useful disposition.

### ***Excluded Despite Considerable Ambiguity***

Preference for Global Communication and Skepticism—both alumni/ae-produced dispositions—demonstrated some encouraging evidence for possible retention in a comprehensive measure of the construct of interest, but enough contradictory evidence to warrant their exclusion.

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<sup>39</sup> The thread of global citizenship being a concept more suited for diplomats than other professions runs through the global citizenship literature (see Reysen & Katzarska-Miller, 2018).

**Preference for Global Communication (PGC).** An examination solely of PGC's *M* on rating scales for each criterion (*range* = 6.45—7.00) might have led to this disposition's retention. But PGC also produced a relatively high proportion of ambivalent ratings (27.27%), with 5 as its modal response across criteria. Moreover, several alumni/ae, especially those who attended secondary school in the United States, raised objections about whether PGC might, to some degree, oppose global citizenship.

Initial PGC conversations among alumni/ae from Sweden positioned English as the language medium that would most likely be preferred, seemingly a vestige of British and U.S. imperial/colonial activities worldwide, though not experienced as directly or thoroughly in Sweden. Fittingly, alumni/ae ratings depicted PGC as professionally beneficial: 72.73% of alumni/ae rated it solidly positively (i.e.,  $\geq 7$ ). But such high ratings were less frequent for PGC's personal benefits/limitations (54.55% solidly positive at 7-9 and 45.55% ambivalent at 4-6) and attributability to global citizenship education (45.55% solidly positive and 54.55% ambivalent, respectively). Furthermore, PGC engendered some of the widest cross-national *M* differences across criteria. Respondents from Sweden rated PGC 1.11 higher for personal benefits/limitations, 2.36 higher for professional benefits/limitations (the largest cross-national *M* difference for any criterion), and 1.97 higher for attributability to global citizenship education.<sup>40</sup>

Qualitatively, some alumni/ae from schools in Sweden described the professional utility of connecting with partners or presenting to audiences in a common language such as English. Alumni/ae from each nation recognized both professional benefits of, and

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<sup>40</sup> Such discrepancies would have been even larger had the ratings of one alumna, who attended school in Sweden but claims English as her "native language," not driven down PGC's means for all criteria, likely an artefact of a small sample when using the nominal group technique.

their global citizenship education's encouragement for, learning additional languages in general, but some argued for less "global" ones than English (US2). One alumna specified the challenge of Swedish-English bilingualism in contexts where not everyone has capacity in both languages (Sweden6). Forcefully though, respondents from the United States rejected PGC for representing a "Western-centric, privileged perspective, potentially even an erasure of cultural nuance" (US2). Another characterized PGC as:

contradictory to the dispositions of Intercultural Sensitivity and Interest in Diversity. The act of selecting a "universal" or "default" language is filled with cultural bias and typically fails to take into account the colonial narrative of how certain languages have become more dominant than others. I understand that it's natural for people to adopt second languages that are more widely used for the purposes of communication, but to claim that communicating in the more dominant language is a "preference" is to discount the numerous social and cultural pressures people may face if their Mother Tongue is not a dominant/widely used language." (US1)

The strength of these statements ultimately overrode any of the descriptive quantitative findings that might have favored the possible retention of PGC.

**Skepticism.** Initially nominated as "appreciation of questioning source of information," the disposition that eventually became Skepticism demonstrated high ratings across criteria.  $M_{ratings} \geq 6.91$ , positioning Skepticism alongside most of the retained dispositions (Appreciation of Multiple Perspectives, Intercultural Sensitivity, Interest in Diversity) with 85% or more of their ratings at least

trending positively (i.e.,  $> 5$ ). Regarding attributability to global citizenship, alumni/ae rated Skepticism ( $M = 8.09$ ;  $SD = 0.79$ ) above all other dispositions. Ratings for personal ( $M = 6.91$ ;  $SD = 1.68$ ) and professional benefits/limitations ( $M = 7.45$ ;  $SD = 2.19$ ), however, produced higher than desirable  $SD$ s. Alongside statistical concerns, Skepticism, as defined by alumni/ae, overlapped conceptually with critical thinking, a notion prior International Baccalaureate research has positioned as a skill rather than a disposition (e.g., Wade et al., 2015). Furthermore, personal benefits/limitations ratings of alumni/ae from secondary schools in Sweden and their U.S. peers varied widely ( $M_{difference} = 2.21$ ).

Overall, descriptive quantitative data revealed a lack of consensus for this disposition, even with some indications that could spur an argument for its prioritization. Qualitative data seemed to echo that conclusion. Alumni/ae from Sweden wrestled with whether Skepticism was indeed a disposition of global citizenship (Sweden3; Sweden7) or “just something from class” (Sweden6). One alumna connected Skepticism to Theory of Knowledge (Sweden1), a course rooted in critical thinking (Wright & Lee, 2014).<sup>41</sup> Moreover, some alumni/ae questioned if Skepticism was a disposition, skill, or behavior (Sweden2; Sweden3; Sweden4; Sweden6; Sweden7).

Alumni/ae also reported mixed personal benefits for Skepticism, saying that it helped retain their own values (Sweden2), but that it was harder to maintain friendships with non-skeptics (US4). One alumna characterized Skepticism as

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<sup>41</sup> Other pedagogies or andragogies emphasize skepticism and/or critical thinking, furthering the notion that this disposition, if it is indeed a disposition, might not be unique to global citizenship education. For example, educators of scientific (Hyytinen et al., 2019) and journalistic methods (Bowe et al., 2020) both target critical thinking as a core learning outcome.

beneficial if “compassion and diplomacy” accompany it (Sweden 4). Other alumnae saw some value in Skepticism, but that it might make her mistrust other people (Sweden1; US2). Professionally, alumni/ae reported benefits such as replacing “lazy” decision-making (US1) with deeper understanding of contexts and data (Sweden2). For one alumna, Skepticism “created complex situations which were not exactly beneficial ... but it has also directed me into knowing exactly what I stand for and what I want to do regarding my professional life” (Sweden4). All told, evidence to exclude Skepticism outstripped evidence to retain it. Specifically, doubts regarding whether it falls squarely under the auspices of global citizenship education rather than other models—as well as its status as a disposition, skill, or behavior—seemingly disqualified it from further consideration in this dissertation.

### ***Excluded with Limited Ambiguity***

Descriptive quantitative and qualitative evidence converged to facilitate the exclusion of both Peacefulness and Social Justice Orientation.

**Peacefulness.** As the only disposition under evaluation in this dissertation that International Baccalaureate explicitly features in its mission, Peacefulness seemed preordained for high ratings regarding attributability to global citizenship education in a sample of International Baccalaureate alumni/ae. Instead, Peacefulness ratings for that criterion were the lowest of any in this dissertation ( $M = 4.73$ ;  $SD = 1.86$ ). By contrast, Peacefulness engendered much higher ratings for personal ( $M = 7.55$ ;  $SD = 1.44$ ) and professional benefits/limitations ( $M = 7.64$ ;  $SD = 1.55$ ). Despite Peacefulness’s low overall ratings for attributability to global citizenship education, alumni/ae from

secondary schools in Sweden rated it even lower ( $M = 4.29$ ;  $SD = 1.83$ ) than their U.S. peers did ( $M = 5.50$ ;  $SD = 1.66$ ).

Possibly, the iterative process of seeking a consensus definition, which concluded with softening the idea of “no party [being] made to be wrong” for “an emphasis on mutual negotiation” might have yielded a disposition that alumni/ae associated with “indecisiveness” or an “unwillingness to make waves” (US2). Accordingly, perspectives on Peacefulness varied widely, with alumni/ae characterizing it alternately as a *predisposition* for global citizenship education students (Sweden1) and a disposition developed among adults (Sweden2). As final evidence for the lack of consensus that led to the exclusion of Peacefulness, one alumna described the challenge of endorsing this disposition if she were external to a conflict. She differentiated a world peace-style scenario from a grudge with a neighbor, implying the local-to-global tension that is prominent in global citizenship literature (e.g., Günel & Pehlivan, 2016). This positional problem raised the worrisome possibility that some respondents might not be able to endorse Peacefulness authentically if a measure were to incorporate it.

**Social Justice Orientation (SJO).** The widest gap between  $M_{ratings}$  for personal ( $M = 7.00$ ;  $SD = 1.41$ ) and professional benefits/limitations ( $M = 5.82$ ;  $SD = 1.64$ ) among dispositions in this dissertation came from alumni/ae ratings of SJO. The other seven dispositions’  $M$  differences between those two criteria  $\leq .61$ , barely half the comparable SJO discrepancy. Regarding attributability to global citizenship education, for which SJO demonstrated solidly positive ratings overall ( $M = 6.73$ ;  $SD = 1.54$ ), cross-national differences were also stark.  $M$  differences favored alumni/ae from schools in Sweden by 1.54 over their U.S. peers. By contrast, cross-national differences were minimal for

personal and professional benefits/limitations. Still, SJO followed Peacefulness as the only dispositions in this dissertation with double-digit percentages of trending or solidly negative ratings across criteria (12.12%).

SJO's qualitative data told a similarly complicated story. Alumni/ae typically endorsed SJO for its ability to screen into one's personal life both people with like-minds and with varying opinions, so long as they all strived for empathy (Sweden4; US2). Professionally, alumni/ae perspectives ranged from employing SJO goals (i.e., commitments to human rights, environmental conservation, or other ethical issues) as criteria for guiding job-searches (Sweden2; Sweden3; Sweden4) to wondering if co-workers or clients might reject one's manifestation of SJO in the workplace (US1; US2). Alumni/ae also varied in their comments about global citizenship education's role in engendering SJO. Global citizenship education might initiate an SJO developmental process that extends into the university years (Sweden4), merely encouraging SJO during the secondary school years, but leaning more on other life experiences (US2). Or SJO might conjure a "vivid memory" of secondary school even a decade later (Sweden 2). In total, SJO, despite some promising metrics, seemed ill-suited for retention into Phase 2.

## **Phase 2: Content Validity**

To operationalize the four dispositions retained from Phase 1 (Appreciation of Multiple Perspectives, Intercultural Sensitivity, Interest in Diversity, and Plural Geographic Allegiance), I drafted 120 items that formed the basis for addressing Research Question 2: *To what extent does the operationalization of global citizenship demonstrate content validity based on scholars' expert ratings of its ability to tap into culturally universal dispositions?* Combining what I could learn from (a) a cut score of  $\geq$

13 scholars agreeing or strongly agreeing for an item’s content validity across criteria (i.e., a rating of  $\geq 3$ ) and (b) their commentary and suggestions for item improvement, I retained 89 items, or 74.17% of the number I had drafted.<sup>42</sup>

To summarize findings from this phase, I have compared scholars’ ratings for each of the four dispositions’ 30 items based on the three content validity criteria. In Table 3.5, I have reported each dimension’s percentage of items that met the content validity standard (i.e.,  $\geq 13$  raters endorsing the item for that criterion; *Content-valid item* %). I further contextualized that statistic by presenting the *M* number of raters who endorsed items as content valid for that criterion (*M*<sub>endorsement</sub>). In total, ratings for all

Table 3.5

*Scholars (n = 18) Rated Items More Strongly for Relevance and Dispositions than Universality*

Criterion	Statistic	AMP	IS	IiD	PGA	Overall	Leading disposition
Global citizenship-relevant	<i>Content-valid item</i> %	73.33	83.33	76.67	80.00	78.33 (0.04)	IS
	<i>M</i> <sub>endorsement</sub> ( <i>SD</i> )	13.67 (2.18)	14.70 (2.56)	13.20 (2.66)	14.13 (2.23)	13.93 (0.56)	
Disposition v. knowledge, skills, & behaviors	<i>Content-valid item</i> %	50.00	76.67	86.67	86.67	75.00 (0.15)	PGA; IiD
	<i>M</i> <sub>endorsement</sub> ( <i>SD</i> )	12.47 (1.52)	13.37 (1.62)	13.80 (2.66)	14.30 (1.35)	13.48 (0.67)	
Cultural universality	<i>Content-valid item</i> %	50.00	83.33	60.00	53.33	61.67 (0.13)	IS
	<i>M</i> <sub>endorsement</sub> ( <i>SD</i> )	12.73 (1.84)	13.40 (1.23)	12.40 (1.65)	12.30 (1.64)	12.71 (0.43)	

*Note.* AMP = Appreciation of Multiple Perspectives; IS = Intercultural Sensitivity; IiD = Interest in Diversity; PGA = Plural Geographic Allegiance; *Content-valid item* % = a dimension’s percentage of items that  $\geq 13$  raters endorsed as content valid for a given criterion; *M*<sub>endorsement</sub> = mean number of raters who endorsed that disposition’s items as content valid for that criterion.

<sup>42</sup> Based on a 4-point, Likert-type scale, an international panel of global citizenship scholars rated the extent of their agreement that each item was (a) relevant to global citizenship; (b) a disposition rather than knowledge, a skill, or a behavior; and (c) culturally universality, rather than culturally relative. For any item that a scholar did not rate at the highest level (i.e., 4 = strongly agree) for all three criteria, that scholar could provide open-ended commentary (e.g., suggestions for improving an item).



items' content validity regarding relevance and being dispositional were high (i.e.,  $\geq 75.00\%$ ). Ratings for items' content validity regarding cultural universality were comparatively lower (61.67%).

Comparing dispositions per criterion, Intercultural Sensitivity items were rated as content valid most frequently for relevance and cultural universality (both 83.33% of items). In terms of being dispositional, Intercultural Sensitivity items generated fewer, but a comparable number of, content valid ratings (76.67%) in relation to corresponding ratings for Plural Geographic Allegiance and Interest in Diversity items (each 86.67%). For each of the three criteria, Appreciation of Multiple Perspectives items were rated as content valid least frequently, seeming to contrast scholars' endorsement of this disposition with the high levels of endorsement that alumni/ae provided in Phase 1.

As I have shown in Table 3.6, ratings for 57-of-120 items (47.50%) demonstrated statistical content validity for all three criteria, and the majority demonstrated statistical content validity for at least two criteria (74.17%). Although these proportions generally held across dispositions, Appreciation of Multiple Perspectives much more frequently failed to demonstrate statistical content validity for two or more criteria (46.67% of its items). Correspondingly, I retained the fewest Appreciation of Multiple Perspectives items into Phase 3 at 53.33% and appreciably more for Plural Geographic Allegiance (90.00%), Intercultural Sensitivity (80.00%), and Interest in Diversity (73.33%).

Highlighting the potential difficulty of operationalizing a definitionally fraught term such as global citizenship into items that an international panel of scholars might all endorse, only 4-of-120 items (3.33%) generated unanimous endorsement for any given criterion. All four items that generated such unanimity did so exclusively for relevance to

Table 3.6

*Scholars (n =18) Rated Items as Content Valid in All or Most Criteria for All Dispositions; AMP Lags*

Content validity	AMP	IS	IiD	PGA	Total
All three criteria	6	20	17	14	57
2-of-3 criteria	10	6	6	10	32
1-of-3 criteria	8	1	4	4	17
No criteria	6	3	3	2	14
Items retained for Phase 3	16	24	22	27	89

*Note.* AMP = Appreciation of Multiple Perspectives; IS = Intercultural Sensitivity; IiD = Interest in Diversity; PGA = Plural Geographic Allegiance

global citizenship (see Table 3.7). But even though these four items exceeded the statistical content validity threshold for all three criteria, scholarly feedback prompted at least some alteration for each item, a very useful contradiction in the data. For example, scholars' suggestions—within and across items—prompted me to (a) specify terms such as “various” with “from home and around the world”; (b) de-emphasize the item pool's overreliance on culture as an important, but not comprehensive, component of global citizenship; (c) minimize the behavioral aspect of terms such as “evaluating”, and (d) de-problematize the notion of “a global issue.” As one instance, the initial draft of AMP.16 demonstrated statistical content validity for each criterion, but revisions still enhanced the item. Relatedly, I collapsed items that were operationalized to tap the same disposition (e.g., IS.4 and IS.19) if doing so mitigated redundancy across items. Moreover, some items required only minimal alteration, such as broadening the singular notion of “the global human community” into “a global community” (PGA.22).

Further signifying the challenge of reaching consensus around an operationalization of global citizenship, 31 items yielded at least 16-of-18 scholars to endorse content validity for relevance (25.83%). By contrast, that degree of consensus

occurred for 12 items regarding being dispositional (10.00%) and only twice regarding culturally universality (1.67%).

Table 3.7

*All Four Items Achieving Unanimous Scores for Content Validity (Relevance) Needed Some Revision*

Original item	Dispositional	Culturally universal	Revised item ( <i>changes</i> )
AMP.16: I consider various cultural perspectives when evaluating global problems.	14	14	I consider <u>perspectives from home and around the world before making up my mind about a global issue</u> .
IS.4: I am concerned for the human rights of all people.	14	14	I <u>believe that</u> all humans <u>should have the same</u> rights <u>regardless of where in the world they live</u> .
IS.19: I respect human rights of people all over the world.	14	15	
PGA.22: I identify myself as part of the global human community.	14	14	I identify myself as part of <u>a</u> global community.

*Note.* AMP = Appreciation of Multiple Perspectives; IS = Intercultural Sensitivity; PGA = Plural Geographic Allegiance

And as I have shown in Table 3.8, I retained 10 items (8.33%) into the Phase 3 factor structure trial without any changes, seven such items that operationalized Interest in Diversity and no such items that operationalized Plural Geographic Allegiance.

For 19 items (15.83%), insufficient content validity ratings for at least one criterion led to exclusion, most of which had too many diction-related or syntactical challenges to salvage. Among those 19, eight operationalized Appreciation of Multiple Perspectives, five for Interest in Diversity, and three each for Intercultural Sensitivity or Plural Geographic Allegiance. For a few of those 19 items, I could not reconcile conflicting, yet equally useful, feedback from different scholars. In general, however, scholarly feedback seemed to improve items. For example, Scholar10 focused my attention on tendencies to stress an item’s dispositional nature. Thus, AMP.3 morphed from “Exchanging ideas with

people from various cultures shapes my ideas” to “I tend to value shaping my ideas through exchanges with people from various cultures.”

Table 3.8

*Items Retained into Phase 3 (Factor Structure Trial) Without Change*

Item	Relevant	Dispositional	Culturally universal
AMP.25: Ideas from people who are culturally different from me stimulate my own thinking.	17	14	14
IS.11: I feel comfortable with people from various cultural groups.	15	14	13
IS.14: I find commonalities between myself and people from various cultural backgrounds.	15	14	14
IiD.2: Cultural differences stimulate my curiosity.	15	14	14
IiD.3: Cultural diversity interests me.	16	16	14
IiD.4: I am curious about events that occur beyond the place where I live.	15	15	13
IiD.11: I enjoy encountering people from different cultures.	17	16	15
IiD.18: I welcome experiences that expose me to customs and traditions of various cultures.	15	15	13
IiD.23: International events interest me.	15	16	13
IiD.30: People whose customs differ from those of my culture are interesting to me.	15	15	14

*Note.* AMP = Appreciation of Multiple Perspectives; IS = Intercultural Sensitivity; IiD = Interest in Diversity

Moreover, Scholar17 highlighted a problematic equivalency in 20 Plural Geographic Allegiance items, which prompted respondents to indicate if their local affinities were “at least” as strong as a corresponding global affinity. I had designed the “at least” construction initially to capture the local-to-global tension that pervades scholarly literature on that disposition (e.g., Walker et al., 2015). As an instance of complementarity, qualitative feedback in this phase helped improve some already highly rated items that demonstrated content validity across all three criteria. For example, scholars sufficiently endorsed the initial iteration of PGA.1 for relevance (17), being

dispositional (15), and for cultural universality (14), respectively. Still, prompting scholars who rated an item  $\leq 3$  for one or more criteria to provide open-ended comments helped transform “Being a global citizen is at least as important in my daily life as being a citizen of the local community where I live” into “I tend to value both being a citizen of the world and the local community where I live.” Ultimately, I moved into Phase 3 with a testable number of content-valid items, though an unequal number of items, for each of the four socially valid dispositions.

### **Phase 3: Factor Structure**

Based on data from Year 9 and 10 student responses to 89 items that I retained from Phase 2 and 33 items from a standardized social desirability scale (Crowne & Marlowe, 1960), I addressed Research Question 3: *To what extent is the factor structure identified based on this data set consistent with the proposed theoretical model, and can results provide utility to inform valid inferences about secondary-school students’ global citizenship-related dispositions?* In this section, I have reported descriptive statistics for the 16 items that operationalized Appreciation of Multiple Perspectives, 24 items that operationalized Intercultural Sensitivity, 22 items that operationalized Interest in Diversity, and 27 items that operationalized Plural Geographic Allegiance.

Second, I explored the extent to which these items allowed the dispositions to demonstrate internal consistency. Third, model fit indicators failed to meet Hu and Bentler’s (1999) standards but still seemed to represent an adequate factor structure within a measurement model that was highly underpowered given the number of parameters it needed to estimate. Therefore, I also reviewed factor covariance among dispositions and factor loadings to demonstrate that the theoretical model proposed in this

phase can offer some utility for measuring global citizenship dispositions among students in secondary schools. Fourth, I demonstrated strong evidence of potential social desirability bias pervading items that operationalized global citizenship dispositions. With that collection of findings as a guide, I developed a discrete-choice measure for the four socially valid dispositions. Importantly though, the current study lacked a large enough sample to test the discrete-choice measure further.

### ***Consistent Descriptive Statistics***

Descriptive statistics for content-valid items that operationalized each of the four dispositions were consistent (see Table 3.9). For example,  $M_{Ratings}$  per disposition were within 0.18 of one another on a 4-point scale with relatively small and consistent  $SDs$ .

Table 3.9

*Descriptive Statistics from Students' (n = 182) Item Ratings Are Consistent Across Dispositions*

<i>Descriptive statistic</i>	<i>AMP (n = 16)</i>	<i>IS (n = 24)</i>	<i>IiD (n = 22)</i>	<i>PGA (n = 27)</i>
$M_{Ratings}$ ( $SD$ )	3.28 (0.08)	3.32 (0.12)	3.24 (0.11)	3.14 (0.15)
Range	3.14 – 3.43	3.10 – 3.62	3.05 – 3.45	2.66 – 3.34
$M_{Skewness}$ ( $SD$ )	-0.76 (0.17)	-0.88 (0.31)	-0.63 (0.15)	-0.70 (0.22)
Range	-1.09 – -0.50	-1.97 – -0.43	-0.96 – -0.40	-1.05 – -0.21
$M_{Kurtosis}$ ( $SD$ )	1.21 (0.54)	1.32 (0.97)	0.45 (0.52)	0.66 (0.63)
Range	0.42 – 2.58	0.09 – 4.28	-0.08 – 1.50	-0.68 – 1.70
$M_{\% missingness}$ ( $SD$ )	4.16 (0.02)	4.88 (0.02)	4.15 (0.02)	4.42 (0.02)
Range	1.10 – 6.59	0.55 – 10.44	0.55 – 12.64	1.65 – 10.44
$M_{\% rating at 4}$ ( $SD$ )	37.65 (0.06)	42.19 (0.09)	36.73 (0.06)	32.51 (0.06)
Range	28.00 – 47.43	26.70 – 57.14	25.16 – 48.86	17.51 – 42.13
$M_{\% rating \geq 3}$ ( $SD$ )	92.19 (0.03)	92.30 (0.04)	88.66 (0.05)	84.93 (0.07)
Range	87.43 – 96.61	82.58 – 97.75	75.88 – 96.59	72.00 – 93.64

*Note.* AMP = Appreciation of Multiple Perspectives; IS = Intercultural Sensitivity; IiD = Interest in Diversity; PGA = Plural Geographic Allegiance

Scores for all 89 items demonstrated negative skew,<sup>43</sup> extremely (i.e.,  $< -1.00$ ) for eight items: AMP.8, AMP.9, IS.10, IS.15, IS.20, PGA.3, PGA.8, PGA.20.  $M_{Skewness}$  was mostly consistent across dispositions, varying by 0.25.  $M_{Kurtosis}$  were comparatively elevated for Appreciation of Multiple Perspectives and Intercultural Sensitivity items in comparison to those that operationalized Interest in Diversity and Plural Geographic Allegiance, but kurtosis did not present an overall problem in these data. One item (IS.15) was extremely leptokurtic (i.e., kurtosis  $> 3.00$ ), as well as being extremely negatively skewed.

For missing data, which in this phase principally represented respondents' marking their lack of understanding for an item, I found minimal variation across dispositions: 4.15-4.88%. Three items demonstrated extreme missingness (i.e.,  $\geq 10\%$ ): IS.21 (10.44%), IID.9 (12.64%), and PGA.26 (10.44%). Thus, data missingness was generally low for a multi-lingual sample responding to English-only items. Finally, proportions of raters who endorsed items at the highest level ( $M_{\% \text{ rating at } 4}$ ) and who endorsed it at all ( $M_{\% \text{ rating } \geq 3}$ ) ranged  $< 10\%$  across dispositions. In sum, these data suggested an overall tendency toward normality.

### ***Internally Consistent Dispositions***

After excluding extremely skewed and/or leptokurtotic items<sup>44</sup> I calculated each disposition's level of internal consistency (Cronbach's  $\alpha = .91-.95$ ).<sup>45</sup> Additionally, I

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<sup>43</sup> The consistent occurrence of negative skewness aligns with strong evidence for potential social desirability bias that I have explored in subsequent section of this chapter and Chapter IV: Discussion.

<sup>44</sup> To examine factor structure, I retained items with higher-than-desired missingness proportions because estimating the subsequent confirmatory factor analysis with maximum likelihood would account for that degree of missing data. I eventually removed those items as I constructed the discrete-choice measure out of an abundance of caution to avoid a potential confound in which secondary-school student respondents avoided that item and/or gravitated to that item due to their potentially limited understanding of it.

<sup>45</sup> High Cronbach's  $\alpha$ , computationally driven by how well items inter-correlate and how many items that a subscale includes, can indicate desirable item performance or flag potential issues of item redundancy in an

Table 3.10

*Strong Internal Consistency Despite Some Items Demonstrating Extreme Skewness and Leptokurtosis*

Disposition	Items		-1 < Skew. > 1		-3 < Kurt. > 3		Cronbach's $\alpha$		Inter-item $r$		
	<i>n</i>	Excl.	<i>n</i>	%	<i>n</i>	%	All	Rand.	<i>M</i>	<i>Min.</i>	<i>Max.</i>
AMP	16	2	2	12.50	0	0.00	.91	.75	.43***	.26***	.61***
IS	24	3	3	12.50	1	4.17	.94	.77	.43***	.13	.70***
IiD	22	0	0	0.00	0	0.00	.95	.76	.49***	.16*	.74***
PGA	27	3	3	11.11	0	0.00	.95	.79	.44***	.18*	.71***

\* $p < .05$ ; \*\* $p < .01$ ; \*\*\* $p < .001$

*Note.* Skew. = skewness; Kurt. = kurtosis; Excl. = excluded items; All = all items for a given disposition; Rand. = random draw of five items per disposition; Min. = minimum value; Max. = maximum value; AMP = Appreciation of Multiple Perspectives (randomized items = AMP.2, AMP.6, AMP.7, AMP.10, AMP.12); IS = Intercultural Sensitivity (randomized items = IS.1, IS.3, IS.7, IS.12, IS.18); IiD = Interest in Diversity (randomized items = IiD.7, IiD.8, IiD.10, IiD.16, IiD.18); PGA = Plural Geographic Allegiance (randomized items = PGA.4, PGA.11, PGA.21, PGA.22, PGA.24). Appendix U features full inter-item correlation matrices per dispositional domain.

computed inter-item correlations per disposition, the means for all of which fell within an optimal range for narrow constructs ( $r = .40-.50$ ).<sup>46</sup> Taken together, these indicators suggested the construction of adequately reliable, stable factors.

***Suboptimal Fit Due to Sample Size?***

Using confirmatory factor analysis, I adequately fit the proposed theoretical model to the observed data. Model fit statistics did not entirely meet *a priori* criteria from Hu and Bentler (1999):  $\chi^2 = 5965.54$  ( $df = 3,153$ ),  $p < .001$ ; Tucker Lewis Index = .70; Standardized Root Mean Square Residual = .085. In Chapter IV: Discussion, I have

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overly specific measure (Briggs & Cheek, 1986). As I have elaborated upon in Chapter IV: Discussion, discrete-choice measures benefit from item redundancy in a way that conventional measures might not. Still, I calculated Cronbach's  $\alpha$  for a random draw (see Haahr, 2020) of five items per disposition as a sensitivity analysis regarding the number of items per domain, finding all four to exceed rules of thumb from (Neuendorf, 2003) for reasonably to very strong levels of internal consistency ( $\alpha = .75-.79$ ).

<sup>46</sup> The notion of a narrower range for capturing higher-order construct (i.e., global citizenship) aligns both conceptually with the current study and with the observed data shown in Table 3.10.



explored the possibility that these suboptimal model fit indices might be more demonstrative of an underpowered, complex measurement model than insufficient factor structure. As another indicator to support the interpretation of an overparameterized model due to an unexpectedly low sample, I observed consistent and appropriate covariances across the latent factors that the four dispositions operationalized (see Table 3.11). Internal consistency statistics and inter-item correlations had revealed the four dispositions to be distinct from one another. Meanwhile, their appropriate and narrow range of factor covariances ( $r = .18-.23, p < .001$ ) suggested that they were all portions of a higher-order construct, which I have theorized as global citizenship dispositions.

Table 3.11

*Factor Covariance Suggests Four Dispositions as Distinct Aspects of a Higher-Order Construct*

Disposition	Intercultural Sensitivity	Interest in Diversity	Plural Geographic Allegiance
Appreciation of Multiple Perspectives	.21***	.23***	.19***
Intercultural Sensitivity		.21***	.17***
Interest in Diversity			.18***

\* $p < .05$ ; \*\* $p < .01$ ; \*\*\* $p < .001$

Furthermore, factor loadings for all items surpassed the  $> .500$  threshold, by a considerable margin in most cases (see Table 3.12). The lowest loading was .516.

Table 3.12

*Factor Loadings Surpassed .500 Threshold by Considerable Margins*

Disposition	$n$	$M$	$SD$
AMP	14	0.833	0.08
IS	21	0.913	0.14
IiD	22	0.928	0.14
PGA	24	0.961	0.15

*Note.* AMP = Appreciation of Multiple Perspectives; IS = Intercultural Sensitivity; IiD = Interest in Diversity; PGA = Plural Geographic Allegiance

### ***Item-Level Social Desirability Bias***

For this sample, the 33 dichotomous items in the standardized measure of social desirability (Crowne & Marlowe, 1960) demonstrated appropriate internal consistency overall ( $\alpha = .76$ ) and for the 18 positively indicated ( $\alpha = .72$ ) and 15 negatively indicated items ( $\alpha = .73$ ), respectively.<sup>47</sup> Students' scores for 65-of-89 global citizenship items (73.03%) correlated significantly with their scores on the standardized measure of social desirability, 13 times the expected Type I-error rate for a study with  $\alpha = .05$ .<sup>48</sup> As I show in Table 3.13, the  $M_{correlation}$  across items was  $r = .18$  ( $p < .05$ ). Across dispositions, I found consistency for correlations'  $M$ ,  $SD$ , ranges, and patterns of significance for varying levels of  $\alpha$ : regardless of disposition, most global citizenship items demonstrated strong potential to be influenced by social desirability bias. Scores for the eight items that I excluded due to extremely negative skewness averaged higher correlations with social desirability scores ( $M_{corr\_excluded} r = .20, p < .01$ ) and varied less ( $SD = 0.04$ ) than corresponding statistics for the 79 retained items ( $M_{corr\_retained} r = .18, p < .05; SD = 0.07$ ), a finding that seems to further the link between high degrees of endorsement for global citizenship and social desirability. In total, an adequate fitting model and indications of social desirability bias warranted construction of a discrete-choice measure.

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<sup>47</sup> I examined Crowne and Marlowe (1960) items overall and by indication type as a sensitivity analysis both for number of items and the potential for contra-indicative items to perplex adolescent respondents.

<sup>48</sup> Perhaps also affected by the smaller-than-desired sample, six items approached the *a priori*  $p$  value.

Table 3.13

*Global Citizenship Disposition Items Consistently Demonstrate Social Desirability Bias*

Disposition	Items	<i>M</i>	<i>SD</i>	<i>Min.</i>	<i>Max.</i>	< .10 <sup>t</sup>	< .05 <sup>*</sup>	< .01 <sup>**</sup>	< .001 <sup>***</sup>
AMP	<i>n</i> = 16	.19 <sup>*</sup>	.06	.08	.29 <sup>***</sup>	13	11	7	2
	%					81.25	68.75	43.75	12.50
IS	<i>n</i> = 24	.17 <sup>*</sup>	.06	.04	.30 <sup>***</sup>	19	16	11	2
	%					79.17	66.67	45.83	8.33
IiD	<i>n</i> = 22	.15 <sup>*</sup>	.07	.02	.26 <sup>**</sup>	16	15	7	0
	%					72.73	68.18	31.82	0.00
PGA	<i>n</i> = 27	.21 <sup>**</sup>	.06	.07	.32 <sup>***</sup>	24	23	19	4
	%					88.89	85.19	70.37	14.81
Total	<i>n</i> = 89	.18 <sup>*</sup>	.07	.02	.32 <sup>***</sup>	72	65	44	8
	%					80.90	73.03	49.44	8.99

<sup>t</sup>*p* < .10; <sup>\*</sup>*p* < .05; <sup>\*\*</sup>*p* < .01; <sup>\*\*\*</sup>*p* < .001

*Note.* *Min.* = minimum correlation; *Max.* = maximum correlation; AMP = Appreciation of Multiple Perspectives; IS = Intercultural Sensitivity; IiD = Interest in Diversity; PGA = Plural Geographic Allegiance

**The Discrete-Choice Measure.** After removing 10 items for extreme skewness, leptokurtosis, and/or missingness, I sorted the remaining 79 in descending order of their scores' correlations with social desirability scores (Brown & Maydeu-Olivares, 2011). Doing so allowed me to group them into triadic blocks such that every block included one item each that operationalized a different disposition, several examples of which I have presented in Figure 3.1. Block 1 includes the three items that I grouped for having the highest social desirability loadings with competition among three dispositional domains: Appreciation of Multiple Perspectives, Intercultural Sensitivity, and Plural Geographic Allegiance. Block 7 features competition among the same three domains based on items with slightly lower social desirability loadings.

<p><b>Block 1</b> Please select 2 statements, 1 each that is <i>most</i> and <i>least</i> like you.</p> <p><b>Items</b> I believe that everyone can learn something of value from the perspectives of people at home and around the world. (AMP.14)</p> <p>I feel friendly toward people from various cultural groups. (IS.8)</p> <p>I consider myself to be a global citizen. (PGA.10)</p> <p style="text-align: center;"><b>This statement is most like me.</b></p> <p style="text-align: center;"><b>This statement is least like me.</b></p>	<p><b>Block 7</b> Please select 2 statements, 1 each that is <i>most</i> and <i>least</i> like you.</p> <p><b>Items</b> Equity for people both at home and around the world matters to me. (IS.23)</p> <p>I think it is important to see similarities and differences between groups at home and around the world. (AMP.13)</p> <p>I see myself as a member of both a global community and the local community where I live. (PGA.21)</p> <p style="text-align: center;"><b>This statement is most like me.</b></p> <p style="text-align: center;"><b>This statement is least like me.</b></p>
<p><b>Block 21</b> Please select 2 statements, 1 each that is <i>most</i> and <i>least</i> like you.</p> <p><b>Items</b> I tend to value efforts aimed at eliminating global inequalities. (IS.19)</p> <p>I tend to feel stimulated by seeing how cultural groups distinguish themselves from one another. (IID.9)</p> <p>I tend to trust people regardless of where they live in the world. (PGA.23)</p> <p style="text-align: center;"><b>This statement is most like me.</b></p> <p style="text-align: center;"><b>This statement is least like me.</b></p>	<p><b>Block 30</b> Please select 2 statements, 1 each that is <i>most</i> and <i>least</i> like you.</p> <p><b>Items</b> Cultural differences stimulate my curiosity. (IID.1)</p> <p>I desire a society of internationally minded people who think about the welfare of people around the world at least as much as they do about people at home. (PGA.27)</p> <p>Ideas from people who are culturally different from me stimulate my own thinking. (AMP.16)</p> <p style="text-align: center;"><b>This statement is most like me.</b></p> <p style="text-align: center;"><b>This statement is least like me.</b></p>

Figure 3.1. Respondent's View of Discrete-Choice Measure Blocks in which Global Citizenship Dispositions Compete.

Note. Item numbers (e.g., AMP.14) are listed for illustrative purposes only. They would not be visible to respondents.

Similarly, Blocks 21 and 30 also have lower social desirability loadings than the earlier blocks and feature competition among Intercultural Sensitivity, Interest in Diversity, Plural Geographic Allegiance and then Interest in Diversity, Plural Geographic Allegiance, and Appreciation of Multiple Perspectives, respectively.

Having unequal numbers of retained items per disposition<sup>49</sup> and a goal of  $\geq 20$  instances for each disposition to be entered into a block so it can be compared with items from other dispositions required me to construct 33 triadic blocks or triplets (see Figure 3.2). I sorted those triads in descending order of their  $M$  correlations between student scores on the global citizenship items and scores from the standardized social desirability scale.<sup>50</sup> As a result, items that operationalized a given disposition and demonstrated, for example, high potential for social desirability bias would only compete within a block of items that also demonstrated high potential for social desirability bias (e.g., Block 1). A corresponding degree of control exists for items that demonstrated medium (e.g., Block 21) or low levels of potential for social desirability bias (e.g., Block 30). Consistently low  $SDs$  ( $> .026$ ) for the  $M$  correlations have provided preliminary evidence for each block's ability to control for the influence of social desirability bias by placing each item in competition with two other item that are all roughly equally susceptible to social desirability bias.

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<sup>49</sup> Among the 79 final items, there were 14 that operationalized Appreciation of Multiple Perspectives, 20 that operationalized Intercultural Sensitivity, 22 that operationalized Interest in Diversity, and 24 that operationalized Plural Geographic Allegiance.

<sup>50</sup> Ensuring  $\geq 20$  instances of each triadic comparison required me to repeat 19 items, accounting for unequal numbers of retained items per domain due to exclusions during Phases 2 and 3. To minimize respondent fatigue from encountering items repeatedly, no item appeared in the final discrete-choice measure more than twice and a single item never competed against any other item more than once (Brown & Maydeu-Olivares, 2013).

Block	<i>M</i>		Statement A		Statement B		Statement C	
	<i>SDB<sub>r</sub></i>	<i>SD</i>	Item	<i>SDB<sub>r</sub></i>	Item	<i>SDB<sub>r</sub></i>	Item	<i>SDB<sub>r</sub></i>
1	0.30	0.013	AMP.14	.29***	IS.8	.30***	PGA.10	.32***
2	0.28	0.021	AMP.1	.25**	IS.8 [r]	.30***	PGA.15	.30***
3	0.28	0.026	IiD.17	.26**	AMP.4	.27***	PGA.10 [r]	.32***
4	0.28	0.012	IiD.6	.26**	PGA.1	.29***	AMP.14 [r]	.29***
5	0.28	0.018	IiD.6 [r]	.26**	AMP.4 [r]	.27***	PGA.15 [r]	.30***
6	0.27	0.014	AMP.1 [r]	.25**	IiD.17 [r]	.26**	PGA.1 [r]	.29***
7	0.25	0.012	IS.23	.24**	AMP.13	.25**	PGA.21	.27***
8	0.25	0.005	IS.23 [r]	.24**	PGA.24	.25**	AMP.13 [r]	.25**
9	0.24	0.008	IiD.7	.23**	AMP.11	.25**	PGA.24 [r]	.25**
10	0.23	0.012	IiD.11	.22**	IS.1**	.22**	PGA.25	.25**
11	0.23	0.013	IiD.5	.22**	IS.18**	.22**	PGA.7	.25**
12	0.23	0.013	AMP.15	.21**	IS.22	.22**	PGA.22	.24**
13	0.21	0.014	IiD.4	.20**	IS.24	.22**	PGA.19	.23**
14	0.21	0.013	IiD.19	.20**	IS.4	.20**	PGA.13	.23**
15	0.20	0.012	AMP.7	.19*	IS.4 [r]	.20**	PGA.2	.22**
16	0.20	0.012	IiD.15	.19*	IS.6	.20**	PGA.4	.22**
17	0.20	0.015	AMP.6	.18*	IS.11	.19*	PGA.16	.22**
18	0.19	0.017	AMP.2	.18*	IiD.12	.18*	PGA.14	.22**
19	0.19	0.018	AMP.5	.17*	IS.9	.18*	PGA.6	.22**
20	0.18	0.019	IiD.22	.17*	IS.13	.17*	PGA.18	.21**
21	0.18	0.018	IS.19	.16*	IiD.9	.17*	PGA.23	.20**
22	0.17	0.016	IS.2	.15 <sup>†</sup>	IiD.2	.17*	PGA.5	.18*
23	0.16	0.012	IS.12	.14 <sup>†</sup>	IiD.8	.17*	PGA.11	.17*
24	0.15	0.013	IS.17	.13 <sup>†</sup>	PGA.9	.16*	IiD.13	.16*
25	0.14	0.010	AMP.3	.13 <sup>†</sup>	PGA.17	.14 <sup>†</sup>	IiD.16	.15*
26	0.12	0.012	PGA.12	.12	IS.14	.12	IiD.14	.14 <sup>†</sup>
27	0.09	0.002	AMP.12	.09	IiD.10	.09	IS.3	.09
28	0.08	0.003	IS.16	.08	PGA.26	.09	AMP.10	.09
29	0.07	0.009	IiD.18	.07	IS.7	.07	AMP.10 [r]	.09
30	0.07	0.002	IiD.1	.07	PGA.27	.07	AMP.16	.08
31	0.06	0.020	IS.5	.04	IiD.21	.05	PGA.26 [r]	.09
32	0.06	0.022	IiD.3	.03	IS.7 [r]	.07	AMP.16 [r]	.08
33	0.04	0.021	IiD.20	.02	IS.5 [r]	.04	PGA.27 [r]	.07

Figure 3.2. Final Discrete-Choice Measure for Four Global Citizenship Dispositions: Appreciation of Multiple Perspectives, Intercultural Sensitivity, Interest in Diversity, and Plural Geographic Allegiance

<sup>†</sup>  $p < .10$ ; \*  $p < .05$ ; \*\*  $p < .01$ ; \*\*\*  $p < .001$

Note. *SBD<sub>r</sub>* = correlation between students' scores on item and on a social desirability scale (Crowne & Marlowe, 1960); [r] = repeated item

## CHAPTER IV: DISCUSSION

The measure I described in the previous chapter has demonstrated proof of concept for operationalizing socially and content-valid global citizenship dispositions and assessing them in a way that can control for the evident effects of social desirability bias. In this final chapter, I have presented implications of this dissertation's substantive findings and methodological contributions, including those that were unexpected and/or those that will require further inquiry. Ultimately, I have concluded by considering this dissertation's limitations and offering future directions for a program of research.

### *Implications of Key Findings*

I have categorized key findings into five areas regarding what I learned during this dissertation due to (a) framing global citizenship as four dimensions: dispositions, knowledge, skills, and behaviors; (b) detecting social desirability bias; (c) observing perspectival variety by reporter (e.g., alumnus/a or scholar); (d) uncovering action items for International Baccalaureate and its schools; and (e) finding utility in mixing methods.

**Four Dimensions of Global Citizenship: Dispositions, Knowledge, Skills, and Behaviors.** Each phase of this dissertation lent support to isolating global citizenship dispositions from its knowledge, skills, and behaviors. First, alumni/ae in two countries and spanning 15 years of age defined and attributed eight dispositions to their global citizenship education experiences, generally rating them all as personally and professionally beneficial. Then, an internationally diverse panel of global citizenship scholars endorsed a strong majority of items that I developed to operationalize the dispositions that seemed most socially valid. Finally, a pilot test of items revealed those four dispositional factors to have high levels of internal consistency and strong inter-item

correlations. Simultaneously, the four dispositional factors covaried significantly, but at an appropriately low level, suggesting their convergence within a higher-order construct that is plausibly global citizenship. These dispositions seemed not to be mere multicollinear approximations of one another.

Moreover, findings from this dissertation have provided some empirical support for the potential utility of a four-dimensional framework that purposefully distinguishes global citizenship dispositions from its knowledge, skills, and behaviors. Some alumni/ae described the challenge of disentangling dispositions from the other dimensions, calling it the “stickiest” (Sweden7) one. But they relied on the framework to recast perspective-taking, a behavior in the global citizenship literature (Engberg, 2013), as a disposition: Appreciation of Multiple Perspectives. Similarly, alumni/ae indecision about whether Skepticism was a disposition, a skill, or a behavior prompted them to link it to critical thinking, which International Baccalaureate research pits as a skill (Wade et al., 2015).

In Phase 2, scholars also commented about the challenge of distinguishing dispositions (e.g., Scholar14), often from behaviors, underscoring this framework’s potential contribution to global citizenship research and educational practice. When given the opportunity to expand my operationalization of global citizenship dispositions, Phase 2 scholars tended to request items regarding action-taking (e.g., Scholar2, Scholar10, Scholar18), which would necessarily introduce behavioral elements, hence the lack of such items in this dissertation. Phase 2 findings aligned with a parallel study that has quantified the frequency of overlap among dispositions, knowledge, skills, and behaviors in prominent global citizenship measures in the field (Thier et al., in preparation). Regarding Phase 3, I can infer that the statistical indicators I reported might not have



been so encouraging had the items featured a mash-up of dispositions, knowledge, skills, and behaviors, as global citizenship measures tend to do.

Overall, this dissertation lends some support to the assertion that “global citizenship is best understood as a psychological orientation or identity” (Reysen & Katzarska-Miller, 2018, p. 145). In one of many divisions among global citizenship scholars, education theorists tend to focus on skills, often invoking competencies. Political scientists tend to examine global citizens’ behavioral duties and legalistic rights. Environmental scientists emphasize a global citizenship knowledge set featuring climate change and sustainability. Generally, global citizenship scholars pay too little attention to “identities” (Reysen & Katzarska-Miller, 2018, p. 6), a stark absence that I found by reviewing many prominent measures and the contested literature base undergirding them.

Until we can differentiate these four dimensions of global citizenship, how can educators or researchers identify its underlying mechanisms? Absent measures suited to uniquely appraise dispositions, knowledge, skills, and behaviors (Dang et al., 2020), we seem unable to pose practical, chicken-and-egg questions about how to sequence global citizenship instructional efforts. Meanwhile, educators still need to know how to marshal limited resources effectively as they seek to foster global citizens, but they might not know whether to focus first on dispositions or knowledge before, perhaps, turning their emphases toward refining skills and then eventually expecting desired behaviors.

Global citizenship literature has not provided a clear path for sequencing such pedagogical activities. Individuals might require certain dispositions before they can access or grow knowledge and then eventually acquire skills and demonstrate behaviors (Banks, 2001; Barth et al., 2015). Instead, knowledge, behaviors, and dispositions might

be equally important (Reysen & Katzarska-Miller, 2018), possibly sustaining arguments for simultaneous pedagogical approaches. Perhaps one's global knowledge might precede globalization of their dispositions, which in turn, would precede one behaving like a global citizen (Kuleta-Hulboj, 2016; Schattle, 2009). Still, knowledge might yield behaviors that shape dispositions (Breitkreuz & Songer, 2015; Reysen & Hackett, 2017).

As an adherent of Deardorff (2006), I expect recursive relations between, and shared variance among, dispositions and the other three dimensions. I do not imagine that individuals develop a pat set of dispositions and then, as in a video game, level up to knowledge acquisition and then skill development in a stepwise fashion, only to reach a pinnacle of behavioral demonstration. I have focused on dispositions in this dissertation because I conceptualize them as a foundational aspect of global citizenship, as Deardorff depicts in her pyramidal model, but also as a critical point of entry for developmental education, as she depicts in her cyclical model. I remain confident that one's experiences of learning global knowledge, acquiring skills for use in global contexts, and behaviors in global spaces all mediate one's dispositions, to varying extents potentially in positive and negative ways. But before researchers can provide evidence for claims of that kind, we need measures that facilitate more precise inference-making.

In the meantime, the identity-laden aspects of dispositions prompt me to project more durability onto global citizenship dispositions than sets of knowledge or skills, which will necessarily need to evolve in response to ever-changing sociopolitical factors and technological shifts. Accordingly, I expect global citizenship behaviors to be functions of dispositions, as well as of knowledge, and skills, so perhaps more durable than knowledge and skills, but less so than dispositions. In this vein, this dissertation has

created one opportunity for educators and researchers to assess global citizenship by isolating dispositions from the other dimensions. In so doing, I have provided a tool that might help educators, at least those in parts of Sweden and the United States, press upon their assumptions about how their pedagogical model might be influencing students' dispositions. This measure can help them determine if instructional interventions they believe to be disposing students toward global citizenship are generating any real effects.

**Detecting Social Desirability Bias.** Social desirability bias appeared consistently in this dissertation's data. Social desirability bias seemed to make it harder to prioritize dispositions as socially valid. Scores on items developed to operationalize socially valid dispositions skewed negatively, sometimes extremely so. Correspondingly, susceptibility to social desirability bias has raised challenges for various self-report measurements of constructs that align with global citizenship (McFarland et al., 2012; Phelps et al., 2011; Türken & Rudmin, 2013). Social desirability bias seems likely to appear in measurement situations when respondents must self-report on dispositional constructs with sociocultural loadings (Deardorff, 2015). In such cases, respondents often have several incentives to, and no guardrails to not, present themselves as different than they truly are.

Specifically, if a measure aims to tap into racist tendencies, the likelihood of respondents indicating such racism is minimal (Krumpal, 2013). The same social desirability trap could ensnare secondary-school students in global citizenship education programs when faced with a measure designed to assess dispositions, especially with the higher stakes that school settings can impose implicitly upon students (Duckworth & Yeager, 2015). Respondents would likely tell assessors what they seemed to want to hear:

- “No, I am not a racist!”

- “Of course, I am a global citizen!”

For educators who want to hear that students are global citizens (or for researchers who want to hear that their participants are not racists), measures are not required. But if educators truly seek formative ways to develop how they can enhance global citizenship education for their students, knowing which dispositions do and do not depict those students would require more precision than measures can typically deliver. Discrete-choice measures are uniquely designed to appraise dispositions with greater precision.

By ranking items by the magnitude of the social desirability bias that I detected, I was able to construct a discrete-choice measure in which each block can contribute to controlling for that bias (Anguiano-Carrasco et al., 2015; Brown & Maydeu Olivares, 2011). Discrete-choice measures are robust in controlling for this bias because they remove a key facet of typical self-report measures, allowing for artificial responses on an arbitrary numerical scale (Cao, 2016; Huws et al., 2009; Kopcha & Sullivan, 2007; Kuokkanen & Sun, 2016; Lagattuta et al., 2012), regardless of whether the artificial response is subconscious. Ultimately, discrete-choice methods offer the potential to decrease any gaps between what respondents might self-report about their dispositions and how they might act in real life (Dang et al., 2020; Kuokkanen & Sun, 2016).

When discrete-choice measures group items by their social desirability loading, responses become relative to domains (i.e., dispositions) within a construct of interest. Because discrete-choice measure respondents endorse items that compete against other items, which all are grouped based on a shared degree of social desirability bias, the assessment offers potential to be more precise than typical Likert-type scales (Anguiano-Carrasco et al., 2015; Brown & Maydeu Olivares, 2011). Examining each of my blocks

for its *SD* of  $M_{correlation}$  between scores from its items and scores from a social desirability measure offered a useful indicator of an ability to control for social desirability bias. For my 33 triadic blocks,  $SD < 0.026$ . To fortify my discrete-choice blocks further, I ordered items within blocks from least to most socially desirable. That is, Item A for each block had a lower social desirability correlation than Item B, which had a lower social desirability correlation than Item C. By balancing the possible influence of primacy (i.e., the respondent would likely first encounter the least-correlated item) against encountering a marginally more highly correlated item last, I have developed an additional tactic that can help control for potential effects of social desirability bias. Still, I lacked a large enough sample to test the contribution of this design choice that is novel to discrete-choice measures or even to test my newly designed measure entirely.

The presence of social desirability bias that I found in my items could plausibly interfere with measures of other dispositional constructs (see Miller, 2012). Seemingly, the relatively simple, correlational approach that I have provided for detecting the presence of social desirability bias can be useful in several areas of psychological measurement. I cannot imagine a self-report—no matter how often it has been used in the field—that would not benefit from such review. Whether developers learn about their measures' susceptibility to social desirability bias or gain confidence that respondents are self-presenting authentically, all researchers benefit when measures in the field improve.

**Perspectival Variety by Reporter.** Beginning this dissertation by assessing social and content validity based on data from alumni/ae and scholars, respectively, I grounded my measure in shared and distinct insights from lay people and experts (Olsen, 1982; Rubio et al., 2003; Wolf, 1978). Naturally, this approach can elicit disagreements

within and between groups. Such tensions have been probative in this study, so I have explored disagreements among alumni/ae, among scholars, and between those groups.

*Disagreement Among Alumni/ae.* Nominal groups demonstrated few divides, especially considering the alumni/ae's various locations (during secondary school and at the time of data collection) and years of graduation. Their data pointed readily toward consensus, making their priorities less immediately evident. I found minimal differences in ratings among alumni/ae from Sweden and their peers from the United States, especially regarding Appreciation of Multiple Perspectives, Intercultural Sensitivity, and Interest in Diversity. By contrast, ratings of Preference for Global Communication varied widely across nation groups as did Social Justice Orientation. Qualitative data revealed sharp cross-national discrepancies regarding Preference for Global Communication, mirroring the ratings and hastening its exclusion. Conceivably indicating internalized lessons about social justice, alumnae from the United States abjectly rejected Preference for Global Communication, fueled by concerns of Western hegemony, perhaps a recognition of their nation being its major force for more than a century.

*Disagreement Among Scholars.* As expected, a relatively large, internationally diverse group of scholars each brought their own subjectivities regarding substance, methodology, or both to Phase 2 (Rubio et al., 2003). Moreover, this area of scholarship is renowned for disagreement (Reysen & Katzarska-Miller, 2018). As an example, scholars have long debated whether global citizenship and global competence are distinct or only different labels for the same construct (Hunter et al., 2006). For Morais and Ogden (2011), global competence is 1-of-3 domains of global citizenship. For Hu et al. (2014), the inverse is true: global citizenship is 1-of-3 domains of global competence.

Again, I regard competencies as skills, not dispositions. Geographic differences of scholars' homes and experiences can also influence their meaning-making around global citizenship (Goren & Yemini, 2017a). As another source of difference in this dissertation, some scholars focused on items, others holistically on the measure (Rubio et al., 2003).

Fittingly, Scholar1 wondered "if anyone can say what the components of global citizenship are (there may always be something not accounted for)." I designed this dissertation in recognition of how challenging it would be to capture the breadth of the construct, hence Phase 1's twin goals of consensus and prioritization. Hopefully, I have added some clarity by operationalizing global citizenship's dispositions only. That said, Scholar10 regarded dispositions as too wide a category but agreed that disentangling 'attitudes' from behaviors would enhance precision of psychological measures.

Naturally, some scholars offered additive ideas such as environmental concerns, sustainability, and 'planetary citizenship' (e.g., Scholar3, Scholar13, and Scholar15). In Phase 1, one alumna (US2) raised a similar point, but the idea gained little traction from the group, seemingly because the consensus definition of Social Justice Orientation captured a "shared responsibility to preserve the human rights of all people and the planetary environment where we cohabitate." Social Justice Orientation, however, was not prioritized, so Phase 2 scholars had no chance to review items meant to operationalize that disposition. Again, this finding highlighted the challenge of developing a comprehensive measure of global citizenship (Reysen & Katzarska-Miller, 2018).

Similarly, Scholar14 requested items that tapped into critical thinking, echoing the Phase 1 alumni/ae-created disposition of Skepticism, which I excluded mostly for fitting this dissertation's definition of a skill rather than a disposition. This request harkened the

overlap across dispositions, knowledge, skills and behaviors that seems rampant in global citizenship research. Moreover, given that most of the items I had drafted were adaptations from measures that an international array of scholars had developed—including 1/3 of the scholars in Phase 2—the proportion of items that demonstrated unanimous ratings for even 1-of-3 criteria was rather low (3.33%). In nearly every case, two or more scholars diverged from the group when rating an item’s relevance. And that was before scholars’ ratings waded into epistemological debates about how to bound dispositions or ontological thoughts on the divisive issue of cultural universality. That said, such disagreement can be viewed as an encouraging sign because most items generated agreement for most criteria. The rarity of complete agreement highlights the seriousness the scholars applied to the review task. The absence of blind or tacit acceptance of items increased the value of the frequent instances of scholarly agreement.

Predictably, cultural universality courted the greatest degree of disagreement among scholars, evidenced by the proportion of items that met the statistical validity threshold for that criterion (61.67%) rather than considerably larger proportions for relevance (78.33%) and dispositions (75.00%). Curiously, items that operationalized Intercultural Sensitivity received endorsements for cultural universality (83.33%) far more often than for the other three dispositions in Phase 2 (all  $\leq 60.00\%$ ). Scholars’ comments did not illuminate why Intercultural Sensitivity items held greater potential for cultural universality than Appreciation of Multiple Perspectives, Interest in Diversity, or Plural Geographic Allegiance, suggesting a target for follow-up research. As an initial theorization, perhaps Intercultural Sensitivity items more nimbly captured one’s critical engagement with and reflexivity toward issues of power, language, and social practices,



rather than softer forms of global citizenship that merely consume differences (Andreotti, 2011), such as an Interest in Diversity or perhaps Appreciation of Multiple Perspectives.

Several scholars (10; 12; 14) who likely identify as members of the critical global citizenship education school of thought, reported never or nearly never endorsing an item for cultural universality. Their branch of scholarship, derived from critical race theory and indigenous ways of knowing, problematizes the Western-dominance that, somewhat ironically, has pervaded the global citizenship literature. I intentionally recruited multiple scholars from this school, recognizing that any items I hypothesized for cultural universality would have to first survive a panel that featured critical voices if those items would ever be useful in the field. It is too much to assume that a single dissertation could be the olive branch to unite cultural universalists and cultural relativists. But having relativists recognize some items as having potential for universality and a representative set of global citizenship scholars endorsing the cultural universality for most items breeds some optimism for perhaps moving the conversation beyond its current entrenchment.

Two areas ripe for further interrogation along the cultural universality-to-relativity continuum are the issues of how respondents' religious and political affiliations might influence their interpretations of, and thus development, of global citizenship dispositions. In several studies, religious and spiritual beliefs, even orthodoxies (Sparks & Gore, 2017), have shown positive correlations with McFarland et al.'s (2012) Identification with All Humanity Scale (Jack et al., 2016), a measure with items that tap into prosocial values and behaviors that align with global citizenship (Reysen & Katzarska-Miller, 2018). Global citizenship studies have not invoked religion in quantitative inquiries, but the construct itself has been framed as "a moral disposition"

(McDougall, 2005, p. 6), which can connote a religious identity. Leading scholars who have distinguished the community orientation of global citizenship from the competition orientation of constructs such as global competence also raise the importance of morality (e.g., Schattle, 2009). Furthermore, measures of global and human identities have associated those global citizenship-adjacent constructs positively with moral reasoning (Nwafor et al., 2016), moral beliefs (Barth et al., 2015), moral identity (Reese et al., 2015), and expansive moral concern for others (Crimston et al., 2016).

Morality has also been featured in political framings of global citizenship, specifically regarding the implications of plural and potentially conflicting allegiances to local and global concerns (Nussbaum, 1997). Many scholars have argued the importance of global citizenship as a counterbalance to some political actors—often those who are considered conservatives in the U.S. context. For example, former Republican Speaker of the U.S. House of Representatives Newt Gingrich and the U.S. President at the time this dissertation, Donald J. Trump, have both scoffed at global citizenship, citing reasons such as the lack of a global anthem or certificate (see Reysen & Katzarska-Miller, 2018). Perhaps unsurprisingly then, several examinations of constructs that align with global citizenship (e.g., sense of global community, cosmopolitanism, and global-mindedness) have all shown positive associations with a liberal political orientation (Hackett, 2014; Hett, 1993; Sevincer et al., 2017). Seemingly, religious and political orientations are areas where many global citizenship scholars would find common ground but studying how respondents across religious and political arrays perceive the construct could prove useful to further examine the issue of cultural relativity as it pertains to global citizenship.

*Disagreement Between Alumni/ae and Scholars.* Connecting the phases of this dissertation, several U.S. alumni/ae adopted a critical frame as they rejected Preference for Global Communication for its likely oppressive martialing of English as a *lingua franca*. Critical global citizenship education scholars would likely concur that universalizing and/or privileging a language disconnects some individuals and cultures from global citizenship, especially for those who are already vulnerable, invalidating any attempt to unite under a common banner of communication. But my exclusion of Preference for Global Communication in Phase 1 meant that Phase 2 scholars would not comment on the content validity of items meant to operationalize that disposition.

Conversely, alumni/ae and scholars presented very different perspectives on Appreciation of Multiple Perspectives and Plural Geographic Allegiance. Phase 1 data revealed the clearest case for retaining Appreciation of Multiple Perspectives; Plural Geographic Allegiance was marginal, largely retained for its salience in scholarly literature. By contrast, Phase 2 concluded with the retention of 27-of-30 (90.00%) items to operationalize Plural Geographic Allegiance, nearly twice as many as for Appreciation of Multiple Perspectives (16-of-30, 53.33%). To a lesser extent, I detected some discrepancies between scholars and alumni/ae regarding Intercultural Sensitivity: the definition I had developed from global citizenship literature stimulated considerable revision during the nominal groups. Still, the large differences in how Appreciation of Multiple Perspectives and Plural Geographic Allegiance resonated with alumni/ae and scholars, respectively, underscored the importance of examining both social and content validity in this dissertation. Accounting for both these dispositions and both these types of validity in the measure seemed to provide considerable utility.

Furthermore, comments from Scholar1 enabled me to identify one plausible explanation for some observed differences between lay and expert reviewers:

Reading your items, I had to step back and realize that you are preparing a measure to use with *secondary school students*. That seemed clear when I saw all of your statements that embrace a willingness to appreciate cultural differences. That is very, very important. But to my mind, respect for cultural diversity is not the endpoint in developing global citizenship, just a vital step along the way. (*emphasis mine*)

Seemingly, alumni/ae and scholars perceive some global citizenship dispositions differently, discrepancies that could be fodder for future studies. In the interim, Scholar1 highlighted a developmental aspect of global citizenship, suggesting a possibility in which some dispositions might be more suitable for measuring in secondary schools than others. Fittingly, the developmental trajectory Deardorff (2006) put forth has depended primarily upon data from universities. Phase 1 findings echoed this idea, specifically regarding Plural Geographic Allegiance and Social Justice Orientation, dispositions that some alumnae identified as more likely acquired through higher education or in other adult settings. Still, this dissertation revealed an important area of agreement in which alumni/ae data confirmed the social validity of five dispositions that are prominent in the global citizenship literature to which the Phase 2 scholars actively contribute. Of course, the alumni/ae also added to the conceptual clutter of global citizenship by endorsing three more dispositions, all of which warrant future scholarly attention.

**Action items for International Baccalaureate and its schools.** This study took place in International Baccalaureate schools as proxies for global citizenship education

(Brunold-Conesa, 2010; Davy, 2011; Garnder-McTaggart, 2016), allowing me to interpret findings that might be pertinent to International Baccalaureate and its schools. First, quantitatively and qualitatively, alumni/ae of International Baccalaureate programmes that sat an ocean and a continent away from one another unambiguously connected Appreciation of Multiple Perspectives to their experiences in the signature Theory of Knowledge course. Unsurprisingly, this disposition aligned closely with a course that can flummox students and their teachers by pushing them to wrestle with various epistemologies. Findings from the current study highlight this course's potential to foster such a disposition in students. International Baccalaureate reviews its course curricula on seven-year cycles. The next review for Theory of Knowledge could account systematically for how that course, maybe in concert with other courses, programs into its curriculum opportunities for students to develop this disposition.

Second, Skepticism was the disposition that alumni/ae attributed most to their International Baccalaureate experiences, according to ratings. Some alumnae qualitatively connected their Skepticism to Theory of Knowledge coursework, specifically. Again, Skepticism might be an alternate label for critical thinking, which is likely a skill, and one that has been identified as a core Theory of Knowledge outcome (Bergeron & Rogers, 2016; Wade et al., 2015; Wright & Lee, 2014; Zemplén, 2007). Perhaps International Baccalaureate can lean further into this notion of Skepticism (i.e., critical thinking). Once known for international-mindedness, a construct that overlaps with global citizenship (Singh & Qi, 2013), International Baccalaureate might be shifting some of its focus to critical thinking. As a rough example of how globally resonant each of those concepts might be, I conducted Google searches that paired “International

Baccalaureate” *with* “critical thinking” and *with* “international mindedness.” With 3.26 million hits, “critical thinking” appeared nearly 70 times as frequently as “international mindedness,”<sup>51</sup> which has been International Baccalaureate’s calling card since its infancy in 1968 (Hill, 2012). Other education models claim critical thinking under their umbrellas, as well (Bowe et al., 2020; Hyytinen et al., 2019). International Baccalaureate might investigate how it can distinguish itself from these other models that seek to instill skills such as critical thinking (i.e., Skepticism).

Third, Social Justice Orientation showed evidence of social validity but was not prioritized. Still, it evoked vivid memories, seemingly lasting effects for some of the alumnae who were farthest removed from their days as International Baccalaureate students. More recently, the term social justice has become fraught in certain contexts. In the United States, with its left-right political divide, rhetoric regarding so-called Social Justice Warriors has demonstrated misogynistic tendencies in the forms of Reddit threads, memes, and other online communication (Massanari & Chess, 2018). International Baccalaureate might examine the extent of its connection with this politically fraught term, either to provide ardent support for those who esteem social justice, assuming an orientation toward social justice comports with organizational intent, or to distance itself from that disposition if International Baccalaureate does not aim to program Social Justice Orientation into its model.

Fourth, Preference for Global Communication generated considerable debate regarding the disposition’s apparent dependence upon English and its legacy and ongoing association with colonial oppression. Initially, International Baccalaureate required its

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<sup>51</sup> On April 29, 2020, I conducted these searches, examining international mindedness with (46,600 hits) and without a hyphen (46,500 hits), as it is referenced both ways.

schools to communicate with the organization in English before later supporting communications in French and Spanish. International Baccalaureate's recent areas of largest growth include nations where Arabic, Japanese, Korean, and varieties of Chinese are prominent languages. Perhaps alumni/ae perspectives reflect vestiges of International Baccalaureate's English-centric roots, rather than its current practices. But perceptions, at least among alumni/ae from Sweden in this study, suggest that International Baccalaureate can provide linguistic currency in English, for better or worse.

Fifth, as perhaps the most surprising finding in this dissertation, Peacefulness ratings for attributability to global citizenship education were the lowest for any criterion of any disposition in this study, the only ratings averaging below the 9-point scalar middle ( $M = 4.73$ ;  $SD = 1.86$ ). The extremity of this finding was surprising as Peacefulness was the only disposition under evaluation that could be found explicitly in International Baccalaureate's mission statement. When I shared this datapoint with leaders at participating schools, one opined that the ratings might be low because the concept is hard for some students to grasp with a consensus definition that might not appeal to some students, which qualitative data corroborated. Notably, among the five dispositions I hypothesized at the outset of this dissertation, Peacefulness had been least present in the scholarly literature. Still, it might be worth International Baccalaureate's exploring how salient peace education and global citizenship education each are to its schools, and the extent to which they are deliverable collectively or as competing programmatic aims (Reilly & Niens, 2014; Reysen & Katzarska-Miller, 2018).

Sixth, I detected potential reciprocal causality regarding dispositions such as Interest in Diversity, Peacefulness, and Plural Geographic Allegiance. Evidence

suggested that some students self-select into International Baccalaureate due to *pre-*dispositions, but this type of education might also enhance or instill those dispositions for students who do not initially present them. A school leader in Sweden indicated that this finding is useful pedagogically to support the students they have already, but also useful to target recruitment of students who might enjoy and enhance the environment of a school that emphasizes global citizenship education. Additionally, relatively stark differences in the personal and professional utility accorded to dispositions such as Social Justice Orientation (perceived as more personally than professional beneficial) and Plural Geographic Allegiance (vice versa) could guide educators' designs of instructional processes or advocacy for the current and future importance of learning outcomes.

Last, characteristics of International Baccalaureate schools can vary tremendously. This measure has shown proof of concept to provide utility for assessing International Baccalaureate students in state-funded schools in multiple nations. So, the organization might find it useful to continue to test this measure in the myriad contexts that it reaches. This measure would benefit from ongoing refinement across contexts, and schools could benefit from eschewing one-size-fits-all global citizenship measures that were originally designed for university students and multi-national employees (Zhao, 2016). There is no reason to think that a measure showing preliminary utility in public schools would not also perform adequately in private schools, although I designed this dissertation to guard against the inverse assumption. The same logic could extend to single-sex or boarding schools that offer International Baccalaureate.

Findings from a measure such as the one I have developed might help educators formatively, allowing them to consider dispositions independently from knowledge,



skills, and behaviors. But educators can also recognize the role that dispositions play in student development of knowledge, skills, and behaviors (Deardorff, 2006). Therefore, using a discrete-choice measure to assess global citizenship dispositions might help educators re-organize pedagogical activities to ensure that learning engagements account for all four of those dimensions. It seems that growing a whole child into an adult who learns for an entire lifetime would require all four. School leaders in eight countries, plus the two where I conducted this study, have already shown interest. Moreover, investigations that feature multiple national contexts seem to align with International Baccalaureate's research priorities: its commissioned studies mostly involve multi-national data collection and/or comparisons.<sup>52</sup> Follow-up research could enable schools to examine the extent to which International Baccalaureate has programmed global citizenship dispositions into its educational model and/or the extent to which schools are implementing the model in a way that manifests such programming. Learning about this measure might prompt educators to reflect upon the measures they use currently. As a possible contrast, the measure I have developed might enable educators to tell their story about whether they verifiably offer something different than a traditional education.

**Utility of Mixed Methods.** Without integrating multiple types of data from both methodological traditions, this dissertation would have suffered critical blind spots. Therefore, I have included this section to show the benefits of (a) multiple indicators, (b) a design to explicitly integrate findings and link phases, and (c) a novel approach to the nominal group technique that revealed rare potential for mixing data that were collected from a single tactic, rather than mixing data collected from multiple tactics.

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<sup>52</sup> See <https://www.ibo.org/research/>.

*Multiple Indicators.* I depended upon multiple sources of data that were quantitative (descriptive and inferential) and qualitative. I learned from multiple reporters who ranged from insightful alumni/ae to renowned global citizenship scholars to students who were actively involved in global citizenship education. My data directly represented 10 nations and accounted indirectly for another 19 (e.g., conversations with an interested leader of a school in Spain that did not qualify for the study; reviews of measures made specific for use in nations not directly studied such as Thailand in Lawthong, 2003).

In each phase, my determinations relied upon multiple criteria or indicators. Phase 1 included three criteria for a disposition's social validity (being personally beneficial/limiting, professionally beneficial/limiting, and attributable to global citizenship education). I examined  $M$ ,  $SD$ , ranges, proportions, and distributional effects, all within and across nations. Phase 2 included three criteria for content validity (relevance to global citizenship; indicating a disposition rather than knowledge, skills, and dispositions; and cultural universality) and examinations of  $M$ ,  $SD$ , ranges, and proportions. Phase 3 included an array of indicators from descriptive measures of central tendency ( $M$ ,  $SD$ , skewness, and kurtosis), multiple calculations of internal reliability and measures of item- and domain-level covariation, as well as three indicators of model fit.

*Integrating Findings and Linking Phases.* Having found a paucity of studies that employed mixed or even quantitative-only methods when I reviewed global citizenship literature, I was anxious to contribute to a methodological gap. Imbalance in the literature might have reflected the natural cycle of scientific inquiry's tendency to favor qualitative data collection for newer research areas. The imbalance might have also revealed some

global citizenship scholars' potentially low degrees of trust in universalist operationalizations upon which measurement can depend.

Furthermore, the sequential exploratory design prompted me to recruit Phase 1 and 3 participants who had attended the same schools, adhering to a greater focus on internal validity at the expense of generalizability, which I can develop iteratively in future studies. Locational links between Phases 1 and 3 also enhanced my confidence when findings converged, as in the case of evidence for social desirability bias. Within Phase 2, my holistic process allowed the compensatory strengths of qualitative and descriptive quantitative data from a panel with diverse, but relevant expertise, to improve items whether they engendered strong or limited endorsement for content validity. Looking beyond strict cut scores was especially useful in my attempt to measure a definitionally fraught construct. Although I prioritized content validity ratios that I calculated from scholars' ratings, I took every opportunity to incorporate commentary, as well. Triangulating from disparate data types enabled me to maximize learning from some of the world's leaders in this field and ensure a strong item pool for testing.

*The Nominal Group Technique: Mixed Method within Itself?* I followed a recommendation to consider more than one analytical process when weighing the descriptive quantitative and qualitative data that nominal group technique focus groups can provide (McMillan et al., 2014). In doing so, I recognized this technique's uncommon affordance for data integration within a single tactic, not simply to quantify data that were collected qualitatively (Gill et al., 2012). In addition to recording participants' written statements during the nomination task and audio from the discussion

task, I enabled participants to elaborate upon their ratings with open-ended opportunities for commentary during the final task.

This richer-than-typical trove of nominal group data allowed me to triangulate ratings with qualitative statements that rationalized those ratings. Integrating these strands led me to interrogate instances when numerical indicators might be acceptably high for one or more criteria, but rationales suggested reasons to suppress, and potentially exclude, a disposition. Detecting such nuance would not have been apparent if I depended exclusively upon quantitative data. Graham (2019) similarly triangulated quantitative and qualitative data during a measurement development study with the nominal group technique, although he did so to strengthen consensus. In this dissertation, I triangulated to aid prioritization. In concert, these two studies suggest the nominal group technique to be a single method that is ripe for data mixing unto itself.

In totality, triangulating data types and cross-national examinations allowed me to determine how findings from this phase converged, complemented, or contradicted each other (Greene et al., 1989) regarding social validity. Those determinations aided my retention or exclusion of dispositions based on degrees of certainty or ambiguity. Given a generally high degree of endorsement that I observed for each disposition, the emphasis I placed on discrepant views facilitated a rigorous selection process, recognizing that neither methodological tradition could inform defensible decisions on its own.

For example, had I relied only on numerical ratings, I would have put forward only Appreciation of Multiple Perspectives and Intercultural Sensitivity for Phase 2, yielding too few dispositions for a discrete-choice measure. When the likely influence of social desirability crept into ratings for each disposition, discrimination became

challenging. Participants' ratings did not neatly prioritize dispositions that they found to be all connected 'in some way' and mostly under the same 'umbrella.' My approach's sensitivity to participant commentary also led to the exclusion of dispositions that alumni/ae rated highly for several criteria, but about which they had some underlying misgivings that would not have been as easily detected with ratings alone (e.g., Preference for Global Communication, Skepticism, and Social Justice Orientation).

Inversely, examining qualitative data allowed me to differentiate instances of minor contradiction (e.g., Intercultural Sensitivity, Interest in Diversity) or dispositions that might be reciprocally attributable to global citizenship education (e.g., Intercultural Sensitivity, Interest in Diversity, Peacefulness). Finally, integrating qualitative data with ratings enabled outliers to speak as loudly as the majority, an especially useful feature for a small sample from two nations. Strict analyses of means would have masked important, potentially discrepant views. Next, I have presented limitations of this dissertation.

### **Limitations**

For a dissertation with three phases that each addressed their own research question within a design that linked those phases, I have discussed limitations (a) overall, (b) regarding school-level sampling and its downstream impacts, (c) for each of the three phases individually, and (d) for the construction of the discrete-choice measure.

#### *Overall*

Not surprisingly after 13 total filings to two institutional review boards (two submissions, eight amendments, and three continuous reviews), this study has undergone considerable evolution. Exemplifying one challenge incurred by the study timeline, the 270-article literature review that provoked this project predated Reysen and Katzarska-

Miller (2018), a comprehensive review of global citizenship as a psychological construct. Fast becoming prominent in this field, the influence of their work can be found throughout this dissertation. However, I hypothesized five global citizenship dispositions based on extant literature toward the end of 2016. Had the Reysen and Katzarska-Miller text, which overlapped considerably with—and extended far beyond—the literature I reviewed, been released earlier, the dispositions that I put forth might have differed in number, composition, and/or articulation. That said, my hypotheses framed only the outset of this dissertation. Interpretations of data from 11 alumni/ae, 18 global citizenship scholars, and 182 secondary-school students guided it from there.

Additionally, English-language dominance, mine and that of an overwhelming number of researchers, especially those who published relevant measures, impacted this dissertation. Research on global citizenship, particularly efforts to measure this construct with its evident linguistic, international, and intercultural considerations, would benefit tremendously from partnerships that cross geographic borders. Temporality might also have influenced the findings upon which I developed my measure (Türken & Rudmin, 2013), especially given the current and rapidly changing global environment. This dissertation began long before COVID-19 arrived but was principally written and then defended with the ongoing specter of possibly shifting values around globalism. This timing raises questions about the long-term utility of my measure. The extent to which the aftermath of a global pandemic might alter the social validity that alumni/ae ascribe to global citizenship education or the content that scholars would warrant for inclusion in a relevant measure might be in flux. Only through iterative retesting of my measure will I be able to determine the durability of what I have learned through this dissertation.

### *School Selection*

I have identified three limitations regarding school selection. First, I needed partnerships to recruit alumni/ae and enrolled students, necessarily biasing selection. On one hand, participants' experiences with and perceptions of global citizenship would be influenced by attending schools led by educators who would volunteer for a dissertation of this kind. Moreover, I could only partner with schools whose leaders received my invitation (in three instances, invitation emails bounced back,<sup>53</sup> so those schools likely never heard about this project). On the other hand, individuals affiliated with global citizenship education were likely most familiar with some of the potentially arcane aspects of this educational type that is growing fast, but still a niche.

Still, I screened in nations and schools for potential participation based on multiple characteristics to emphasize data comparability.<sup>54</sup> I designed this dissertation with an emphasis on internal validity, concerned less with making claims about the generalizability of its findings. Iteratively, I can further test my discrete-choice measure to examine variance based on the school characteristics that drove my sampling: nation, language of instruction, sector, sex of students, day/boarding, and urbanicity.

Second, the educational contexts of Sweden and the United States shared more traits than most nations with schools that offer International Baccalaureate programmes. Clearly, this measure is not ready for use in most national contexts, especially developing world nations where students likely have more pressing concerns than global citizenship.

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<sup>53</sup> Also, some Phase 2 recruitment emails to scholars bounced back, and school designees reported the same experience during outreach to alumni/ae (Phase 1) and students' parents/guardians (Phase 3).

<sup>54</sup> This dissertation did not feature a convenience sample in the classic sense, neither for its approach or the colloquial use of "convenience" given that school-level attrition at the most nearby sites compromised the original design. More proximal domestic schools were less convenient than peer institutions in Sweden.

Still, the nations featured in this dissertation presented systematic differences, and the field of comparative education lacks a unified methodological approach for making international comparisons (Bray, 2010). As one issue that might affect the zeitgeist of a school community, potentially influencing how it educates for global citizenship, given its local-to-global tension (Ahmad, 2013; Coetzee, 2014; Veugelers et al., 2014), enrollment at the U.S. school in this dissertation grossly exceeded the combined enrollments of the two schools in Sweden. Without raising a direct student-level confound, this school-level difference probably contributed to variation in how educators interacted with students as members of local and global school communities. Even though recruitment in Sweden was far stronger than in the United States, the wide differences in participation did not offset possible variance in how each local and national context might have inflected global citizenship education.

Third, school withdrawals in the United States created an international imbalance, compromising a design intended to control for site-specific aspects amid potential nation-level differences. With two schools in Sweden and one in the United States, such control was lost. Then, weak recruitment at the remaining school in the United States, likely due to an active parental permission requirement, left this study without enough observations to perform initially planned item-response theory methods. I had barely enough observations for traditional factor analysis. Most problematically, school-level attrition and inadequate sampling left me only able to design, not test, a discrete-choice measure. Although I assumed that recruiting domestically would be more convenient than doing so internationally, I learned not to conflate proximity with convenience.



### *Phase 1: Social Validity Trial*

Limitations in Phase 1 pertained to recruitment, collection of data, and analysis. I recruited an overwhelmingly female-dominant sample. After attempts to oversample alumni were unsuccessful, I needed to move this dissertation toward timely completion. Because participation depended upon self-selection, the sex-based disproportionality might reflect greater conceptual interest in global citizenship among females.<sup>55</sup> Several alumni showed initial interest but could not accomplish the three Phase 1 tasks in the time allowed. An email from one initially interested alumnus provided further insight to possibly explain the sampling imbalance. After reviewing my information about the nominal group technique, he asked if he could respond in writing only, because he expected to “only be talking 10% of the time and listening 90% of the time, which sounds pretty boring, tbh [to be honest]”. His statement might exemplify some individual or male-specific conversational expectations. Or his response to the description of a nominal group might reflect the technique doing its job: mitigating an outspoken participant’s tendency to dominate a group (Delbecq & Van de Ven, 1971; Jones, 2004).

Regarding data collection, I primed the groups (i.e., providing topical information prior to brainstorming activities; Dennis et al., 2013). I emailed participants the five hypothesized dispositions, so they could explicitly examine my interpretations of concepts for which literature has shown vast definitional disagreement (Reysen & Katzarska-Miller, 2018). Priming can enhance a group’s ability to make informed comparisons about relevant topics, but also can homogenize data (Dennis et al., 2013),

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<sup>55</sup> U.S. postsecondary data on study abroad, a concept that touts global citizenship as a core outcome (Mason & Thier, 2018) shows females to participate at twice the frequency of their male peers, a disproportion that has grown in the last decade (Redden, 2019).

potentially inflating consensus. Alumni/ae endorsed all five hypothesized dimensions, but produced three of their own, perhaps mitigating concerns about inflated consensus. Based on alumni/ae data, I retained only 2-of-5 hypothesized dispositions.

Additionally, the rating scale might have limited this dissertation. Perhaps surprising within a dissertation that culminated in a forced-choice measure, the 9-point scale I adapted from Rubin et al. (2006) had a true middle (i.e. 5) with a response range meant to capture ambivalence (i.e., 4-6). By design, Phase 1 created space for alumni/ae, who were experiential and not technical experts (Olsen, 1982) on global citizenship education, to mull over the construct's ambiguity. By contrast, I used a 4-level, Likert-type scale in Phase 2, enabling scholars to clear away any ambiguity that might invalidate an item's content (Dillman et al., 2014; Rubio et al., 2003).

Still, alumni/ae produced very few solidly negative ratings and far fewer ambivalent ratings than a normal distribution of data would. Consequently, any rating  $\leq 6$  might have exerted undue influence on the analyses, given such a relatively small sample. Perhaps a scale with as many as nine levels would be more useful with a larger sample for which distributional effects might be more stable. Yet, distributions were largely consistent across national contexts, and I seem to have offset this potential limitation by having participants rate each of three criteria using the 9-point scales. In doing so, I could judge whether outliers or majority perceptions were driving any disconnects between, for example, perceptions of social validity regarding personal versus professional benefits/limitations (e.g., Plural Geographic Allegiance and Social Justice Orientation). Furthermore, the nominal groups' goal of consensus might have altered definitions for some dispositions, rendering them less appealing for endorsement. For example,

participants' commentary suggested that the definition of Peacefulness might have become too sanitized to be socially valid for alumni/ae.

In addition, constraints for designing a suitable discrete-choice measure prompted a need to retain 3-5 dispositions for subsequent phases, a fact that influenced interpretations of alumni/ae's descriptive quantitative and qualitative data. Alumni/ae were largely consistent in their comments and ratings, enhancing my confidence that the four retained dispositions would carry social validity for other groups of alumni/ae. Still, the small sample raised questions about the generalizability of whether Appreciation of Multiple Perspectives, Intercultural Sensitivity, Interest in Diversity, and Plural Geographic Allegiance were *the most* socially valid dispositions in all cases. Within this study, the four excluded dispositions (Peacefulness, Social Justice Orientation, Preference for Global Communication, and Skepticism) have demonstrated merit for future research regarding their social validity and their measurability. Correspondingly, cross-national differences became useful analytical criteria, but school-level attrition meant those 'cross-national differences' could be interpreted as differences between a single school from one nation and two schools from another. Thus, observed cross-national differences might truly be school-community differences instead. Often, global citizenship education studies have included unfounded generalizations about the national contexts (Goren & Yemini, 2017a). Unfortunately, school-level attrition undermined my attempt to combat that concern in this dissertation.

Finally, to minimize burden on participants who had already spent 2-3 hours on this project, I opted not to conduct a *post hoc* member check, which can enhance reliability (Merriam, 2009). Although, nominal groups' iterative, participatory nature and

my additional tactics to ensure that participants had multiple opportunities to be heard on each question and topic of interest served as an *in vivo* member check. Importantly, the combination of Inflexion's Consensus-Building Tool and Zoom made international research more convenient, enabling participants to provide real-time insights on each other's thoughts and thought processes (through their spoken words and chat/instant message features), while the researcher facilitating the focus group could remain engaged with their production of rich, thick qualitative data in a way that ensured all insights would be captured digitally. In fact, these digital tools seemed to minimize the influence toward conformity that can be typical of face-to-face focus groups (Tseng et al., 2006).

### *Phase 2: Content Validity Trial*

Phase 2 also encountered limitations with recruitment and data collection. By drawing upon potentially conflicting ideas from a diverse panel of scholarly experts whose topic of shared interest features contested definitions, I welcomed varied ontologies, which enhanced and challenged my data analysis. Regarding recruitment, I initially targeted June 2019, the Global North's summer, expecting most potential panelists to have fewer competing priorities than (e.g., teaching, academic-year research projects). Unfortunately, Phase I delays pushed recruitment to August; some would-be participants could not commit due to preparations for the new school year. Thus, I reached a satisfactory rate for response (60.29%), but a lower rate for participation (26.47%).<sup>56</sup> With several scholars not following through on initial indications that they

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<sup>56</sup> Indicating potential similarity between some participants and some declining respondents, one respondent declined regrettably due to scheduling constraints, describing the current study as "very important." That statement echoed language from several consenting participants as they expressed their interest. The extent to which those groups are similar overall and whether any non-respondents viewed this dissertation as important, but did not respond for other reasons, is not known.

would participate, including after face-to-face meetings at conferences, multiple emails, and extended timelines to complete the review task, I must wonder about how well my panel has represented a contested field with busy people who have specific expertise.

Regarding collection, my decision to randomize items might have guarded against order effects but led to unanticipated participant frustration, which could have influenced responses in unmeasurable ways. To develop a discrete-choice measure, I needed scholars to critique many seemingly similar items. Some respondents characterized such items as redundant<sup>57</sup> and/or suggested that I cluster them. Additionally, when a scholar rated an item  $\leq 3$  for any criterion, Qualtrics prompted their open-ended feedback on the whole item. Consequently, participants sometimes marked “ditto,” “same,” or “see previous” to an issue they flagged repetitively across items. But participants did not encounter items in the same order that they appeared in my dataset from Qualtrics, creating frustrations both for participants when providing data and for me when analyzing those data. Fortunately, my integrated approach allowed me to apply qualitative feedback from any given item to improve any other item, regardless of numerical rating. Still, had I clustered items (I could still have randomized the order within clusters), I likely would have reduced respondent burden, a helpful lesson for my future survey projects.

Relatedly, Scholar1 questioned the logic of rating an item as dispositional or not, or as culturally universal or relative, if they already rejected the item’s premise for being irrelevant to global citizenship. Thus, Scholar1 marked 1 = strongly disagree for all three criteria in such instances, providing commentary that allowed me to flag them for further

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<sup>57</sup> The appearance of item redundancy can be useful for constructing discrete-choice measures. Estimating parameters for a factor (e.g., a disposition) from a discrete-choice measure requires that factor to be operationalized many times over,  $\geq 20$  (Anguiano-Carrasco et al., 2015), so items operationalizing that factor can compete repeatedly against items that operationalize other factors.

analysis. However, I do not know if other scholars also approached responses with a similar if  $p$  then  $q$  logic that linked relevance to disposition to cultural universality. Upon further review, the items' design certainly implied that logic but did not mandate it. In the future, I should redesign items to enable a clearer distinguishing of criteria. Last, scholars who rated one criterion at 3 and the other two criteria at 4 were prone to generic comments (e.g., "Ok"). Thus, if the instrument prompted commentary only for ratings  $\leq 2$ , I might have generated less qualitative data, but it might have been more prescriptive.

With survey literature divided on whether progress bars are beneficial for longer surveys (Dillman et al., 2014), I opted not to include one, which one scholar recommended to minimize respondent burden. There were also instances of user error (e.g., a scholar requesting new access to the instrument after marking strongly disagree for an item they meant to endorse as strongly agree). Another scholar reported a broken link upon trying to access the survey. I resent the original link, and the problem had resolved itself. The latter issues did not seem to unduly burden participants.

Ontologically, I encountered a range of opinions, as expected in a content validity trial (Rubio et al., 2003). I received some suggestions that could not be reconciled, from outliers (e.g., one scholar's view that nearly all items aligned more with an adjacent construct rather than global citizenship)<sup>58</sup> or a few participants who entirely rejected the notion of cultural universality for global citizenship. Not surprisingly, content validity statistics were stronger for relevance and dispositions than universality, but I remain confident about the decision to recruit ardent relativists into this study.<sup>59</sup> Therefore, my

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<sup>58</sup> Naming the construct of interest, which literature shows to overlap conceptually with global citizenship, would render the scholar identifiable, so I have not done so to protect that scholar's anonymity.

<sup>59</sup> One scholar who declined to participate said, "I am not an appropriate person to ask about an exercise designed to measure [global citizenship] as I have severe reservations about the possibility of such an

novel approach of experts rating items for multiple criteria of content validity added rigor and allowed an important scholarly camp to influence the measure. With only one criterion, I would have retained as many as 106-of-120 items (88.33%), producing a considerably less-nimble and less-targeted measure.

### *Phase 3: Factor Structure Trial*

Phase 3 limitations stemmed mainly from poor recruitment at the school in the United States. This situation became predictable once its district mandated active parental permission, unlike the schools in Sweden that allowed passive permission.<sup>60</sup> This district's decision contributed strongly to vastly different participation rates for schools in Sweden (89.74 and 70.67%., respectively) and in the United States (3.61%). Importantly, I could only calculate a participation rate (i.e., students who responded / students enrolled in the relevant grades), not a true response rate. U.S. school designees contacted some number of parents/guardians seeking permission, but I was divorced from that process, so I could not produce a denominator for a true response rate. Furthermore, data collection at the U.S. school occurred in March 2020, when school closures for the COVID-19 pandemic denied any opportunity to gather additional data.

Consequently, I abandoned plans for item-response theory models and resorted to confirmatory factor analysis with the small sample that I recruited. The model did not meet the fit thresholds I had set (Hu & Bentler, 1999), but several caveats might be useful for interpreting the suboptimal model fit indices that I reported. Perhaps they were more

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exercise.” That scholar suggested measurement-focused colleagues instead, but that scholar’s view would have added value through dissonance, ultimately setting an even higher bar for content validity.

<sup>60</sup> The University of Oregon Institutional Review Board approved passive consent for this study, which met the federal definition for minimal risk (Code of Federal Regulations, 46.110) and sought to use a common survey research tactic (Pokorny et al., 2001).

demonstrative of an underpowered, complex measurement model than poor factor structure. First,  $\chi^2$  analyses are highly sensitive to small size, making the significant test a possible result of Type I error. Second, observed values for the Tucker-Lewis Index (.20 below) and Standardized Root Mean Square Residual (.005 above) were not far from *a priori* criteria, especially the latter. Third, the Tucker-Lewis Index penalizes complexity (Kenny, 2015), an apt description for a measurement model that necessitated 249 parameters within a study that could only generate 182 observations.

Similarly, Anguiano-Carrasco et al. (2015) compared psychometric approaches with items they made for a discrete-choice measure, using confirmatory factor analyses and Thurstonian 1-parameter logistic models: the latter being the intended approach for the current study's initial design. They reported a significant  $\chi^2$  test and a Root Mean Square Error of Approximation nearing .20, despite an acceptable Comparative Factor Index (.91). Model-fit challenges for their study and this dissertation both have suggested that confirmatory factor analyses might not be the best approach for developing discrete-choice measures and/or typical model-fit indices might not be the best indicators of overall quality for factor structure trials regarding this type of measure.

To offset these limitations, I emphasized multiple indicators for every statistic I examined, following the same logic that led me to employ mixed methods and multiple criteria in Phases 1 and 2. First, I examined an array of descriptive statistics at item levels and aggregated across dispositional domains to exclude items that demonstrated extreme skewness or missingness (Brown & Maydeu-Olivares, 2011; Türken & Rudmin, 2013). Second, I randomized items for a novel test of Cronbach's  $\alpha$  sensitivity to the number of items per disposition. Third, I employed maximum likelihood estimation to handle the



minimal occurrence of data missingness (Schlomer et al., 2010), robust standard errors, and multiple fit indices (Kline, 2015). Fourth, I followed strict criteria for inter-item correlations (Clark & Watson, 1995) and factor loadings (Nye & Drasgow, 2011). Ultimately, the factors' covariation suggested a viable measurement model to attempt to develop blocks for a discrete-choice measure (Anguiano-Carrasco et al., 2015).

### *Constructing the Discrete-Choice Measure*

In constructing the discrete-choice measure, I experienced two limitations. First, unequal exclusion of items across dispositions required me to repeat items for two blocks, in some instances. When estimating overall and factor scores from a discrete-choice measure that repeats items, one must constrain error terms and variances to allow the model to converge (Brown & Maydeu-Olivares, 2011). Consequently, I may still need to expand the number of items that operationalize dispositions such as Appreciation of Multiple Perspectives or exclude that disposition from future iterations of the measure.

Second, designers of discrete-choice measures typically aim to produce a roughly equal number of positively indicated and negatively indicated items with blocks typically reflecting two of one and one of the other (Anguiano-Carrasco et al., 2015; Brown & Maydeu Olivares, 2011). Likewise, self-reports can operationalize a construct more comprehensively when its items reflect positive and negative aspects (Günel & Pehlivan, 2016; Sheehy-Skeffington, 2013). Of course, Phase 1 data were so often positive, and scholarly suggestions raised few negative aspects of global citizenship. Moreover, item writers seeking to tap into a construct's negative aspects too frequently simply default to using negation (Brown & Maydeu Olivares, 2011). Negated items might or might not indicate the inverse of a positively indicated aspect (Anderson et al., 2017).

Furthermore, negation could also raise an already high degree of cognitive load that respondents are likely to experience with discrete-choice measures (Anguiano-Carrasco et al., 2015; Anguiano-Carrasco et al., 2017; Brown & Maydeu Olivares, 2011). Discrete-choice measures with K-12 students have shown some promise (e.g., Anguiano-Carrasco et al., 2017). But more studies are needed to conclude the extent to which students in secondary schools can persevere through being compelled to wrestle with a series of frustrating comparisons, especially when items employ negation to tap into a construct's less-desirable aspects (Brown & Maydeu Olivares, 2011).

Theoretically, another way to generate more comparisons per disposition would be to include what might be called a 'ghost' domain. That 'ghost' domain would feature an adjacent, but theoretically distinct, latent trait. For example, a triad might include one item each from two different global citizenship dispositions and a third item from a 'ghost domain', perhaps openness from the Big Five. But there is not yet a literature base to describe promising practices for including 'ghost' domains in discrete-choice measures. It seems clear, however, that before including a 'ghost' domain in the current discrete-choice measure, one would first need to test its items' correlations to scores from a social desirability indicator so one knew best how to combine items from the 'ghost' domain and the dispositions of interest (Anguiano-Carrasco, personal communication).

### **Future Directions**

In concluding this dissertation, I have established a program of future research that allows me to continue asking questions and to address limitations. The process of refining a measure that is sound enough to enable valid inference-making never ends (Rubio et al., 2003). I have merely completed some initial steps, leading to my three-

prong plan to grow this dissertation into a program of research. First, I intend to continue development of my discrete-choice measure, so it is optimally suited to assess global citizenship dispositions among students in secondary schools. That process will involve replicating the latter portions of this dissertation with a larger sample (at least  $n \geq 1,000$ ) to employ the robust item-response theory methods I had intended to use. Once I have optimized the measure psychometrically, I could begin iteratively testing it, partnering domestically and internationally with schools and researchers that represent various contexts. My goal would be maximal understanding of the degree to which the measure would require cultural adaptations that might facilitate the widest possible use in the largest possible swath of secondary schools. To do so, I would need to move the sampling frame beyond Westernized contexts and engage in deep adaptation engagement about the sociocultural factors that might be most salient to respondents in those contexts. By working with cultural experts, not just meeting item-response theory needs by adding new respondents or providing linguistic translations only, I could develop a measure that recognizes global citizenship's potential to vary by context.

Of course, my measure only taps into global citizenship dispositions. The second prong would involve identifying and/or producing measures that can collectively account for a fuller dimensionality of global citizenship (i.e., its dispositions, knowledge, skills, and behaviors, all as they pertain to needs of students and educators in secondary schools). With discrete-choice measurement, I have applied a method of using relative comparisons that might prevent respondents from gaming an assessment by assigning numbers haphazardly, thus possibly reducing social desirability bias in a way that seems to gather data efficiently. But analog measures for knowledge, skills, and behaviors might

still require additional inquiry and exploration. Eventually, a battery of global citizenship measures that each tapped into dispositions, knowledge, skills, or behaviors, would enable tests of each measure's predictive and/or concurrent validity and allow schools to assess students' developmental progress (Deardorff, 2006).

As a third prong, the multi-faceted datasets I built for this dissertation can afford a series of parallel research projects. I have already begun to determine whether a discrete-choice measure could be used descriptively with smaller samples to produce proportions of respondents that endorse items from a given disposition, rather than estimating factor scores as one would with item-response models for large samples. With a small sample, one might be able to use a discrete-choice measure to see what proportion of respondents endorse a given disposition as "most like me" or "least like me." Proportions might even provide more practical utility for educators than factor scores and their added complexity (Thier, in preparation). Other potential studies include:

- differentially mapping the dispositions that I retained from those I excluded in Phase 1, tracing the various ways global citizenship research has treated them;
- interrogating lay person/expert perspectival differences, such as which validity and for whom (my data suggest the possibility that social validity and content validity might be in competition, under certain conditions. Understanding those conditions could add value for global citizenship and other areas of research);
- correlating scores of scholars' item ratings to detect potential patterns for dispositions or if I were to group scholars by characteristic (e.g., scholars who have lived and worked primarily in the United States v. those with more globalized personal and professional circumstances);

- in-depth qualitative analysis of scholars' comments, potentially mixed with their ratings, to isolate areas where the field tends to fragment;
- studying the “double effect” of Plural Geographic Allegiance: its relative ambivalence among alumni/ae and relative importance to scholars or the difficulty it presents for item writing when trying to capture the local-to-global tension; and
- distinguishing why some dispositions seemed more socially valid from a personal than a professional standpoint (e.g., Social Justice Orientation), or vice versa.
- applying my method for detecting social desirability loadings in the most prominent measures in field, examining the possibility that social desirability bias is endemic to the entire construct and/or its relevant measures.

This dissertation that I designed to reconcile practical and scholarly tensions did not solve all the problems of measuring global citizenship dispositions among secondary-school students. But it has developed a self-report alternative that has shown proof of concept among reasonably diverse groups of people who have experienced global citizenship education, thought deeply and written much about global citizenship education, and who have engaged daily in global citizenship education.

## APPENDIX A—REFLEXIVITY STATEMENT

Readers of this dissertation should know that I identify as a global citizenship education proponent and global citizenship educator, although one who acknowledges large impediments to normalizing this type of education in U.S. public secondary schools. To that end, I recognize that researchers' lived experiences influence their beliefs (explicit and implicit), assumptions (stated and unstated), and applications of knowledge (by inclusion and exclusion). In turn, these factors influence researchers' ontological framings of the world and their epistemological approaches to study that world. Considering the complex interplay of these factors and their potential impacts on the dissertation I have conducted, I have embraced DeCuir-Gunby and Schutz's (2016) tripartite approach to developing a theoretical framework for a dissertation.

To DeCuir-Gunby and Schutz (2016), a theoretical framework should subsume one's worldview and subjectivity, as well as other scholars' substantive content theories. An *inquiry worldview* should feature a researcher's "current overarching beliefs regarding how you see, understand and interpret how research investigations wor[k]" (p. 18). A *subjectivity statement* should explain a researcher's "relationship with the topic," allowing readers to consider a study's contribution against the common occurrence in which a researcher inquires in an area that links to one's personal experience (p. 25). And the *substantive content theory* should serve as the source of the literature review, an opportunity for a developing scholar to identify key debates, examine positions of influential authors, and "add to a conversation that has been going on for a time before you got there" (p. 26). DeCuir-Gunby and Schutz also note that most dissertations that employ mixed methods follow multiple substantive content theories. In the ensuing

sections, I have presented an inquiry worldview and subjectivity statement to establish the arguments that governed my dissertation. In Chapter I, I have presented the substantive content theories that guided my dissertation.

### **Inquiry Worldview**

Like Kerkhoff (2016), whose dissertation developed a measurement of teachers' global readiness, I value pragmatism and epistemological pluralism. In concert, these concepts have compelled researchers to ask questions that govern their methods for investigating problems of practice. Pragmatism and epistemological pluralism require researchers to value and validate multiple rationalities from an array of perspectives. Pragmatic and plural approaches are particularly useful to study global citizenship given the decentering that one must engage in to become a citizen of the world, rather than feel overwhelming attachment to individual nations. Regarding globalizing pedagogy, Kerkhoff noted that specific bodies of knowledge are less important than knowing "how to question and how to learn" (p. 6). Therefore, a singular approach would be unfit for purpose within a systematic inquiry to understand and measure global citizenship. Thus, I considered mixed methods to be an essential design element for this dissertation.

### **Subjectivity Statement**

My research agenda stems from a desire to disrupt two forces that limit the uptake of global citizenship education in U.S. public secondary schools: (a) weaknesses in global citizenship's conceptual and measurement bases and (b) inequitable opportunities to access global citizenship education. I have waded into scholarly debates that are rife with international importance due to my passions for education, global citizenship, and the connection between them. As someone who prefers the arduous path, my interest in

global citizenship education might emerge from a compulsion toward a pursuit Davies and Pike (2009) have characterized as “necessary, highly significant, but extremely challenging” (p. 62). Relatedly, President Kennedy’s (1963) rhetorical cadence has continued to capture my imagination, although I was born 15 years too late to hear any of his speeches without a recording. Especially this excerpt from his commencement address at American University—five months before his assassination—has inspired me to understand and expand access to global citizenship education:

Reason and spirit have often solved the seemingly unsolvable, and we believe they can do it again...And if we cannot end now our differences, at least we can help make the world safe for diversity. For in the final analysis, our most basic common link is that we all inhabit this small planet. We all breathe the same air. We all cherish our children’s futures. And we are all mortal.

Although his words have rung in my ears and chilled my spine every time I read or hear them,<sup>1</sup> I still needed nearly a decade in a small North Carolina town to find my professional commitment: ensuring every public-school student completes Grade 12 as global citizens. In that town (pop. 25,342)—where as recently as 2012 the local newspaper ran a front-page advertisement for a Ku Klux Klan crosslighting—I taught English and journalism to middle and high schoolers. Later, I implemented and directed five international studies programs. My experiences serving rural, urban, and suburban areas, particularly juxtaposed to my first 27 years living in and around New York City, propelled me to help schools prepare young people for an age of global interdependence.

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<sup>1</sup> And apparently now as I type them for the first time.



Of course, insinuating that my interest in global citizenship education stems simply from observing deficits in that domain while working in the American South would be incomplete. Early on, my life affixed some rather powerful blinders to my eyes. My parents, both elementary school educators, settled our family on Long Island to avoid my brother and I attending New York City's public schools. True to its well-advertised statistics, the school they chose bred copious Ivy League acceptances and sent nearly all its students to four-year colleges. Our school produced two other interrelated crops: white privilege and limited understanding of cultural difference. Due to spending my formative years on Long Island, I was initially oblivious to those concepts. Including the college semester when I lived in Italy, my four undergraduate years at New York University might have reinforced my ignorance of cultural difference, rather than counteracted it.

Ironically, that small North Carolina town developed my worldview more than living in the planet's most populous and diverse city did. If not for attending a community college lecture during my first year of teaching in North Carolina, I probably would not have developed my commitment to global citizenship education. The speaker exhorted K-12 educators to globalize curricula and pedagogy. He told us to read Friedman's (2005) *The world is flat: A brief history of the 21<sup>st</sup>-century* instead of Wong and Wong's (1991) *First days of school: How to be an effective teacher*.

I quickly identified similarities between the New York schools I attended and the North Carolina schools where I taught. Both focused inwardly, constructing cultural bubbles that impeded students from forming broad or inclusive worldviews. I felt compelled to learn how to penetrate those bubbles. In 2008, a solution materialized. My school district began preparations to implement International Baccalaureate programmes,

which are designed, among other outcomes, to develop global citizens. En route to epiphany, the district chose me as the new International Baccalaureate programme's first teacher. I received incomparable professional development. Within two years, the superintendent tapped me to implement and direct a three-school International Baccalaureate partnership to accommodate our overflowing wait list. Our programmes doubled in popularity in fewer than three years. Our students led the state in standardized test scores; our seniors led the county by orders of magnitude in every college acceptance and scholarship metric. In 2013, my boss credited our International Baccalaureate programmes as a major reason why he won the state's superintendent of the year award.

Amid the excitement of families and local media celebrating our successes, I realized that we did not know what we were doing. We talked about creating global citizens, but none of us could define what that meant or measure progress toward that goal. We just assumed we were doing good things. We served a non-representative 7% of the county's students, so I built a coalition of stakeholders that wanted full participation, not just students from the affluent suburbs. A rival faction, including some of the teachers who I had trained, wanted to restrict access for select students. As this debate intensified in frequency and contentiousness, I realized that I lacked the skills to win hearts and minds to move the programmes forward. I needed to learn more about how to define, measure, and scale up global citizenship education so it would not belong to a select few. My partner and I packed up our daughters (then ages 5 years and 10 months) to drive nearly 2,800 miles across the United States so I could study at the University of Oregon.

I have maintained professional proximity to the construct of global citizenship for more than a decade as a secondary-school educator, administrator, and researcher. I

began training to teach in the International Baccalaureate Middle Years and Diploma Programmes in 2008. Two years later, I had begun to coordinate those programmes within and across schools. By 2012, I had become a leader of International Baccalaureate's professional development workshops and a site visitor to evaluate the schools it was vetting for possible authorization. The next year, I co-organized the first International Baccalaureate Career-Related Programme in the state of North Carolina and an International Baccalaureate World Student Conference at Wake Forest University. By 2014, I was leading or co-conducting a research project each year that organizations such as International Baccalaureate, the California Department of Education, and the California Education Policy Fund had commissioned.

So, I came to research from leading classroom, school, and district initiatives that purportedly emphasized global citizenship education. I became well-acquainted with education leaders' needs to justify their resource allocations to decision-makers who occupied higher rungs on organizational charts. I was especially aware that, in many state-funded educational contexts, global citizenship was considered nice to have, but not an essential investment of limited resources. Therefore, I knew that convincing decision-makers would likely raise the burden of proof for leaders who believed that global citizenship education was worthwhile and that it worked.

These experiences reaffirmed my singular contention: any school that does not prepare students to be global citizens is serving its community inadequately. I think often of educators' axioms such as 'we treasure what we measure and measure what we treasure' and 'assess what you value so you can value what you assess' (Amiot, 1998; Davy, 2011). These phrases fit better on coffee mugs than in educational conversations,

but they often shape opportunities in schools. Therefore, I came to realize how reliable measurement could facilitate valid inference-making about students' global citizenship dispositions, potentially circumventing at least one factor that continues to thwart the scale up of global citizenship education.

Understanding that many educational decision-makers value metrics to reflect how well a school, educator, and/or students are doing in a given domain—and how to improve—I began examining available measures of global citizenship and related constructs. I found several areas that needed remedy, as I have presented in Chapter I. To support leaders of global citizenship education programs, like that one I had been, I designed this study to develop a measure that would address those challenges.



## **APPENDIX B – SCHOOL INFORMATION SHEET**

### **A Global Set of Dispositions? Applying Discrete-Choice Method to Measure Global Citizenship Dispositions of Secondary-School Students in Multiple Nations**

1. **Purpose of the study:** The number of schools embracing global citizenship education through International Baccalaureate (IB) and other providers is expanding daily. But there are no measures to reliably help school leaders formatively analyze instructional methods or provide evidence for claims about local needs for implementation, improvement, or scale-up of global citizenship education programs that are working well. This project aims to support school leaders that have adopted or intend to adopt pedagogical models to prepare students as global citizens.
2. **What does the research entail?** Schools participating in this study would be asked to
  - a. Email selected alumni of your school who graduated after undergoing the IB Diploma Programme, inviting them on my behalf to participate in an online group interview [I will provide a recruitment email].
  - b. Email parents of your school's current students with a passive/active permission form regarding student participation in a brief survey in Fall 2018 [I will provide a permission form].
  - c. Provide me with grade-level lists of students' first and last names with no other student information so I can document students' assent to participate.
  - d. Arrange minimally invasive, staff-supervised time during the school day for participating students to complete an online survey (e.g., during a homeroom period) that should take 15-30 minutes. For a pilot in early Fall 2018 with your school's Grade/Year 9 and 10 students, I would request that school-designated staff oversee the process. For the final administration in late Fall 2018 with your school's Grade/Year 11 and 12 students, I would request that I visit your school. The final version uses comparative rankings rather than a typical format (such as 1 = Strongly Disagree; 5 = Strongly Agree). Consequently, I might be needed onsite to answer format-related questions for the final administration.
3. **Feedback to participating schools:** After each of my project's phases of the data-collection conclude, your school leadership team would receive an executive summary of findings with information about
  - a. what dispositions alumni from IB schools in multiple nations find beneficial and limiting in their personal and professional lives after completing a global citizenship education program during secondary/high school



- b. what research-active scholars think should or should not be included in a measure of global citizenship for students at this point in their development
- c. what a reliable measure of global citizenship dispositions for use with secondary students would entail, as well as interpretations of your students' results
- d. how using that measure might vary by students' nation, sex, global citizenship education participation, and/or race/ethnicity, as well as results disaggregated by those factors

As papers are presented or published and the dissertation is finalized, school leaders will also receive instructions for how to access those documents in their entirety.

4. **Honorarium:** I will provide a USD \$1,000 honorarium intended for use in a student-focused event of the school's choice (e.g., a school performance, prom, or other academic, cultural, or social purpose) for schools that meet all three of the following criteria:
  - a. Identifying 3-4 qualifying alumni to consent *and* be available for participation in a focus group that I will conduct through computer-mediated/digital means
  - b. Using a standard script when introducing a survey to qualifying students in an attempt to facilitate that  $\geq 60\%$  of Years 9 and Year 10 students assent (with active/passive parental consent) to participate in and respond to all statements in the online pilot administration
  - c. Using a standard script when introducing a survey to qualifying students in an attempt to facilitate that  $\geq 80\%$  of Years 11 and Year 12 students assent (with active/passive parental consent) to participate in and respond to all statements in the final administration that I would conduct on site.
5. **Contacts:** I am happy to answer any questions you have about the study. Please email me at [mthier@uoregon.edu](mailto:mthier@uoregon.edu) or call me at (country code 001) 541.214.3207 with any questions.

Thank you for considering participation in this project. Your support would be greatly appreciated.

***Principal Investigator: Michael Thier; Faculty Advisor: Dr. Charles R. Martinez, Jr.***

**APPENDIX C – SCHOOL RECRUITMENT EMAIL**

Dear [NAME OF SCHOOL HEAD AND/OR COORDINATOR]

My name is Michael Thier and I am a doctoral student at the College of Education at the University of Oregon. I was an International Baccalaureate educator and Diploma Programme coordinator before beginning my Ph.D. studies.

I am ***inviting your school to participate in research*** to help develop a measure of global citizenship dispositions. The measure would be designed for use with students in schools that share your school's commitment to international education. The Institutional Review Board (IRB) at the University of Oregon has approved this study, which has also been sponsored by the Ryoichi Sasakawa Young Leaders Fellowship Fund (Sylff) program for international research.

You might be interested in this study because you may share the struggles of many education leaders who offer students a global citizenship education but must depend upon anecdotal evidence to support the idea that a globalized approach is better than the traditional, nationally focused approach. As a classroom teacher, programme coordinator, and international studies director, I have faced the common struggle of convincing some provincial families, policymakers, and funders that global citizenship education can benefit students and their communities. The measure I am attempting to develop will ***help school leaders like yourself provide evidence to aid the implementation, improvement, or scale-up of global citizenship education programs so they can work for as many students as possible.***

The attached file provides more information about my study. I welcome any questions you may have.

If you or any other members of your school leadership team have time to discuss this study, I would welcome the opportunity.

Thank you in advance for your kind attention.

Sincerely,

Michael Thier  
Ph.D. candidate  
University of Oregon

**APPENDIX D – PHASE 1 ALUMNI/AE RECRUITMENT EMAIL**

Dear [ALUMNUS/A],

My name is Michael Thier and I am a doctoral student at the College of Education at the University of Oregon. I was an International Baccalaureate educator and Diploma Programme coordinator before beginning my Ph.D. studies.

I am ***inviting you to participate in research*** to help develop a measure of global citizenship dispositions. The measure would be designed for use with students in the kind of secondary/high school you used to attend. The Institutional Review Board (IRB) at the University of Oregon has approved this study, which has also been sponsored by Ryoichi Sasakawa Young Leaders Fellowship Fund (Sylff) program for international research.

Participating in this study would give you an opportunity to reflect on the education you received in a programme meant to focus on global citizenship. You could hear experiences of other students who attended similar schools in Sweden and the United States, the two nations of interest for this research. You can share your experiences with them. By hearing from alumni of International Baccalaureate Diploma Programmes like yourself, I can develop a way to measure which aspects of global citizenship alumni have found beneficial and limiting in their careers and personal lives. The measure I intend to develop can ***help schools provide or improve global citizenship education experiences for future generations of students, expanding access as widely as possible.***

I welcome any questions you may have about this study. If you are interested in participating, please email me at [mthier@uoregon.edu](mailto:mthier@uoregon.edu).

Thank you in advance for your kind attention.

Sincerely,

Michael Thier  
Ph.D. candidate  
University of Oregon





**APPENDIX E – PHASE 1 FOCUS GROUP INFORMED CONSENT**

**Consent for Research Participation (Focus Group)**

**Title:** A Global Set of Dispositions? Applying Discrete-Choice Method to Measure Global Citizenship Dispositions of Secondary-School Students in Multiple Nations

**Sponsor:** The Ryoichi Sasakawa Young Leaders Fellowship Fund

**Researcher(s):** **Michael Thier**, University of Oregon, Principal Investigator  
 Dr. Charles Martinez, Jr., University of Oregon, Faculty Advisor

**Researcher Contact Info:** Michael Thier: +1 541.214.3207; [mthier@uoregon.edu](mailto:mthier@uoregon.edu)  
 Dr. Charles Martinez, Jr.: +1 541.346.2161; [charlesm@uoregon.edu](mailto:charlesm@uoregon.edu)

You are being asked to participate in a research study. The box below highlights key information about this research for you to consider when making a decision whether or not to participate. Carefully consider this information and the more detailed information provided below. Please ask questions about any of the information you do not understand before you decide whether to participate.

<b>Key Information for You to Consider</b>
<ul style="list-style-type: none"> <li>• <b>Voluntary Consent.</b> You are being asked to volunteer for a research study. It is up to you whether you participate or not. You are free to discontinue participation at any time. There will be no penalty or loss of benefits to which you are otherwise entitled if you choose not to participate or discontinue participation. Choosing not to participate or discontinuing participation will not affect your relationship with International Baccalaureate (IB), your IB school, or the University of Oregon in any way.</li> <li>• <b>Purpose.</b> The purpose of this research is to develop a way to measure global citizenship dispositions among high school students.</li> <li>• <b>Duration.</b> It is expected that your participation will last approximately three hours: one half hour of preparation, a maximum two-hour session for a group interview, and one half hour to individually rate outputs of the group interview.</li> <li>• <b>Procedures and Activities.</b> You will be asked to respond to a prompt in advance of an online group interview and then participate with other former IB Diploma Programme students in an online group interview.</li> <li>• <b>Risks.</b> There are minimal risks to this study. The two primary risks would be a possible violation of confidentiality due to the nature of a group interview and the possibility of experiencing discomfort or embarrassment in disclosing perceptions or other personal information during the group interview.</li> <li>• <b>Benefits.</b> Participants will receive no direct benefits, but some participants who are graduates of IB Diploma Programmes might enjoy the opportunity to reflect upon their common and unique experiences and learn what students in their country and another country think about global citizenship education.</li> </ul>



- **Alternatives.** Participation is voluntary and the only alternative is not to participate.

### **Who is conducting this research?**

Researcher Michael Thier under the guidance of Dr. Charles Martinez, Jr. at the University of Oregon is asking for your consent to this research, which is Thier's dissertation study.

### **Why is this research being done?**

The purpose of the research is to create a way to measure global citizenship dispositions that will help leaders of secondary/high schools provide evidence about how their schools prepare students as global citizens. You are being asked to participate because you participated in global citizenship education in an IB Diploma Programme. About 12-18 people will take part in this phase of this research study.

### **What happens if I agree to participate in this research?**

If you agree to be in this research, your participation will include providing your ideas via email about global citizenship, then participating in an online group interview at a mutually agreed upon time with other former IB Diploma Programme students who have also provided their ideas about global citizenship, followed by individually rating the dispositions that are discussed during the online group interview. *Those are the only tasks that would be required of participants who wanted to receive compensation (a \$25 gift card).* After the responses have been analyzed, you can receive a summary of your group's responses and responses from a similar group conducted with former IB Diploma Programme students from another country if you wish.

### **What happens to the information collected for this research?**

I will share information collected for this research by making presentations and publishing reports. I will never use your name, your likeness, or your private information that could identify you or the school you attended when I share research results with others. I might share deidentified data with other researchers who might conduct unique analyses of information from this research without obtaining additional consent from you, but the information they will be able to access would always be deidentified; other researchers will never know your name nor the name of the school you attended.

### **How will my privacy and data confidentiality be protected?**

In order to promote accuracy in data collection for this study, only individuals who agree to allow me to take notes and record the audio of our conversation can participate in a group interview. The online platform I use for group interviews has video recording features, but I will not use those features to ensure that participants will not be identifiable to other focus group participants unless they choose to be by announcing their own participation during the group interview. I will take measures to protect your



privacy by storing the recordings—without writing your name or the name of the school you attended. I store all notes and tapes securely in password-protected computer files at the research center where I work at the University of Oregon.

Despite taking steps to protect your privacy, we can never fully guarantee your privacy will be protected. The nature of a group interview makes me unable to guarantee absolute confidentiality because another group member could disclose information that we discuss.

Individuals and organization that conduct or monitor this research may be permitted access to and inspect the research records. Only myself, my advisor, and the University of Oregon's Institutional Review Board will be able to access any information that identifies you. Along with myself and my advisor, the Board wants to make sure that everybody who takes part in the study is safe and treated with respect at all times. We are all trained to protect your privacy. Other researchers who work with me would have access only to deidentified data for unique analyses of information from this research without obtaining additional consent from you.

### **What are the risks if I participate in this research?**

Although this study presents minimal risk to you, there may be risks associated with participating in a research study such as possible loss of confidentiality or discomfort or embarrassment in disclosing perceptions or other personal information during group interviews. If you do not want others to know that you are participating in this study, you can help protect your privacy by not telling anyone about your participation. If you feel embarrassed or uncomfortable about any of the questions that I ask you about global citizenship, know that you always have the right not to answer questions or take part in activities. You can also choose to stop taking part in the study at any time. Your participation is entirely voluntary.

### **What are the benefits of participating in this research?**

You may or may not benefit from participating in this research. There are no known direct benefits to you from participating in this study. However, it is hoped that information gained from this study will help schools improve education that is available for future students of the school you attended and schools that offer or want to offer similar types of educational programmes.

### **What if I want to stop participating in this research?**

Taking part in this research study is your decision. Your participation in this study is voluntary. You do not have to take part in this study, but if you do, you can stop at any time. You have the right to choose not to participate in any study activity or completely withdraw from continued participation at any point in this study without penalty or loss of benefits to which you are otherwise entitled. Your decision of whether or not to



participate or to discontinue participation will not affect your relationship with the researchers, IB, your IB school, or the University of Oregon in any way.

**Will I be paid for participating in this research?**

You do not have to pay anything to take part in this research study. Instead, for taking part in this research, you will be paid \$25 via gift card. Your compensation will be delivered electronically within two weeks of the completion of the rating that follows the group interview, assuming you complete the preparatory work, participate in the group interview, and the rating that follows.

**Who can answer my questions about this research?**

If you have questions, concerns, or have experienced a research-related injury, contact the research team by emailing *both*:

**Michael Thier** at [mthier@uoregon.edu](mailto:mthier@uoregon.edu)

**Dr. Charles Martinez, Jr.** at [charlesm@uoregon.edu](mailto:charlesm@uoregon.edu)

or calling **Michael Thier** at (country code 001) 541.214.3207

or calling **Dr. Charles Martinez, Jr.** at (country code 001) 541.346.2161

An Institutional Review Board (“IRB”) is overseeing this research. An IRB is a group of people who perform independent review of research studies to ensure the rights and welfare of participants are protected. The University of Oregon Research Compliance Services is the office that supports the IRB. If you have questions about your rights or wish to speak with someone other than the research team, you may contact:

Research Compliance Services  
5237 University of Oregon  
Eugene, OR 97403-5237  
(541) 346-2510



## STATEMENT OF CONSENT

I have had the opportunity to read and consider the information in this form. I have asked any questions necessary to make a decision about my participation. I understand that I can ask additional questions throughout my participation.

I understand that by signing below, I volunteer to participate in this research. I understand that I am not waiving any legal rights. I have been provided with a copy of this consent form. I understand that if my ability to consent or assent for myself changes, either I or my legal representative may be asked to re-consent prior to my continued participation in this study.

I consent to participate in this study.

---

Name of Adult Participant

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Signature of Adult Participant

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Date

### **Researcher Signature** (to be completed at time of informed consent)

I have explained the research to the participant and answered all of his/her questions. I believe that he/she understands the information described in this consent form and freely consents to participate.

Michael Thier

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Name of Research Team Member

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Signature of Research Team Member

---

Date

## APPENDIX F – CONSENSUS BUILDING TOOL

Italy One ([My Account](#)) ([Sign Out](#)) ([CCRS Home](#))

- [Administrator](#)
- [Facilitator](#)
- [Reviewer](#)

### Facilitator Global Citizenship Dispositions

Nominate for Ranking

During Round 1, you will be asked five questions, each under the heading “Requirement”. This focus group uses the nominal group technique, which means our goal is for you to think of, or nominate, as many relevant dispositions as possible in response to each question (“Requirement”).

Please complete the following steps for each question or “Requirement”:

1. Click into the text editor under “Requirement” for the question you are responding to. After you think of relevant dispositions in response to the question, you can choose from the 5 suggested dispositions listed underneath the question and you can also nominate new ideas about dispositions that you feel are relevant.
2. When you want to choose from the 5 suggested dispositions, just copy the disposition [*Ctrl-C for PC; Command-C for Mac*], click “Add”, and paste the disposition [*Ctrl-P for PC; Command-P for Mac*] into the text editor. When you want to nominate a new idea for a disposition, simply click “Add” and type in your nominated disposition.
3. Whether you are copying and pasting from the list of 5 suggested dispositions or typing a newly nominated disposition, you must “Add” them as separate disposition. ***If you do not, the group will not be able to discuss them in Round 2 or rank them in Round 3.***
4. Repeat Steps 2 and 3 as often as you need to provide as many responses to the question as possible.
5. Once you have exhausted all relevant responses, scroll down to the next “Requirement”, repeating Steps 1-4 to this process until you have responded fully to all 5 questions.
6. At any point in the process, you can use the “Save & Continue” button at the bottom of your screen to pause.

When you have completed your responses, click “Preview” to doublecheck your accuracy. This button will display all of your responses to each question at once unlike when you had to click each text editor individually to respond.

If you need to edit any responses, click “Resume” to bring you back to Edit mode.

Once you have proofread your responses, click “Done” to submit your data. You should see a screen that confirms your completion of the Round 1 task. I will send you a separate email regarding the Round 2 task.

Open  
Requirement

1. Which of these, or other global citizenship dispositions, did you develop most directly due to your experiences in global citizenship education during secondary school?

- Intercultural sensitivity
- Interest in diversity
- Peacefulness
- Plural geographical allegiance
- Social justice orientation

Open  
Requirement

2. Which of these, or other global citizenship dispositions, have helped you most in your professional life?

- Intercultural sensitivity
- Interest in diversity
- Peacefulness
- Plural geographical allegiance
- Social justice orientation

Dispositions

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**Peacefulness**: inclination to approach conflict with an emphasis on mutual negotiation

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**Peacefulness**: inclination to approach conflict with an emphasis on mutual negotiation

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**Plural geographic allegiance**: culturally interdependent inclination to identify with the wider world rather than, or in addition to, a specified geographic area

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**Plural geographic allegiance:** culturally interdependent inclination to identify with the wider world rather than, or in addition to, a specified geographic area

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**Plural geographic allegiance:** culturally interdependent inclination to identify with the wider world rather than, or in addition to, a specified geographic area

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**Social justice orientation:** belief in shared responsibility to preserve the human rights of all people and the planetary environment where we cohabitate

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**Social justice orientation:** belief in shared responsibility to preserve the human rights of all people and the planetary environment where we cohabitate

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- Interest in diversity



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Dispositions



3. Which of these, or other global citizenship dispositions, have limited you most in your professional life?

- Intercultural sensitivity
- Interest in diversity
- Peacefulness
- Plural geographical allegiance
- Social justice orientation

Dispositions

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**Social justice orientation**: belief in shared responsibility to preserve the human rights of all people and the planetary environment where we cohabitate

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**Appreciation of multiple perspectives**: desire to inform one's opinions through various opinions of others

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**Appreciation of multiple perspectives**: desire to inform one's opinions through various opinions of others

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Requirement

4. Which of these, or other global citizenship dispositions, have helped you most in your personal life aside from work?

- Intercultural sensitivity
- Interest in diversity
- Peacefulness
- Plural geographical allegiance
- Social justice orientation

Dispositions

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**Appreciation of multiple perspectives:** desire to inform one's opinions through various opinions of others

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**Preference for global communication:** situational inclination toward endorsing a globally used language (for example, English) over Mother Tongue

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**Preference for global communication:** situational inclination toward endorsing a globally used language (for example, English) over Mother Tongue

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**Preference for global communication**: situational inclination toward endorsing a globally used language (for example, English) over Mother Tongue

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**Skepticism**: inclination to question sources of, or interrogate potential biases in, information

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**Skepticism**: inclination to question sources of, or interrogate potential biases in, information

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**Skepticism**: inclination to question sources of, or interrogate potential biases in, information

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Requirement

5. Which of these, or other global citizenship dispositions, have limited you most in your personal life aside from work?

- Intercultural sensitivity
- Interest in diversity
- Peacefulness
- Plural geographical allegiance
- Social justice orientation

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## User Guide

Click below to download the user guide.

[Download User Guide](#)

## Administration Manual



Please click the link below to view the Administration Manual for the School Diagnostic

[Download Administration Manual](#)

## **System Guide**

Please click the link below to view the System Guide for the School Diagnostic

[Download System Guide](#)

## **Troubleshooting Quick Guide**

Please click the link below to view the Troubleshooting Quick Guide for the School Diagnostic

[Download Troubleshooting Guide](#)

## **Technical Specifications**

Please click the link below to view the Technical Specifications for the School Diagnostic

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## **Timeout**

You were automatically logged out after 1 hour of inactivity. Please log in again.

[Return to Home](#)

Italy One ([My Account](#)) ([Sign Out](#)) ([CCRS Home](#))

- [Administrator](#)
- [Facilitator](#)
- [Reviewer](#)

## Global Citizenship Dispositions

Rate Dispositions



The items below will ask you to provide three separate ratings for each of eight potential dispositions of global citizenship.

For each disposition, you will be asked to rate the extent to which it

- a. is a direct result of your secondary-school global citizenship education (GCE) experiences (for example, attending an International Baccalaureate programme)
- b. is professionally helpful or limiting
- c. is personally helpful or limiting

There are 8 dispositions so please respond to all 24 items (8 dispositions x 3 items per disposition). For each item, click the numbered response that ***best describes you***. You will find numbered response options to choose from underneath "Evidence".

After you select a rating for each item, you will see a "Change decision" option appear. Only click "Change decision" if you would rather revise your response to a different rating for that item. Otherwise, ignore the "Change decision" option and proceed to rate the next item.

After each set of response options, you will see "Annotation" followed by a window that allows you to type in your own text. You may, for any or all items, type in any additional feedback after you rate the item.

As you will notice, the three rating scales are presented in the same order for each of the eight dispositions. You can click “Download Document” to see definitions of key terms.

When you have completed responded to all 24 items, please click Complete Review.

Review Document

[Dispositions\\_SWE\\_Ratings\\_Upload.docx](#)

Dispositions

**Intercultural sensitivity**: non-discriminatory, empathetic respect for cultural perspectives that differ from one's own

Evidence

- (1) **Definitely not** a direct result of my secondary-school GCE experiences
- (2) **Very unlikely** to be a direct result of my secondary-school GCE experiences [Change decision](#)
- (3) **Unlikely** to be a direct result of my secondary-school GCE experiences
- (4) **Somewhat unlikely** to be a direct result of my secondary-school GCE experiences
- (5) **Unsure** of the likelihood of being a direct result of my secondary-school GCE experiences
- (6) **Somewhat likely** to be a direct result of my secondary-school GCE experiences
- (7) **Likely** to be a direct result of my secondary-school GCE experiences
- (8) **Very likely** to be a direct result of my secondary-school GCE experiences
- (9) **Definitely** a direct result of my secondary-school GCE experiences

Annotation

x

Dispositions

**Intercultural sensitivity**: non-discriminatory, empathetic respect for cultural perspectives that differ from one's own

Evidence

- (1) **Definitely limiting** in my *professional* life
- (2) **Very likely to limit** my *professional* life
- (3) **Likely to limit** my *professional* life
- (4) **Somewhat likely to limit** my *professional* life
- (5) **Unsure** of impact on my *professional* life
- (6) **Somewhat likely to help** my *professional* life
- (7) **Likely to help** my *professional* life [Change decision](#)
- (8) **Very likely to help** my *professional* life
- (9) **Definitely helpful** in my *professional* life

Annotation

y

Dispositions

**Intercultural sensitivity**: non-discriminatory, empathetic respect for cultural perspectives that differ from one's own

Evidence

- (1) **Definitely limiting** in my *personal* life
- (2) **Very likely to limit** my *personal* life
- (3) **Likely to limit** my *personal* life [Change decision](#)
- (4) **Somewhat likely to limit** my *personal* life
- (5) **Unsure** of impact on my *personal* life
- (6) **Somewhat likely to help** my *personal* life
- (7) **Likely to help** my *personal* life
- (8) **Very likely to help** my *personal* life
- (9) **Definitely helpful** in my *personal* life

Annotation

Dispositions

**Interest in diversity**: desire to experience the complexities of various cultures' norms, languages, expectations, and contexts

Evidence

- (1) **Definitely not** a direct result of my secondary-school GCE experiences
- (2) **Very unlikely** to be a direct result of my secondary-school GCE experiences
- (3) **Unlikely** to be a direct result of my secondary-school GCE experiences
- (4) **Somewhat unlikely** to be a direct result of my secondary-school GCE experiences
- (5) **Unsure** of the likelihood of being a direct result of my secondary-school GCE experiences [Change decision](#)
- (6) **Somewhat likely** to be a direct result of my secondary-school GCE experiences
- (7) **Likely** to be a direct result of my secondary-school GCE experiences
- (8) **Very likely** to be a direct result of my secondary-school GCE experiences
- (9) **Definitely** a direct result of my secondary-school GCE experiences

Annotation

Dispositions

**Interest in diversity**: desire to experience the complexities of various cultures' norms, languages, expectations, and contexts

Evidence

- (1) **Definitely limiting** in my *professional* life
- (2) **Very likely to limit** my *professional* life
- (3) **Likely to limit** my *professional* life [Change decision](#)
- (4) **Somewhat likely to limit** my *professional* life
- (5) **Unsure** of impact on my *professional* life
- (6) **Somewhat likely to help** my *professional* life
- (7) **Likely to help** my *professional* life
- (8) **Very likely to help** my *professional* life
- (9) **Definitely helpful** in my *professional* life

Annotation

y

Dispositions

**Interest in diversity:** desire to experience the complexities of various cultures' norms, languages, expectations, and contexts

Evidence

- (1) **Definitely limiting** in my *personal* life [Change decision](#)
- (2) **Very likely to limit** my *personal* life
- (3) **Likely to limit** my *personal* life
- (4) **Somewhat likely to limit** my *personal* life
- (5) **Unsure** of impact on my *personal* life
- (6) **Somewhat likely to help** my *personal* life
- (7) **Likely to help** my *personal* life
- (8) **Very likely to help** my *personal* life
- (9) **Definitely helpful** in my *personal* life

Annotation

z

Dispositions

**Peacefulness:** inclination to approach conflict with an emphasis on mutual negotiation

Evidence

- (1) **Definitely not** a direct result of my secondary-school GCE experiences
- (2) **Very unlikely** to be a direct result of my secondary-school GCE experiences [Change decision](#)
- (3) **Unlikely** to be a direct result of my secondary-school GCE experiences
- (4) **Somewhat unlikely** to be a direct result of my secondary-school GCE experiences
- (5) **Unsure** of the likelihood of being a direct result of my secondary-school GCE experiences
- (6) **Somewhat likely** to be a direct result of my secondary-school GCE experiences
- (7) **Likely** to be a direct result of my secondary-school GCE experiences
- (8) **Very likely** to be a direct result of my secondary-school GCE experiences
- (9) **Definitely** a direct result of my secondary-school GCE experiences

Annotation

x

Dispositions

**Peacefulness:** inclination to approach conflict with an emphasis on mutual negotiation

Evidence

- (1) **Definitely limiting** in my *professional* life
- (2) **Very likely to limit** my *professional* life
- (3) **Likely to limit** my *professional* life [Change decision](#)
- (4) **Somewhat likely to limit** my *professional* life
- (5) **Unsure** of impact on my *professional* life
- (6) **Somewhat likely to help** my *professional* life
- (7) **Likely to help** my *professional* life
- (8) **Very likely to help** my *professional* life
- (9) **Definitely helpful** in my *professional* life

## Annotation

## Dispositions

**Peacefulness**: inclination to approach conflict with an emphasis on mutual negotiation

## Evidence

- (1) **Definitely limiting** in my *personal* life
- (2) **Very likely to limit** my *personal* life
- (3) **Likely to limit** my *personal* life
- (4) **Somewhat likely to limit** my *personal* life [Change decision](#)
- (5) **Unsure** of impact on my *personal* life
- (6) **Somewhat likely to help** my *personal* life
- (7) **Likely to help** my *personal* life
- (8) **Very likely to help** my *personal* life
- (9) **Definitely helpful** in my *personal* life

## Annotation

## Dispositions

**Plural geographic allegiance**: culturally interdependent inclination to identify with the wider world rather than, or in addition to, a specified geographic area

## Evidence

- (1) **Definitely not** a direct result of my secondary-school GCE experiences
- (2) **Very unlikely** to be a direct result of my secondary-school GCE experiences
- (3) **Unlikely** to be a direct result of my secondary-school GCE experiences
- (4) **Somewhat unlikely** to be a direct result of my secondary-school GCE experiences
- (5) **Unsure** of the likelihood of being a direct result of my secondary-school GCE experiences [Change decision](#)
- (6) **Somewhat likely** to be a direct result of my secondary-school GCE experiences
- (7) **Likely** to be a direct result of my secondary-school GCE experiences
- (8) **Very likely** to be a direct result of my secondary-school GCE experiences
- (9) **Definitely** a direct result of my secondary-school GCE experiences

## Annotation

## Dispositions

**Plural geographic allegiance**: culturally interdependent inclination to identify with the wider world rather than, or in addition to, a specified geographic area

## Evidence

- (1) **Definitely limiting** in my *professional* life
- (2) **Very likely to limit** my *professional* life
- (3) **Likely to limit** my *professional* life
- (4) **Somewhat likely to limit** my *professional* life
- (5) **Unsure** of impact on my *professional* life
- (6) **Somewhat likely to help** my *professional* life [Change decision](#)
- (7) **Likely to help** my *professional* life
- (8) **Very likely to help** my *professional* life

(9) **Definitely helpful** in my *professional* life

Annotation

y

Dispositions

**Plural geographic allegiance:** culturally interdependent inclination to identify with the wider world rather than, or in addition to, a specified geographic area

Evidence

- (1) **Definitely limiting** in my *personal* life
- (2) **Very likely to limit** my *personal* life
- (3) **Likely to limit** my *personal* life
- (4) **Somewhat likely to limit** my *personal* life
- (5) **Unsure** of impact on my *personal* life
- (6) **Somewhat likely to help** my *personal* life
- (7) **Likely to help** my *personal* life [Change decision](#)
- (8) **Very likely to help** my *personal* life
- (9) **Definitely helpful** in my *personal* life

Annotation

z

Dispositions

**Social justice orientation:** belief in shared responsibility to preserve the human rights of all people and the planetary environment where we cohabitate

Evidence

- (1) **Definitely not** a direct result of my secondary-school GCE experiences
- (2) **Very unlikely** to be a direct result of my secondary-school GCE experiences
- (3) **Unlikely** to be a direct result of my secondary-school GCE experiences
- (4) **Somewhat unlikely** to be a direct result of my secondary-school GCE experiences
- (5) **Unsure** of the likelihood of being a direct result of my secondary-school GCE experiences
- (6) **Somewhat likely** to be a direct result of my secondary-school GCE experiences
- (7) **Likely** to be a direct result of my secondary-school GCE experiences
- (8) **Very likely** to be a direct result of my secondary-school GCE experiences [Change decision](#)
- (9) **Definitely** a direct result of my secondary-school GCE experiences

Annotation

x

Dispositions

**Social justice orientation:** belief in shared responsibility to preserve the human rights of all people and the planetary environment where we cohabitate

Evidence

- (1) **Definitely limiting** in my *professional* life
- (2) **Very likely to limit** my *professional* life
- (3) **Likely to limit** my *professional* life
- (4) **Somewhat likely to limit** my *professional* life
- (5) **Unsure** of impact on my *professional* life

- (6) **Somewhat likely to help** my *professional* life
- (7) **Likely to help** my *professional* life
- (8) **Very likely to help** my *professional* life
- (9) **Definitely helpful** in my *professional* life [Change decision](#)

Annotation

Dispositions

**Social justice orientation**: belief in shared responsibility to preserve the human rights of all people and the planetary environment where we cohabitate

Evidence

- (1) **Definitely limiting** in my *personal* life [Change decision](#)
- (2) **Very likely to limit** my *personal* life
- (3) **Likely to limit** my *personal* life
- (4) **Somewhat likely to limit** my *personal* life
- (5) **Unsure** of impact on my *personal* life
- (6) **Somewhat likely to help** my *personal* life
- (7) **Likely to help** my *personal* life
- (8) **Very likely to help** my *personal* life
- (9) **Definitely helpful** in my *personal* life

Annotation

Dispositions

**Appreciation of multiple perspectives**: desire to inform one's opinions through various opinions of others

Evidence

- (1) **Definitely not** a direct result of my secondary-school GCE experiences
- (2) **Very unlikely** to be a direct result of my secondary-school GCE experiences [Change decision](#)
- (3) **Unlikely** to be a direct result of my secondary-school GCE experiences
- (4) **Somewhat unlikely** to be a direct result of my secondary-school GCE experiences
- (5) **Unsure** of the likelihood of being a direct result of my secondary-school GCE experiences
- (6) **Somewhat likely** to be a direct result of my secondary-school GCE experiences
- (7) **Likely** to be a direct result of my secondary-school GCE experiences
- (8) **Very likely** to be a direct result of my secondary-school GCE experiences
- (9) **Definitely** a direct result of my secondary-school GCE experiences

Annotation

Dispositions

**Appreciation of multiple perspectives**: desire to inform one's opinions through various opinions of others

Evidence

- (1) **Definitely limiting** in my *professional* life
- (2) **Very likely to limit** my *professional* life



- (3) **Likely to limit** my *professional* life [Change decision](#)
- (4) **Somewhat likely to limit** my *professional* life
- (5) **Unsure** of impact on my *professional* life
- (6) **Somewhat likely to help** my *professional* life
- (7) **Likely to help** my *professional* life
- (8) **Very likely to help** my *professional* life
- (9) **Definitely helpful** in my *professional* life

Annotation

Dispositions

**Appreciation of multiple perspectives**: desire to inform one's opinions through various opinions of others

Evidence

- (1) **Definitely limiting** in my *personal* life
- (2) **Very likely to limit** my *personal* life
- (3) **Likely to limit** my *personal* life
- (4) **Somewhat likely to limit** my *personal* life [Change decision](#)
- (5) **Unsure** of impact on my *personal* life
- (6) **Somewhat likely to help** my *personal* life
- (7) **Likely to help** my *personal* life
- (8) **Very likely to help** my *personal* life
- (9) **Definitely helpful** in my *personal* life

Annotation

Dispositions

**Preference for global communication**: situational inclination toward endorsing a globally used language (for example, English) over Mother Tongue

Evidence

- (1) **Definitely not** a direct result of my secondary-school GCE experiences
- (2) **Very unlikely** to be a direct result of my secondary-school GCE experiences
- (3) **Unlikely** to be a direct result of my secondary-school GCE experiences
- (4) **Somewhat unlikely** to be a direct result of my secondary-school GCE experiences
- (5) **Unsure** of the likelihood of being a direct result of my secondary-school GCE experiences [Change decision](#)
- (6) **Somewhat likely** to be a direct result of my secondary-school GCE experiences
- (7) **Likely** to be a direct result of my secondary-school GCE experiences
- (8) **Very likely** to be a direct result of my secondary-school GCE experiences
- (9) **Definitely** a direct result of my secondary-school GCE experiences

Annotation

Dispositions

**Preference for global communication**: situational inclination toward endorsing a globally used language (for example, English) over Mother Tongue

Evidence

- (1) **Definitely limiting** in my *professional* life
- (2) **Very likely to limit** my *professional* life
- (3) **Likely to limit** my *professional* life
- (4) **Somewhat likely to limit** my *professional* life
- (5) **Unsure** of impact on my *professional* life
- (6) **Somewhat likely to help** my *professional* life [Change decision](#)
- (7) **Likely to help** my *professional* life
- (8) **Very likely to help** my *professional* life
- (9) **Definitely helpful** in my *professional* life

Annotation

Dispositions

**Preference for global communication:** situational inclination toward endorsing a globally used language (for example, English) over Mother Tongue

Evidence

- (1) **Definitely limiting** in my *personal* life
- (2) **Very likely to limit** my *personal* life
- (3) **Likely to limit** my *personal* life
- (4) **Somewhat likely to limit** my *personal* life
- (5) **Unsure** of impact on my *personal* life
- (6) **Somewhat likely to help** my *personal* life
- (7) **Likely to help** my *personal* life [Change decision](#)
- (8) **Very likely to help** my *personal* life
- (9) **Definitely helpful** in my *personal* life

Annotation

Dispositions

**Skepticism:** inclination to question sources of, or interrogate potential biases in, information

Evidence

- (1) **Definitely not** a direct result of my secondary-school GCE experiences
- (2) **Very unlikely** to be a direct result of my secondary-school GCE experiences
- (3) **Unlikely** to be a direct result of my secondary-school GCE experiences
- (4) **Somewhat unlikely** to be a direct result of my secondary-school GCE experiences
- (5) **Unsure** of the likelihood of being a direct result of my secondary-school GCE experiences
- (6) **Somewhat likely** to be a direct result of my secondary-school GCE experiences
- (7) **Likely** to be a direct result of my secondary-school GCE experiences
- (8) **Very likely** to be a direct result of my secondary-school GCE experiences [Change decision](#)
- (9) **Definitely** a direct result of my secondary-school GCE experiences

Annotation

Dispositions

**Skepticism:** inclination to question sources of, or interrogate potential biases in, information

Evidence

- (1) **Definitely limiting** in my *professional* life
- (2) **Very likely to limit** my *professional* life
- (3) **Likely to limit** my *professional* life
- (4) **Somewhat likely to limit** my *professional* life
- (5) **Unsure** of impact on my *professional* life
- (6) **Somewhat likely to help** my *professional* life
- (7) **Likely to help** my *professional* life
- (8) **Very likely to help** my *professional* life
- (9) **Definitely helpful** in my *professional* life [Change decision](#)

Annotation

Dispositions

**Skepticism:** inclination to question sources of, or interrogate potential biases in, information

Evidence

- (1) **Definitely limiting** in my *personal* life
- (2) **Very likely to limit** my *personal* life
- (3) **Likely to limit** my *personal* life
- (4) **Somewhat likely to limit** my *personal* life
- (5) **Unsure** of impact on my *personal* life
- (6) **Somewhat likely to help** my *personal* life
- (7) **Likely to help** my *personal* life
- (8) **Very likely to help** my *personal* life
- (9) **Definitely helpful** in my *personal* life [Change decision](#)

Annotation

Save and Continue Later

Complete Review

## User Guide

Click below to download the user guide.

[Download User Guide](#)

## Administration Manual

Please click the link below to view the Administration Manual for the School Diagnostic

[Download Administration Manual](#)

## System Guide

Please click the link below to view the System Guide for the School Diagnostic

[Download System Guide](#)

## Troubleshooting Quick Guide

Please click the link below to view the Troubleshooting Quick Guide for the School Diagnostic

[Download Troubleshooting Guide](#)

## Technical Specifications

Please click the link below to view the Technical Specifications for the School Diagnostic

[Download Technical Specifications](#)

## Timeout

You were automatically logged out after 1 hour of inactivity. Please log in again.

[Return to Home](#)

## **APPENDIX G – PHASE 1 PARTICIPANT INSTRUCTIONS**

I hope this email finds you well. Thank you again for your interest in this research study on global citizenship education.

This is a reminder for you to complete the survey at the link below as soon as you have a moment. It should take fewer than 5 minutes and will enable me to schedule a focus group that would work best for your participation.

[https://oregon.qualtrics.com/jfe/form/SV\\_2tpj0VY1vJ5o5PD](https://oregon.qualtrics.com/jfe/form/SV_2tpj0VY1vJ5o5PD)

Please email me with any questions or concerns.

Best wishes,

Michael

-----  
Hello again and thank you for participating in the nominal technique focus group to nominate, discuss, and rank dispositions of global citizenship based on your experiences attending IB schools.

Today, you can begin the “nomination phase” in which you will be asked to identify dispositions of global citizenship that stem from your time as an IB student and that you find helpful or limiting to you personally and professionally.

Shortly, you will receive an invitation and a unique log-in from the CollegeCareerReady System, a software from an organization called Inflexion.

At your earliest convenience, please log in to the system and complete a 10-15 minute task of responding to five questions. Ideally, you would complete this task by Friday, June 7, giving me time to process everyone’s responses in advance of our focus group meeting at the following date/time:

Monday, June 10 from 6:30-8:30 PM (Pacific)

A few notes that will help you respond to the five questions on the CollegeCareerReady System:

1. This research study is interested in the Dispositions of global citizenship. I am defining Dispositions as people’s characteristic attitudes or inclinations. I distinguish Dispositions from Knowledge (what someone theoretically or practically understands about a subject), Skill (an ability to do something well or with expertise), or Behavior (how one acts or conducts oneself).

When responding to the five questions, please think only about Dispositions.

2. I have suggested five Dispositions to prompt your thinking. Perhaps all or some of these Dispositions reflect your global citizenship education experiences. Perhaps none of them do. I have suggested the following five Dispositions as a starting point. Feel free to use as many of them or none of them when responding to each of the five questions. You may use any of my suggested Dispositions, or any that you create, repetitively across questions if you like.

- (1) Intercultural sensitivity: non-discriminatory, empathetic respect for cultural perspectives that differ from one's own
- (2) Interest in cultural diversity: desire to experience the complexities of various cultures' norms, expectations, and contexts
- (3) Peacefulness: inclination to approach conflict so that no party is made to be wrong
- (4) Plural geographic allegiance: culturally interdependent inclination to identify with the wider world rather than, or in addition to, a specified geographic area
- (5) Social justice orientation: belief in shared responsibility to preserve the human rights of all people and the planetary environment where we cohabitate

As always, please do not hesitate to email me with any questions. Again, thank you very much for participating in this study.

Best wishes,

Michael

-----

Hello and thank you again for your interest in participating in this research study on global citizenship education. We have a fascinating collection of participants for this nominal group process. Our participants live across five time zones, so I want to schedule our synchronous session as precisely as possible to meet everyone's needs.

As soon as you have a free moment, please use this link and respond to questions that will enable me to schedule our nominal group technique meeting.

[https://oregon.qualtrics.com/jfe/form/SV\\_5BCmHQ4wH90wV0N](https://oregon.qualtrics.com/jfe/form/SV_5BCmHQ4wH90wV0N)

Once you visit the site at this link, you will see that I have provided time listings across those five time zones for 22 different dates. Please respond about whether you expect to be available for the listed two-hour period that corresponds to your time zone and about whether you expect to be available on the same date but at slightly different time periods.

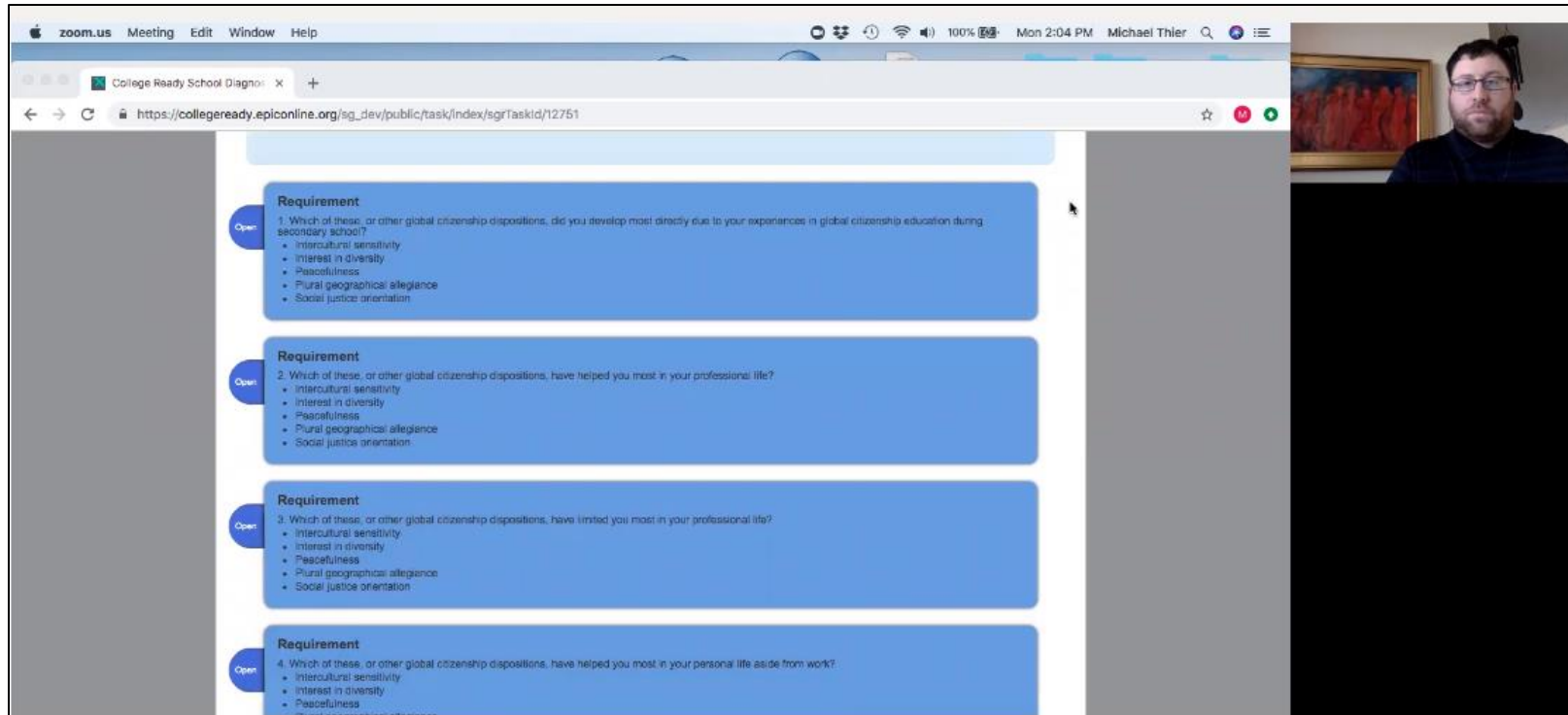
Please choose all options for each date that describe your expected availability so the group has the best chance to meet everyone's needs.

Of course, please do not hesitate to email me if you have any questions.

Best wishes,

Michael

## APPENDIX H – PHASE 1 FOCUS GROUP ZOOM SCREENSHOT



The screenshot shows a Zoom meeting window. The top bar displays 'zoom.us Meeting Edit Window Help' and system icons for volume, network, and battery. The browser address bar shows 'College Ready School Diagn...' and the URL 'https://collegeready.epiconline.org/sg\_dev/public/task/Index/sgfTaskId/12751'. The main content area displays a survey with four questions, each in a blue box with a 'Requirement' header and a list of options. The video feed on the right shows a man with glasses and a beard.

**Requirement**  
1. Which of these, or other global citizenship dispositions, did you develop most directly due to your experiences in global citizenship education during secondary school?  
• Intercultural sensitivity  
• Interest in diversity  
• Peacefulness  
• Plural geographical allegiance  
• Social justice orientation

**Requirement**  
2. Which of these, or other global citizenship dispositions, have helped you most in your professional life?  
• Intercultural sensitivity  
• Interest in diversity  
• Peacefulness  
• Plural geographical allegiance  
• Social justice orientation

**Requirement**  
3. Which of these, or other global citizenship dispositions, have limited you most in your professional life?  
• Intercultural sensitivity  
• Interest in diversity  
• Peacefulness  
• Plural geographical allegiance  
• Social justice orientation

**Requirement**  
4. Which of these, or other global citizenship dispositions, have helped you most in your personal life aside from work?  
• Intercultural sensitivity  
• Interest in diversity  
• Peacefulness

## **APPENDIX I – PHASE 1 FOCUS GROUP ADAPTATION**

Thank you for participating in this adapted version of the nominal group technique. Our goal is to seek consensus as we deepen understanding of global citizenship dispositions!

**Instructions:** Please use the comment feature (grey quotation icon in the upper right corner) to respond to the questions I have posed below in **green, bolded, underlined, italicized text**. In addition to your unique comments, please also use that feature to comment on other respondents' ideas: elaborate upon them, support them, and challenge them in a respectful way.

In the previous round, participants nominated a total of eight dispositions across the prompts I had provided about global citizenship.

- **Intercultural sensitivity**: non-discriminatory, empathetic respect for cultural perspectives that differ from one's own
- **Interest in diversity**: desire to experience the complexities of various cultures' norms, expectations, and contexts
- **Peacefulness**: inclination to approach conflict so that no party is made to be wrong
- **Plural geographic allegiance**: culturally interdependent inclination to identify with the wider world rather than, or in addition to, a specified geographic area
- **Social justice orientation**: belief in shared responsibility to preserve the human rights of all people and the planetary environment where we cohabitate
- **Appreciation of multiple perspectives**: desire to explore multiple perspectives of an issue to generate a more informed opinion
- **Preference for global communication**: tendency to prefer speaking a widely used language (e.g., English), whether or not one's Mother Tongue
- **Skepticism**: appreciation of questioning source of information; recognizing biases in historical narratives

***In reflecting upon these eight nominated dispositions, do any of these nominated dispositions seem as if they overlap or might be redundant to one or more of the others? If so, which ones overlap/seem redundant and why?***

***Do any of the eight nominations seem as if they do not belong at all on a list of global citizenship dispositions? If so, which one(s) and why?***

**Instructions:** Still using the comment feature, please respond to **additional questions I am no posing** about each of the original prompts during the nomination phase.

### **Prompt 1**

*Which of these, or other global citizenship dispositions, did you develop most directly due to your experiences in global citizenship education during secondary school?*

In response to Prompt 1, participants nominated 3 dispositions:

- Intercultural sensitivity
- Interest in diversity
- Peacefulness



*Question 1a: Which, if any, of these 3 dispositions are unsuitable responses to Prompt 1?*

*Question 1b: Which, if any, of the 5 other nominated dispositions (Plural geographic allegiance, Social justice orientation, Appreciation of multiple perspectives, Preference for global communication, Skepticism) would also be suitable responses to Prompt 1?*

*Question 1c: Are there any additional dispositions you would now like to nominate as suitable responses to Prompt 1?*

### **Prompt 2**

*Which of these, or other global citizenship dispositions, have helped you most in your professional life?*

In response to Prompt 2, participants nominated 3 dispositions:

- Peacefulness
- Plural geographic allegiance
- Social justice orientation

*Question 2a: Which, if any, of these 3 dispositions are unsuitable responses to Prompt 2?*

*Question 2b: Which, if any, of the 5 other nominated dispositions (Intercultural sensitivity, Interest in diversity, Appreciation of multiple perspectives, Preference for global communication, Skepticism) would also be suitable responses to Prompt 2?*

*Question 2c: Are there any additional dispositions you would now like to nominate as suitable responses to Prompt 2?*

### **Prompt 3**

*Which of these, or other global citizenship dispositions, have limited you most in your professional life?*

In response to Prompt 3, participants nominated 2 dispositions:

- Social justice orientation
- Appreciation of multiple perspectives

*Question 3a: Which, if any, of these 2 dispositions are unsuitable responses to Prompt 3?*

*Question 3b: Which, if any, of the 6 other nominated dispositions (Intercultural sensitivity, Interest in diversity, Peacefulness, Plural geographic allegiance, Preference for global communication, Skepticism) would also be suitable responses to Prompt 3?*

*Question 3c: Are there any additional dispositions you would now like to nominate as suitable responses to Prompt 3?*

### **Prompt 4**

*Which of these, or other global citizenship dispositions, have helped you most in your personal life?*

In response to Prompt 4, participants nominated 3 dispositions:

- Appreciation of multiple perspectives
- Preference for global communication
- Skepticism

*Question 4a: Which, if any, of these 3 dispositions are unsuitable responses to Prompt 4?*

*Question 4b: Which, if any, of the 5 other nominated dispositions (Intercultural sensitivity, Interest in diversity, Peacefulness, Plural geographic allegiance, Social justice orientation) would also be suitable responses to Prompt 4?*

*Question 4c: Are there any additional dispositions you would now like to nominate as suitable responses to Prompt 4?*

### **Prompt 5**

*Which of these, or other global citizenship dispositions, have limited you most in your personal life aside from work?*

In response to Prompt 5, participants nominated 2 dispositions:

- Social justice orientation
- Peacefulness

*Question 5a: Which, if any, of these 2 dispositions are unsuitable responses to Prompt 5?*

*Question 5b: Which, if any, of the 6 other nominated dispositions (Intercultural sensitivity, Interest in diversity, Plural geographic allegiance, Appreciation for multiple perspectives, Preference for global communication, Skepticism) would also be suitable responses to Prompt 5?*

*Question 5c: Are there any additional dispositions you would now like to nominate as suitable responses to Prompt 5?*

***Thank you very much for your responses!***

***As soon as we hear from everyone in the group, I will process the data into a form that allows participants to rank their responses about global citizenship dispositions. I will email out to the group when the ranking task is available (likely June 17-20). For previous groups, the ranking task has taken participants 10-15 minutes total.***

**APPENDIX J – PHASE 2 SCHOLAR RECRUITMENT EMAIL**

Dear Dr. [research-active scholar],

My name is Michael Thier and I am a Ph.D. candidate at the University of Oregon's College of Education. Perhaps you recall that we met at \_\_\_\_[CONFERENCE]\_\_\_\_\_.

Because of your expertise in global citizenship and related scholarly areas, I am ***inviting you to participate in the content validity phase of research*** to help develop a measure of global citizenship dispositions. The measure would be designed for use with students in secondary schools. The Institutional Review Board at the University of Oregon has approved this study, which has also been sponsored by Ryoichi Sasakawa Young Leaders Fellowship Fund (Sylff) program for international research.

Participating in this phase of the study would involve you applying your expert opinion to 120 items I have drafted, a process that should take about 60 minutes. If you participate, you would have an opportunity to guide the development of a measure meant for use with a student population that has been understudied regarding global citizenship. I expect this research to produce a discrete-choice measure, a cutting-edge approach to measurement that can solve many of the response-style biases (e.g., social desirability) that limit the utility of the self-report measures, which are common in the field. Attached is a brief primer on discrete-choice measurement to familiarize you with the advantages of this approach.

***The measure I am developing can prove useful in your work. Participants who complete the requested tasks can elect to receive an emailed copy of the measure upon successful completion of my dissertation defense (anticipated in Spring 2020). Perhaps most importantly, participants can also help secondary schools provide or improve global citizenship education experiences for future generations of students, expanding access to this type of education as widely as possible.***

If you are interested in participating in this study, please email me at [mthier@uoregon.edu](mailto:mthier@uoregon.edu) so I can email you an informed consent document. After you approve, digitally sign, and email back the informed consent document, I will then send you a link that includes the 120 items I have drafted.

I welcome any questions you may have about this study. Thank you in advance for your kind attention.

Sincerely,

Michael Thier  
Ph.D. candidate  
University of Oregon



## **APPENDIX K – PHASE 2 DISCRETE-CHOICE MEASUREMENT PRIMER**

**Discrete-choice measurement (DCM)**: a measurement approach that is robust against response-style biases, which can arise when using self-report instruments to measure dispositions that have socially desirable aspects<sup>1</sup>

Traditional measures often use Likert-type or other rating scales, presenting respondents with individual statements and then requesting responses that are numerically arbitrary. By contrast, DCMs enable respondents to rate statements against one another, forcing choice among complex options to reveal dispositional traits across multiple domains. Instead, scales for traditional measures typically provide no reference points for ratings.<sup>2</sup> Thus, arbitrary scales can make traditional measures susceptible to response-style biases.<sup>3</sup> For example, how do we know that Respondent A’s rating of “5 = strongly agree” for a given statement is equally as strong as Respondent B’s rating of “5 = strongly agree” for the same statement? The same concerns can apply for all respondents across all statements or across multiple measurement occasions.

Furthermore, social desirability of certain statements can raise measurement problems.<sup>4</sup> Respondents who desire conformity—a salient feature of many students in secondary schools—are likely to respond how they think an authority figure wants them to respond.<sup>5</sup> If high stakes are attached to a measure, this phenomenon can become even more pronounced.<sup>6</sup>

Instead, DCMs present respondents with blocks of statements from multiple domains of a complex construct of interest. In a three-statement block, respondents weigh statements against each other, selecting both the statement that is “most like” the respondent and the statement that is “least like” the respondent, thus rank-ordering all three statements. Comparing statements relatively, rather than on an arbitrary numerical scale, enhances a measure’s precision.

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<sup>1</sup> Brown, A., & Maydeu-Olivares, A. (2012). Fitting a Thurstonian IRT model to forced-choice data using Mplus. *Behavior Research Methods*, 44(4), 1135-1147.

<sup>2</sup> Anderson, R., Thier, M., & Pitts, C. (2017). Interpersonal and intrapersonal skill assessment alternatives: Self-reports, situational-judgment tests, and discrete-choice experiments. *Learning and Individual Differences*, 53, 47-60.

<sup>3</sup> Drasgow, F., Stark, S., Chernyshenko, O. S., Nye, C. D., ... & White, L. A. (2012). *Development of the tailored adaptive personality assessment system to support army personnel selection and classification decisions*.

<sup>4</sup> Lagattuta, K. H., Sayfan, L., & Bamford, C. (2012). Do you know how I feel? Parents underestimate worry and overestimate optimism compared to child self-report. *Journal of Experimental Child Psychology*, 113(2), 211-232.

<sup>5</sup> Miller, A. (2012). Investigating social desirability bias in student self-report surveys. *Educational Research Quarterly*, 36(1).

<sup>6</sup> Duckworth, A., & Yeager, D. (2015). Measurement matters: Assessing personal qualities other than cognitive ability for educational purposes. *Educational Researcher*, 44, 237–251.



Creating DCMs first requires a developer to test statements using typical Likert-type approaches, vetting for content validity (as in the phase you have been invited to participate in) and then factor structure. In a multi-statement block, content valid and psychometrically sound statements can be evaluated with linear logistic test models, an application of item-response theory.<sup>7</sup>

When finalized, DCMs can provide reliable information about multiple domains of a complex construct. Of practical significance, the measure resulting from this dissertation should supply formative data for educators to analyze their instructional methods and provide evidence about their needs related to implementation, improvement, or scale-up of global citizenship education.

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<sup>7</sup> Anguiano-Carrasco, C., MacCann, C., Geiger, M., Seybert, J. M., & Roberts, R. D. (2015). Development of a forced-choice measure of typical-performance emotional intelligence. *Journal of Psychoeducational Assessment*, 33(1), 83-97.



## **APPENDIX L – PHASE 2 SCHOLAR REMINDERS**

Dear Dr. [research-active scholar],

About two weeks ago, I invited you to participate in a dissertation study that seeks expert opinions to validate content for a measure of global citizenship dispositions, rather than knowledge, skills, or behaviors. I understand that you have many commitments because I am familiar with your work. That is also why I know how incredibly helpful your expertise in global citizenship would be for this study.

This study is employing a cutting-edge measurement approach that can solve problems such as social desirability bias (please see attachment on discrete choice). The measure should help researchers more precisely collect data on a contested construct and with a population that has been understudied. The measure can also aid educators' attempts to improve and expand access to global citizenship education.

Initially, I estimated an hour for you to apply your expert opinion to the 120 items I drafted. Your fellow global citizenship scholars have been completing the online task in ***43 minutes on average***. I would like to analyze data at the end of September, so there you would have ***one month*** to complete the task.

***Participants who complete the task can elect to receive an emailed copy of the measure upon successful completion of my dissertation defense (anticipated in Spring 2020).***

If you are interested in participating, please email me at [mthier@uoregon.edu](mailto:mthier@uoregon.edu) so I can email you an informed consent document. I welcome any questions you may have about this study.

Sincerely,

Michael Thier  
Ph.D. candidate  
University of Oregon



### **Final Reminder**

Dear Dr. [research-active scholar],

In recent weeks, I have asked you to participate in a dissertation study that seeks your expert opinion on content for a measure of global citizenship dispositions. I plan to analyze data from this phase of the study soon, so I wanted to offer a **final opportunity** to include your considerable expertise in this study.

You can help by reviewing 120 items that I drafted. This self-paced, online task has been taking your colleagues in global citizenship research from institutions worldwide about **[45 minutes]**. The measure this study will provide can help educators in secondary schools document their global citizenship education efforts for funders and policymakers. It can also help you and other researchers assess a hard-to-measure construct among an understudied group that may be developing into global citizens.

If you are interested in participating, please email me at [mthier@uoregon.edu](mailto:mthier@uoregon.edu) so I can email you an informed consent document. I welcome any questions you may have about this study.

Sincerely,

Michael Thier  
Ph.D. candidate  
University of Oregon



**APPENDIX M – PHASE 2 SURVEY INFORMED CONSENT**

**Consent for Research Participation (Survey)**

**Title:** A Global Set of Dispositions? Applying Discrete-Choice Method to Measure Global Citizenship Dispositions of Secondary-School Students in Multiple Nations

**Sponsor:** The Ryoichi Sasakawa Young Leaders Fellowship Fund

**Researcher(s):** **Michael Thier**, University of Oregon, Principal Investigator  
 Dr. Charles Martinez, Jr., University of Oregon, Faculty Advisor

**Researcher Contact Info:** Michael Thier: +1 541.214.3207; [mthier@uoregon.edu](mailto:mthier@uoregon.edu)  
 Dr. Charles Martinez, Jr.: +1 541.346.2161; [charlesm@uoregon.edu](mailto:charlesm@uoregon.edu)

You are being asked to participate in a research study. The box below highlights key information about this research for you to consider when making a decision whether or not to participate. Carefully consider this information and the more detailed information provided below. Please ask questions about any of the information you do not understand before you decide whether to participate.

<b>Key Information for You to Consider</b>
<ul style="list-style-type: none"> <li>• <b>Voluntary Consent.</b> You are being asked to volunteer for a research study. It is up to you whether you participate or not. You are free to discontinue participation at any time. There will be no penalty or loss of benefits to which you are otherwise entitled if you choose not to participate or discontinue participation. Choosing not to participate or discontinuing participation will not affect your relationship with the University of Oregon in any way.</li> <li>• <b>Purpose.</b> The purpose of this research is to develop a way to measure global citizenship dispositions among high school students.</li> <li>• <b>Duration.</b> It is expected that your participation will last approximately 60 minutes.</li> <li>• <b>Procedures and Activities.</b> You will be asked to respond by critiquing survey items to be included in a discrete-choice measure of global citizenship dispositions.</li> <li>• <b>Risks.</b> There are minimal risks to this study.</li> <li>• <b>Benefits.</b> Participants in this phase will receive access to the discrete-choice measure that this study produces. Also, as a research-active scholar who studies global citizenship, you might enjoy contributing to the production of generalizable knowledge that can help produce a measure of the dispositions of global citizenship that is robust against social desirability bias and can be useful in with students who attend secondary schools across multiple national contexts. Also, participating in this study would allow you to contribute to producing generalizable knowledge that can aid school leaders in programming global citizenship education in their schools.</li> <li>• <b>Alternatives.</b> Participation is voluntary and the only alternative is not to participate.</li> </ul>





### **Who is conducting this research?**

Researcher Michael Thier under the guidance of Dr. Charles Martinez, Jr. at the University of Oregon is asking for your consent to this research, which is Thier's dissertation study.

### **Why is this research being done?**

The purpose of the research is to create a way to measure global citizenship dispositions that will help leaders of secondary/high schools provide evidence about how their schools prepare students as global citizens. You are being asked to participate because you have published one or more articles on global citizenship in peer-reviewed journals. About 30 people will take part in this phase of this research study.

### **What happens if I agree to participate in this research?**

If you agree to be in this research, your participation will include reviewing 120 statements from an initial item pool to measure the dispositions of global citizenship among secondary/high school students. I am asking you to review 120 items that have been inspired by or adapted from more than 30 extant measures of global citizenship or conceptually related constructs. Items that remain after this content validity phase will be entered into a discrete-choice measure, a cutting-edge approach that can solve issues of response-style bias (e.g., social desirability), which often accompany measures of dispositions or attitudes. For each item, I will ask you to rate your level of agreement that the item (a) is relevant to the construct of global citizenship; (b) features a disposition rather than knowledge, skills, or behaviors; and (c) features a culturally universal, rather than culturally relative (assuming a faithful linguistic translation), component of global citizenship. For items you find to have limited relevance, limited value to tap into a disposition, or limited potential for cultural universality, you will have an opportunity to offer open-ended critique. At the end of this instrument, you will also have an opportunity to suggest any aspects or components of global citizenship for which the 120 items have not accounted.

### **What happens to the information collected for this research?**

I will share information collected for this research by making presentations and publishing reports. I will not use your name, likeness, institutional affiliation, or any other information that could identify you when I share research results with others. I might share deidentified data with other researchers who might conduct unique analyses of information from this research without obtaining additional consent from you, but the information they will be able to access would always be deidentified; other researchers will never know your name nor your institutional affiliation.

### **How will my privacy and data confidentiality be protected?**

I will take measures to protect your privacy by storing all deidentified data securely in password-protected computer files at the research center where I work at the University of Oregon. Despite taking steps to protect your privacy, we can never fully guarantee



your privacy will be protected. If you do not want others to know that you are participating in this study, you can help protect your privacy by not telling anyone about your participation.

Individuals and organization that conduct or monitor this research may be permitted access to and inspect the research records. Only myself, my advisor, and the University of Oregon's Institutional Review Board will be able to access any information that identifies you. Along with myself and my advisor, the Board wants to make sure that everybody who takes part in the study is safe and treated with respect at all times. We are all trained to protect your privacy. Other researchers who work with me would have access only to deidentified data for unique analyses of information from this research without obtaining additional consent from you.

### **What are the benefits of participating in this research?**

You may or may not benefit from participating in this research. It is hoped that information gained from this study will help produce a measure of the dispositions of global citizenship that is robust against social desirability bias and can be useful in with students who attend secondary schools across multiple national contexts. Participants in this phase will receive access to the discrete-choice measure that this study produces. As an indirect benefit for a research-active scholar who studies global citizenship such as yourself, you might enjoy contributing to the production of generalizable knowledge that can help produce a measure of the dispositions of global citizenship that is robust against social desirability bias and can be useful in with students who attend secondary schools across multiple national contexts. Also, participating in this study would allow you to contribute to producing generalizable knowledge that can aid school leaders in programming global citizenship education in their schools.

### **What if I want to stop participating in this research?**

Taking part in this research study is your decision. Your participation in this study is voluntary. You do not have to take part in this study, but if you do, you can stop at any time. You have the right to choose not to participate in any study activity or completely withdraw from continued participation at any point in this study without penalty or loss of benefits to which you are otherwise entitled. Your decision of whether or not to participate or to discontinue participation will not affect your relationship with the researchers or the University of Oregon in any way.

### **Will I be paid for participating in this research?**

You do not have to pay anything to take part in this research study, nor will you receive any compensation for participating.

### **Who can answer my questions about this research?**

If you have questions, concerns, or have experienced a research-related injury, contact the research team by emailing *both*:



**Michael Thier** at [mthier@uoregon.edu](mailto:mthier@uoregon.edu)

**Dr. Charles Martinez, Jr.** at [charlesm@uoregon.edu](mailto:charlesm@uoregon.edu)

or calling **Michael Thier** at (country code 001) 541.214.3207

or calling **Dr. Charles Martinez, Jr.** at (country code 001) 541.346.2161

An Institutional Review Board (“IRB”) is overseeing this research. An IRB is a group of people who perform independent review of research studies to ensure the rights and welfare of participants are protected. The University of Oregon Research Compliance Services is the office that supports the IRB. If you have questions about your rights or wish to speak with someone other than the research team, you may contact:

Research Compliance Services  
5237 University of Oregon  
Eugene, OR 97403-5237  
(541) 346-2510

## STATEMENT OF CONSENT

I have had the opportunity to read and consider the information in this form. I have asked any questions necessary to make a decision about my participation. I understand that I can ask additional questions throughout my participation.

I understand that by signing below, I volunteer to participate in this research. I understand that I am not waiving any legal rights. I have been provided with a copy of this consent form. I understand that if my ability to consent or assent for myself changes, either I or my legal representative may be asked to re-consent prior to my continued participation in this study.

I consent to participate in this study.

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Name of Adult Participant

---

Signature of Adult Participant

---

Date



**Researcher Signature** (to be completed at time of informed consent)

I have explained the research to the participant and answered all of his/her questions. I believe that he/she understands the information described in this consent form and freely consents to participate.

Michael Thier  
Name of Research Team Member

\_\_\_\_\_  
Signature of Research Team Member

\_\_\_\_\_  
Date

## APPENDIX N – PHASE 2 CONTENT VALIDITY SURVEY INSTRUMENT

### Default Question Block

Thank you very much for lending your expertise and time to the content validity phase of this research project, which is designed to develop a measure of the dispositions of global citizenship for use with students in secondary schools.

I am asking you to review 120 items that have been inspired by or adapted from more than 30 extant measures of global citizenship or conceptually related constructs. Items that remain after this content validity phase will be entered into a discrete-choice measure, a cutting-edge approach that can solve issues of response-style bias (e.g., social desirability), which often accompany measures of dispositions or attitudes. For each item, I will ask you to rate your level of agreement that the item (a) is **relevant** to the construct of global citizenship; (b) features a **disposition** rather than knowledge, skills, or behaviors; and (c) features a **culturally universal**, rather than culturally relative (assuming a faithful linguistic translation), component of global citizenship.

For items you find to have limited relevance, limited value to tap into a disposition, or limited potential for cultural universality, you will have an opportunity to offer open-ended critique. At the end of this instrument, you will also have an opportunity to suggest any aspects or components of global citizenship for which the 120 items have not accounted.

Last, you will also be asked if you want to receive a final copy of the discrete-choice measure and updates during the study's subsequent phases.

Again, thank you for participating in this study!

Michael Thier  
Ph.D. candidate, University of Oregon

## IS Block 1

Empathizing with people from different cultural groups is important to me.

The above statement is **relevant** to the construct of global citizenship.

The above statement features a **disposition** rather than knowledge, skills, or behaviors.

The above statement features a **culturally universal**, rather than culturally relative, component of global citizenship.

Please suggest how this item can be improved: Empathizing with people from different cultural groups is important to me.



## IS Block 2

I accept people regardless of any differences between their cultural backgrounds and mine.

The above statement is **relevant** to the construct of global citizenship.

The above statement features a **disposition** rather than knowledge, skills, or behaviors.

The above statement features a **culturally universal**, rather than culturally relative, component of global citizenship.

Please suggest how this item can be improved: I accept people regardless of any differences between their cultural backgrounds and mine.



### IS Block 3

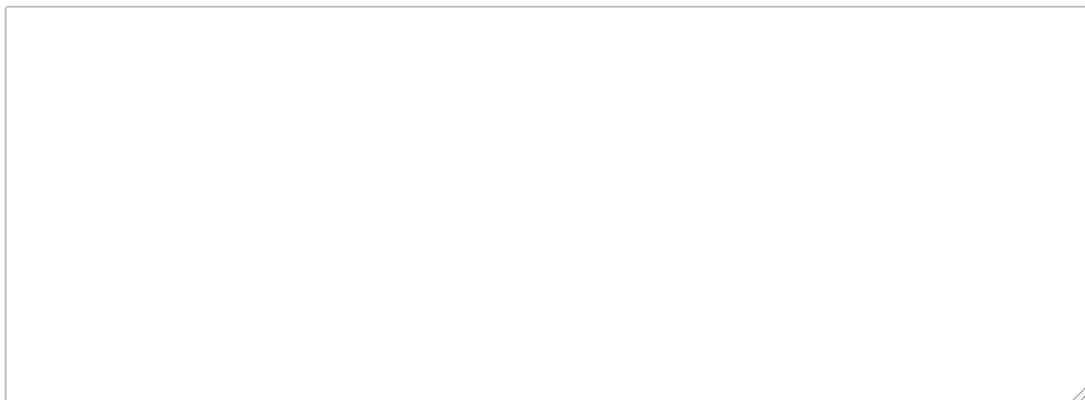
I am against the idea of a single, dominant culture.

The above statement is **relevant** to the construct of global citizenship.

The above statement features a **disposition** rather than knowledge, skills, or behaviors.

The above statement features a **culturally universal**, rather than culturally relative, component of global citizenship.

Please suggest how this item can be improved: I am against the idea of a single, dominant culture.





## IS Block 4

I am concerned for the human rights of all people.

The above statement is **relevant** to the construct of global citizenship.

The above statement features a **disposition** rather than knowledge, skills, or behaviors.

The above statement features a **culturally universal**, rather than culturally relative, component of global citizenship.

Please suggest how this item can be improved: I am concerned for the human rights of all people.

## IS Block 5

I am confident that morals are culturally specific.

The above statement is **relevant** to the construct of global citizenship.

The above statement features a **disposition** rather than knowledge, skills, or behaviors.

The above statement features a **culturally universal**, rather than culturally relative, component of global citizenship.

Please suggest how this item can be improved: I am confident that morals are culturally specific.

## IS Block 6

I am confident that problems occur when people think of any specific culture as the best.

The above statement is **relevant** to the construct of global citizenship.

The above statement features a **disposition** rather than knowledge, skills, or behaviors.

The above statement features a **culturally universal**, rather than culturally relative, component of global citizenship.

Please suggest how this item can be improved: I am confident that problems occur when people think of any specific culture as the best.



## IS Block 7

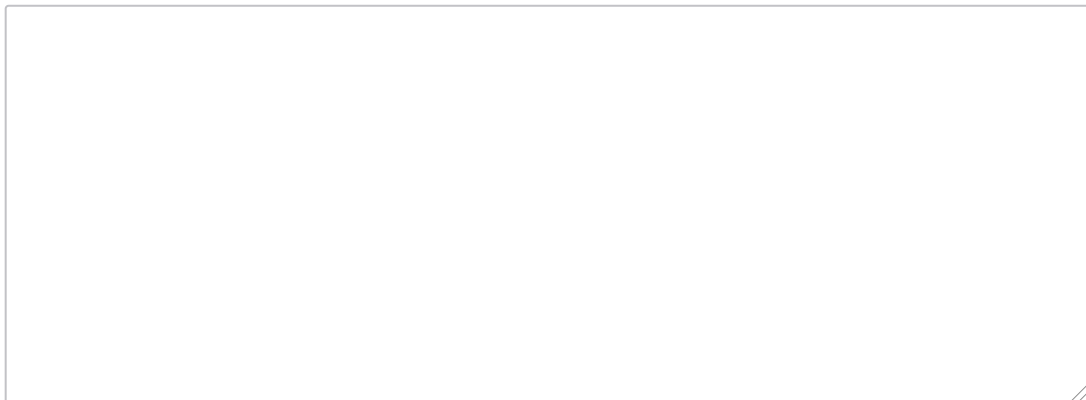
I am sensitive to the needs of people who experience discrimination.

The above statement is **relevant** to the construct of global citizenship.

The above statement features a **disposition** rather than knowledge, skills, or behaviors.

The above statement features a **culturally universal**, rather than culturally relative, component of global citizenship.

Please suggest how this item can be improved: I am sensitive to the needs of people who experience discrimination.



## IS Block 8

I believe international relations require everyone to respect cultural perspectives that differ from their own.

The above statement is **relevant** to the construct of global citizenship.

The above statement features a **disposition** rather than knowledge, skills, or behaviors.

The above statement features a **culturally universal**, rather than culturally relative, component of global citizenship.

Please suggest how this item can be improved: I believe international relations require everyone to respect cultural perspectives that differ from their own.

## IS Block 9

I believe that people experiencing difficulty deserve help regardless of their cultural group.

The above statement is **relevant** to the construct of global citizenship.

The above statement features a **disposition** rather than knowledge, skills, or behaviors.

The above statement features a **culturally universal**, rather than culturally relative, component of global citizenship.

Please suggest how this item can be improved: I believe that people experiencing difficulty deserve help regardless of their cultural group.

## IS Block 10

I feel friendly toward people from various cultural backgrounds.

The above statement is **relevant** to the construct of global citizenship.

The above statement features a **disposition** rather than knowledge, skills, or behaviors.

The above statement features a **culturally universal**, rather than culturally relative, component of global citizenship.

Please suggest how this item can be improved: I feel friendly toward people from various cultural backgrounds.

## IS Block 11

I feel comfortable with people from various cultural groups.

The above statement is **relevant** to the construct of global citizenship.

The above statement features a **disposition** rather than knowledge, skills, or behaviors.

The above statement features a **culturally universal**, rather than culturally relative, component of global citizenship.

Please suggest how this item can be improved: I feel comfortable with people from various cultural groups.

## IS Block 12

I feel upset when I notice people receiving poor treatment based on their cultural group.

The above statement is **relevant** to the construct of global citizenship.

The above statement features a **disposition** rather than knowledge, skills, or behaviors.

The above statement features a **culturally universal**, rather than culturally relative, component of global citizenship.

Please suggest how this item can be improved: I feel upset when I notice people receiving poor treatment based on their cultural group.



### IS Block 13

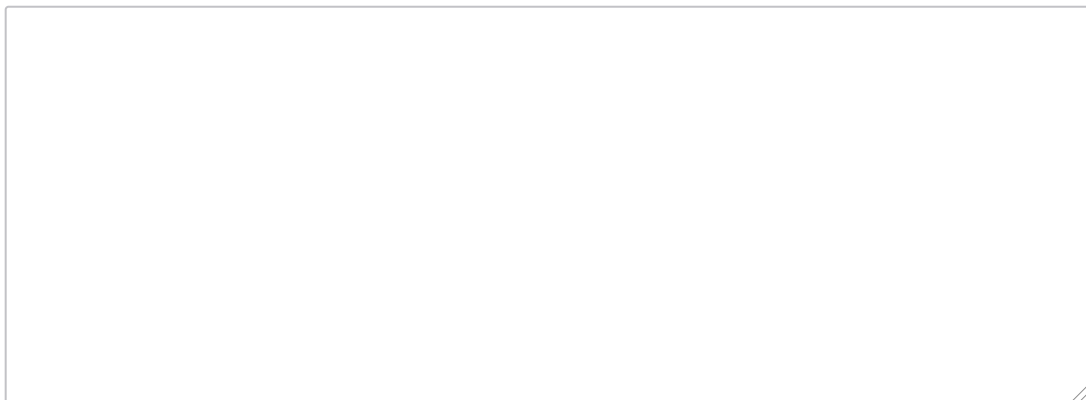
I feel upset when people's human rights are disrespected.

The above statement is **relevant** to the construct of global citizenship.

The above statement features a **disposition** rather than knowledge, skills, or behaviors.

The above statement features a **culturally universal**, rather than culturally relative, component of global citizenship.

Please suggest how this item can be improved: I feel upset when people's human rights are disrespected.





## IS Block 14

I find commonalities between myself and people from various cultural backgrounds.

The above statement is **relevant** to the construct of global citizenship.

The above statement features a **disposition** rather than knowledge, skills, or behaviors.

The above statement features a **culturally universal**, rather than culturally relative, component of global citizenship.

Please suggest how this item can be improved: I find commonalities between myself and people from various cultural backgrounds.

## IS Block 15

I form opinions about people based on reasons besides their cultural backgrounds.

The above statement is **relevant** to the construct of global citizenship.

The above statement features a **disposition** rather than

knowledge, skills, or behaviors.

The above statement features a **culturally universal**, rather than culturally relative, component of global citizenship.

Please suggest how this item can be improved: I form opinions about people based on reasons besides their cultural backgrounds.

## IS Block 16

I have concern for people regardless of their cultural backgrounds.

The above statement is **relevant** to the construct of global citizenship.

The above statement features a **disposition** rather than knowledge, skills, or behaviors.

The above statement features a **culturally universal**, rather than culturally relative, component of global citizenship.

Please suggest how this item can be improved: I have concern for people regardless of their cultural backgrounds.



## IS Block 17

I recognize that global historical forces shape present-day events in ways that are inequitable.

The above statement is **relevant** to the construct of global citizenship.

The above statement features a **disposition** rather than knowledge, skills, or behaviors.

The above statement features a **culturally universal**, rather than culturally relative, component of global citizenship.

Please suggest how this item can be improved: I recognize that global historical forces shape present-day events in ways that are inequitable.



## IS Block 18

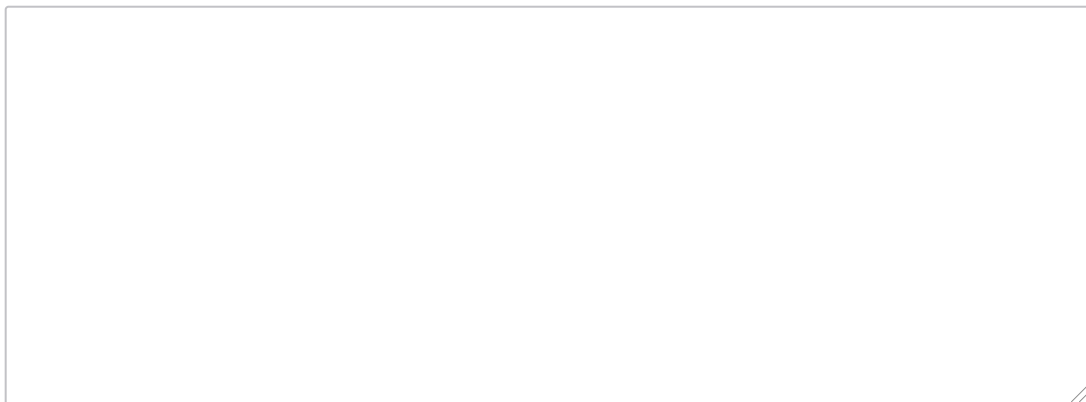
I respect cultural differences.

The above statement is **relevant** to the construct of global citizenship.

The above statement features a **disposition** rather than knowledge, skills, or behaviors.

The above statement features a **culturally universal**, rather than culturally relative, component of global citizenship.

Please suggest how this item can be improved: I respect cultural differences.



## IS Block 19

I respect human rights of people all over the world.

The above statement is **relevant** to the construct of global citizenship.

The above statement features a **disposition** rather than knowledge, skills, or behaviors.

The above statement features a **culturally universal**, rather than culturally relative, component of global citizenship.

Please suggest how this item can be improved: I respect human rights of people all over the world.

## IS Block 20

I see how cultural considerations can determine "right" or "wrong".

The above statement is **relevant** to the construct of global citizenship.

The above statement features a **disposition** rather than knowledge, skills, or behaviors.

The above statement features a **culturally universal**,

rather than culturally relative, component of global citizenship.

Please suggest how this item can be improved: I see how cultural considerations can determine "right" or "wrong".

## IS Block 21

I see the importance of people from different cultural groups communicating their ways of living to each other.

The above statement is **relevant** to the construct of global citizenship.

The above statement features a **disposition** rather than knowledge, skills, or behaviors.

The above statement features a **culturally universal**, rather than culturally relative, component of global citizenship.

Please suggest how this item can be improved: I see the importance of people from different cultural groups communicating their ways of living to each other.



## IS Block 22

I see the importance of people respecting cultural differences during their interactions.

The above statement is **relevant** to the construct of global citizenship.

The above statement features a **disposition** rather than knowledge, skills, or behaviors.

The above statement features a **culturally universal**, rather than culturally relative, component of global citizenship.

Please suggest how this item can be improved: I see the importance of people respecting cultural differences during their interactions.



### IS Block 23

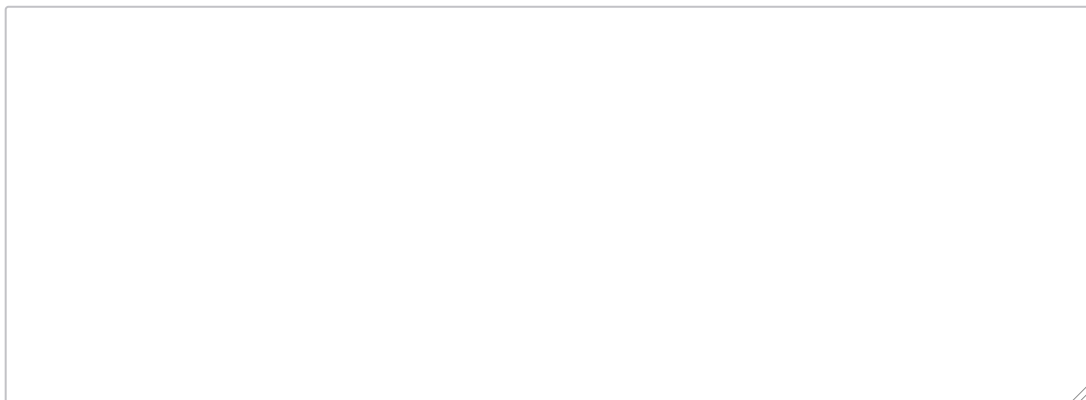
I think global inequalities should be eliminated.

The above statement is **relevant** to the construct of global citizenship.

The above statement features a **disposition** rather than knowledge, skills, or behaviors.

The above statement features a **culturally universal**, rather than culturally relative, component of global citizenship.

Please suggest how this item can be improved: I think global inequalities should be eliminated.





## IS Block 24

I think it is unjust when one powerful cultural group exploits other cultural groups.

The above statement is **relevant** to the construct of global citizenship.

The above statement features a **disposition** rather than knowledge, skills, or behaviors.

The above statement features a **culturally universal**, rather than culturally relative, component of global citizenship.

Please suggest how this item can be improved: I think it is unjust when one powerful cultural group exploits other cultural groups.

## IS Block 25

I think policies that negatively affect the rest of the world are unjust.

The above statement is **relevant** to the construct of global citizenship.

The above statement features a **disposition** rather than knowledge, skills, or behaviors.

The above statement features a **culturally universal**, rather than culturally relative, component of global citizenship.

Please suggest how this item can be improved: I think policies that negatively affect the rest of the world are unjust.

### IS Block 26

I trust people from various cultural backgrounds.

The above statement is **relevant** to the construct of global citizenship.

The above statement features a **disposition** rather than knowledge, skills, or behaviors.

The above statement features a **culturally universal**, rather than culturally relative, component of global citizenship.

Please suggest how this item can be improved: I trust people from various cultural backgrounds.



## IS Block 27

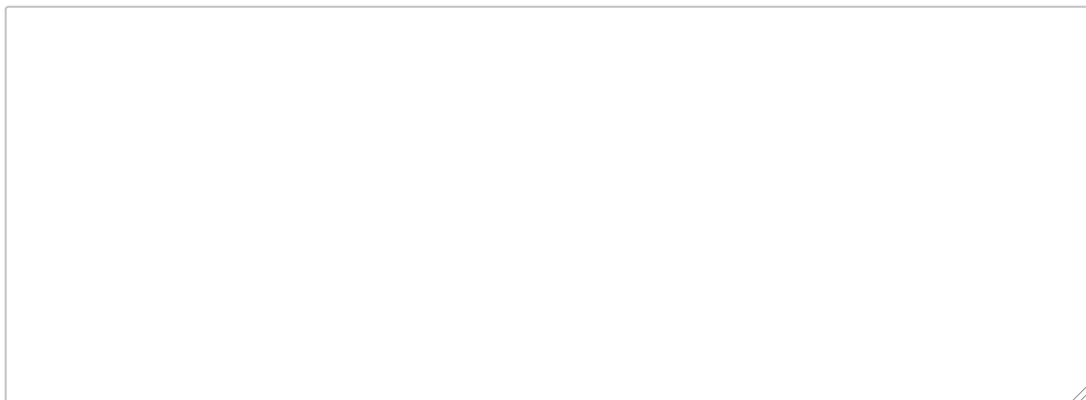
In my opinion, cultural authenticity should be preserved.

The above statement is **relevant** to the construct of global citizenship.

The above statement features a **disposition** rather than knowledge, skills, or behaviors.

The above statement features a **culturally universal**, rather than culturally relative, component of global citizenship.

Please suggest how this item can be improved: In my opinion, cultural authenticity should be preserved.



## IS Block 28

In my opinion, solving pressing global problems requires cultural groups to collaborate and compromise.

The above statement is **relevant** to the construct of global citizenship.

The above statement features a **disposition** rather than knowledge, skills, or behaviors.

The above statement features a **culturally universal**, rather than culturally relative, component of global citizenship.

Please suggest how this item can be improved: In my opinion, solving pressing global problems requires cultural groups to collaborate and compromise.

## IS Block 29

Social equality matters to me.

The above statement is **relevant** to the construct of global citizenship.

The above statement features a **disposition** rather than

knowledge, skills, or behaviors.

The above statement features a **culturally universal**, rather than culturally relative, component of global citizenship.

Please suggest how this item can be improved: Social equality matters to me.

### IS Block 30

The needs of people from various cultures are at least as important as my own.

The above statement is **relevant** to the construct of global citizenship.

The above statement features a **disposition** rather than knowledge, skills, or behaviors.

The above statement features a **culturally universal**, rather than culturally relative, component of global citizenship.

Please suggest how this item can be improved: The needs of people from various cultures are at least as important as my own.



### AMP Block 1

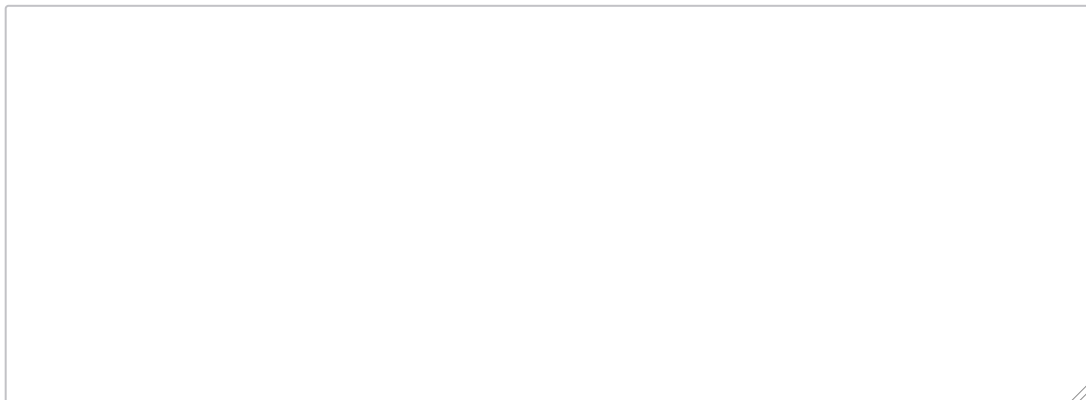
Appreciating people based on their cultural norms is important to me.

The above statement is ***relevant*** to the construct of global citizenship.

The above statement features a ***disposition*** rather than knowledge, skills, or behaviors.

The above statement features a ***culturally universal***, rather than culturally relative, component of global citizenship.

Please suggest how this item can be improved: Appreciating people based on their cultural norms is important to me.



## AMP Block 2

Examining cultural differences helps me learn more about my own ideas.

The above statement is ***relevant*** to the construct of global citizenship.

The above statement features a ***disposition*** rather than knowledge, skills, or behaviors.

The above statement features a ***culturally universal***, rather than culturally relative, component of global citizenship.

Please suggest how this item can be improved: Examining cultural differences helps me learn more about my own ideas.

## AMP Block 3

Exchanging ideas with people from various cultures shapes my ideas.

The above statement is ***relevant*** to the construct of global citizenship.

The above statement features a **disposition** rather than knowledge, skills, or behaviors.

The above statement features a **culturally universal**, rather than culturally relative, component of global citizenship.

Please suggest how this item can be improved: Exchanging ideas with people from various cultures shapes my ideas.

#### AMP Block 4

Experiencing complex, intercultural relationships strengthens my ideas.

The above statement is **relevant** to the construct of global citizenship.

The above statement features a **disposition** rather than knowledge, skills, or behaviors.

The above statement features a **culturally universal**, rather than culturally relative, component of global citizenship.

Please suggest how this item can be improved: Experiencing complex, intercultural relationships strengthens my ideas.





### AMP Block 5

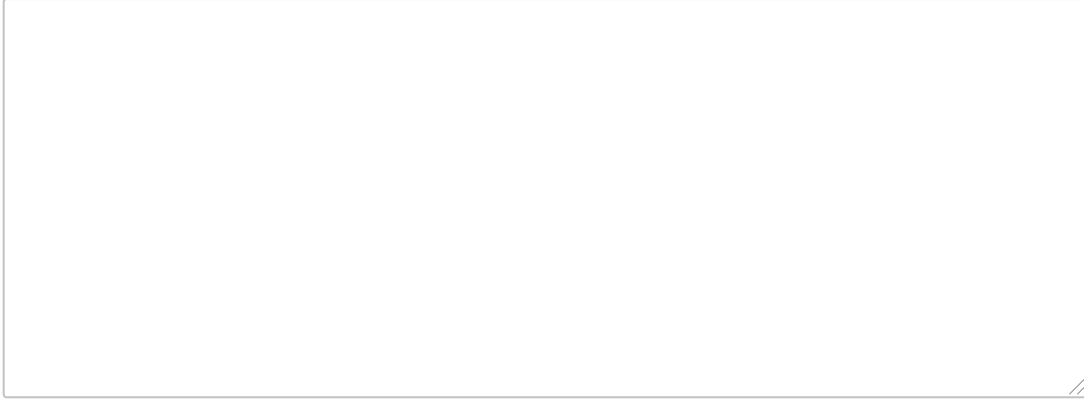
Explaining my ways of thinking to people who are different from me is as important to me as hearing them explaining their ways of thinking to me.

The above statement is ***relevant*** to the construct of global citizenship.

The above statement features a ***disposition*** rather than knowledge, skills, or behaviors.

The above statement features a ***culturally universal***, rather than culturally relative, component of global citizenship.

Please suggest how this item can be improved: Explaining my ways of thinking to people who are different from me is as important to me as hearing them explaining their ways of thinking to me.



## AMP Block 6

Exposing my ideas to people who are different from me is a great opportunity to learn more about my own ideas.

The above statement is ***relevant*** to the construct of global citizenship.

The above statement features a ***disposition*** rather than knowledge, skills, or behaviors.

The above statement features a ***culturally universal***, rather than culturally relative, component of global citizenship.

Please suggest how this item can be improved: Exposing my ideas to people who are different from me is a great opportunity to learn more about my own ideas.



## AMP Block 7

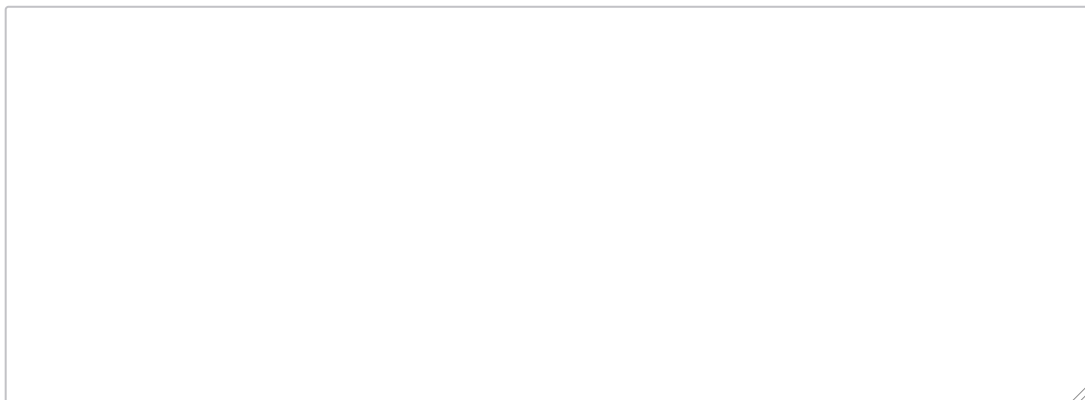
I account for multiple perspectives when I consider cultural conflicts.

The above statement is **relevant** to the construct of global citizenship.

The above statement features a **disposition** rather than knowledge, skills, or behaviors.

The above statement features a **culturally universal**, rather than culturally relative, component of global citizenship.

Please suggest how this item can be improved: I account for multiple perspectives when I consider cultural conflicts.



## AMP Block 8

I am confident that being informed about cultural differences makes for better discussion.

The above statement is **relevant** to the construct of global citizenship.

The above statement features a **disposition** rather than knowledge, skills, or behaviors.

The above statement features a **culturally universal**, rather than culturally relative, component of global citizenship.

Please suggest how this item can be improved: I am confident that being informed about cultural differences makes for better discussion.

## AMP Block 9

I am confident that learning from people in various cultures improves decision-making.

The above statement is **relevant** to the construct of global citizenship.

The above statement features a **disposition** rather than knowledge, skills, or behaviors.

The above statement features a **culturally universal**, rather than culturally relative, component of global citizenship.

Please suggest how this item can be improved: I am confident that learning from people in various cultures improves decision-making.

## AMP Block 10

I am confident that solutions to pressing global problems require teams with diverse perspectives.

The above statement is **relevant** to the construct of global citizenship.

The above statement features a **disposition** rather than knowledge, skills, or behaviors.

The above statement features a **culturally universal**, rather than culturally relative, component of global citizenship.

Please suggest how this item can be improved: I am confident that solutions to pressing global problems require teams with diverse

perspectives.

### AMP Block 11

I am open to how people live their lives regardless of how much their lives might differ from mine.

The above statement is ***relevant*** to the construct of global citizenship.

The above statement features a ***disposition*** rather than knowledge, skills, or behaviors.

The above statement features a ***culturally universal***, rather than culturally relative, component of global citizenship.

Please suggest how this item can be improved: I am open to how people live their lives regardless of how much their lives might differ from mine.



## AMP Block 12

I approve of all members of a society learning about various religions that differ from their own.

The above statement is **relevant** to the construct of global citizenship.

The above statement features a **disposition** rather than knowledge, skills, or behaviors.

The above statement features a **culturally universal**, rather than culturally relative, component of global citizenship.

Please suggest how this item can be improved: I approve of all members of a society learning about various religions that differ from their own.



### AMP Block 13

I believe globalization is beneficial when it helps people from different cultures experience various perspectives.

The above statement is ***relevant*** to the construct of global citizenship.

The above statement features a ***disposition*** rather than knowledge, skills, or behaviors.

The above statement features a ***culturally universal***, rather than culturally relative, component of global citizenship.

Please suggest how this item can be improved: I believe globalization is beneficial when it helps people from different cultures experience various perspectives.





## AMP Block 14

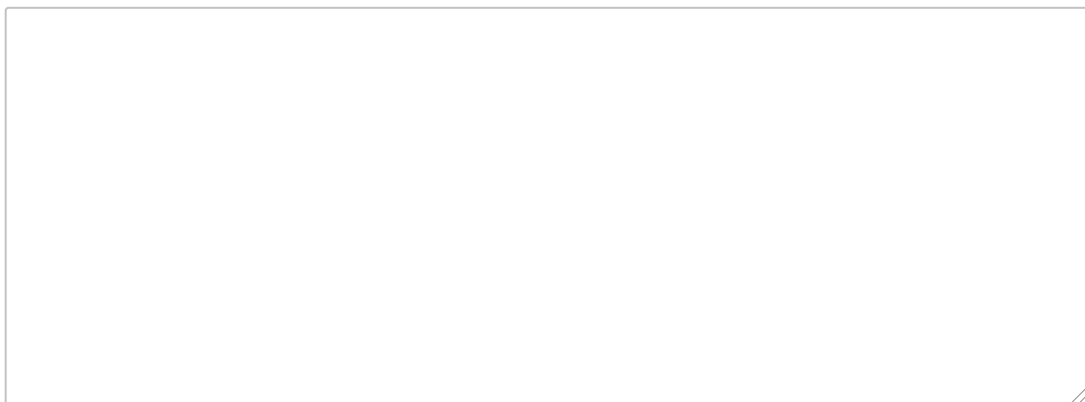
I believe that multiple perspectives are better than an individual's ideas.

The above statement is ***relevant*** to the construct of global citizenship.

The above statement features a ***disposition*** rather than knowledge, skills, or behaviors.

The above statement features a ***culturally universal***, rather than culturally relative, component of global citizenship.

Please suggest how this item can be improved: I believe that multiple perspectives are better than an individual's ideas.



## AMP Block 15

I consider different cultural perspectives before drawing conclusions about the world.

The above statement is ***relevant*** to the construct of global citizenship.

The above statement features a ***disposition*** rather than knowledge, skills, or behaviors.

The above statement features a ***culturally universal***, rather than culturally relative, component of global citizenship.

Please suggest how this item can be improved: I consider different cultural perspectives before drawing conclusions about the world.

## AMP Block 16

I consider various cultural perspectives when evaluating global problems.

The above statement is ***relevant*** to the construct of global citizenship.

The above statement features a **disposition** rather than knowledge, skills, or behaviors.

The above statement features a **culturally universal**, rather than culturally relative, component of global citizenship.

Please suggest how this item can be improved: I consider various cultural perspectives when evaluating global problems.

## AMP Block 17

I enrich my opinions by encountering people whose life experiences differ from mine.

The above statement is **relevant** to the construct of global citizenship.

The above statement features a **disposition** rather than knowledge, skills, or behaviors.

The above statement features a **culturally universal**, rather than culturally relative, component of global citizenship.

Please suggest how this item can be improved: I enrich my opinions by encountering people whose life experiences differ from mine.

### AMP Block 18

I feel comfortable in groups even when group members' views differ from mine.

The above statement is **relevant** to the construct of global citizenship.

The above statement features a **disposition** rather than knowledge, skills, or behaviors.

The above statement features a **culturally universal**, rather than culturally relative, component of global citizenship.

Please suggest how this item can be improved: I feel comfortable in groups even when group members' views differ from mine.

## AMP Block 19

I keep an open mind when I engage with people who are culturally different from me.

The above statement is **relevant** to the construct of global citizenship.

The above statement features a **disposition** rather than knowledge, skills, or behaviors.

The above statement features a **culturally universal**, rather than culturally relative, component of global citizenship.

Please suggest how this item can be improved: I keep an open mind when I engage with people who are culturally different from me.

## AMP Block 20

I recognize that a society with a variety of cultural groups is more able to tackle problems as they occur.

The above statement is **relevant** to the construct of global citizenship.

The above statement features a **disposition** rather than knowledge, skills, or behaviors.

The above statement features a **culturally universal**, rather than culturally relative, component of global citizenship.

Please suggest how this item can be improved: I recognize that a society with a variety of cultural groups is more able to tackle problems as they occur.

## AMP Block 21

I see the importance of all members of a society learning about differences between cultural groups.

The above statement is **relevant** to the construct of global citizenship.

The above statement features a **disposition** rather than knowledge, skills, or behaviors.

The above statement features a **culturally universal**, rather than culturally relative, component of global citizenship.

Please suggest how this item can be improved: I see the importance of all members of a society learning about differences between cultural groups.

## AMP Block 22

I trust that everyone can learn something of value from different cultural perspectives.

The above statement is **relevant** to the construct of global citizenship.

The above statement features a **disposition** rather than knowledge, skills, or behaviors.

The above statement features a **culturally universal**, rather than culturally relative, component of global citizenship.

Please suggest how this item can be improved: I trust that everyone can learn something of value from different cultural perspectives.

### AMP Block 23

I try to account for various cultural viewpoints before making decisions.

The above statement is **relevant** to the construct of global citizenship.

The above statement features a **disposition** rather than knowledge, skills, or behaviors.

The above statement features a **culturally universal**, rather than culturally relative, component of global citizenship.

Please suggest how this item can be improved: I try to account for various cultural viewpoints before making decisions.



## AMP Block 24

I would approve of schools providing activities designed for students to examine their opinions alongside those of people from various cultures.

The above statement is **relevant** to the construct of global citizenship.

The above statement features a **disposition** rather than knowledge, skills, or behaviors.

The above statement features a **culturally universal**, rather than culturally relative, component of global citizenship.

Please suggest how this item can be improved: I would approve of schools providing activities designed for students to examine their opinions alongside those of people from various cultures.

## AMP Block 25

Ideas from people who are culturally different from me stimulate my own thinking.

The above statement is ***relevant*** to the construct of global citizenship.

The above statement features a ***disposition*** rather than knowledge, skills, or behaviors.

The above statement features a ***culturally universal***, rather than culturally relative, component of global citizenship.

Please suggest how this item can be improved: Ideas from people who are culturally different from me stimulate my own thinking.

## AMP Block 26

Immersing myself in an unfamiliar culture is a great way to test my ideas.

The above statement is ***relevant*** to the construct of global citizenship.

The above statement features a ***disposition*** rather than knowledge, skills, or behaviors.

The above statement features a ***culturally universal***, rather than culturally relative, component of global citizenship.

Please suggest how this item can be improved: Immersing myself in an unfamiliar culture is a great way to test my ideas.

### AMP Block 27

Involving people from various cultural backgrounds in my life enhances my decision-making processes.

The above statement is **relevant** to the construct of global citizenship.

The above statement features a **disposition** rather than knowledge, skills, or behaviors.

The above statement features a **culturally universal**, rather than culturally relative, component of global citizenship.

Please suggest how this item can be improved: Involving people from various cultural backgrounds in my life enhances my decision-making processes.



## AMP Block 28

My decisions about important issues account for various individual and group perspectives.

The above statement is ***relevant*** to the construct of global citizenship.

The above statement features a ***disposition*** rather than knowledge, skills, or behaviors.

The above statement features a ***culturally universal***, rather than culturally relative, component of global citizenship.

Please suggest how this item can be improved: My decisions about important issues account for various individual and group perspectives.



## AMP Block 29

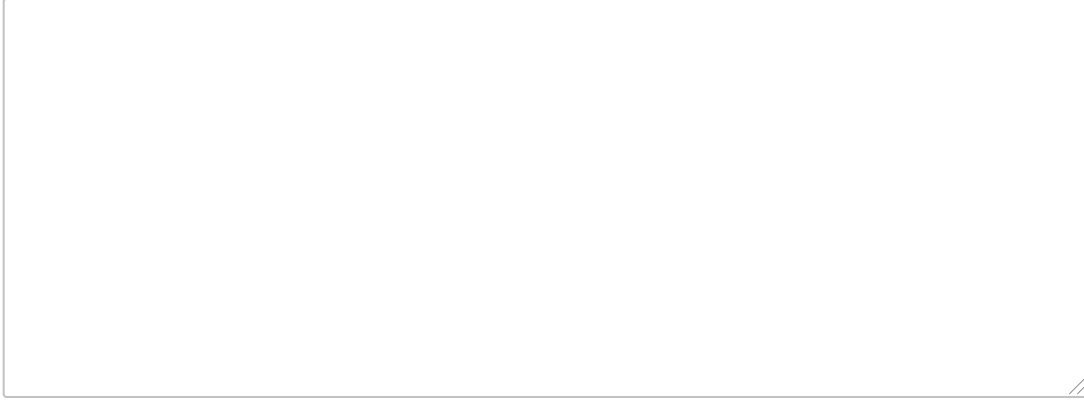
My learning would be limited if I only encountered people whose ways of thinking were similar to mine.

The above statement is ***relevant*** to the construct of global citizenship.

The above statement features a ***disposition*** rather than knowledge, skills, or behaviors.

The above statement features a ***culturally universal***, rather than culturally relative, component of global citizenship.

Please suggest how this item can be improved: My learning would be limited if I only encountered people whose ways of thinking were similar to mine.



### AMP Block 30

People who have different ways of thinking than the people in my culture prompt me to improve my ideas.

The above statement is **relevant** to the construct of global citizenship.

The above statement features a **disposition** rather than knowledge, skills, or behaviors.

The above statement features a **culturally universal**, rather than culturally relative, component of global citizenship.

Please suggest how this item can be improved: People who have different ways of thinking than the people in my culture prompt me to improve my ideas.



## IID Block 1

Activities with a variety of people are more interesting to me than activities with people who are just like me.

The above statement is **relevant** to the construct of global citizenship.

The above statement features a **disposition** rather than knowledge, skills, or behaviors.

The above statement features a **culturally universal**, rather than culturally relative, component of global citizenship.

Please suggest how this item can be improved: Activities with a variety of people are more interesting to me than activities with people who are just like me.



## IID Block 2

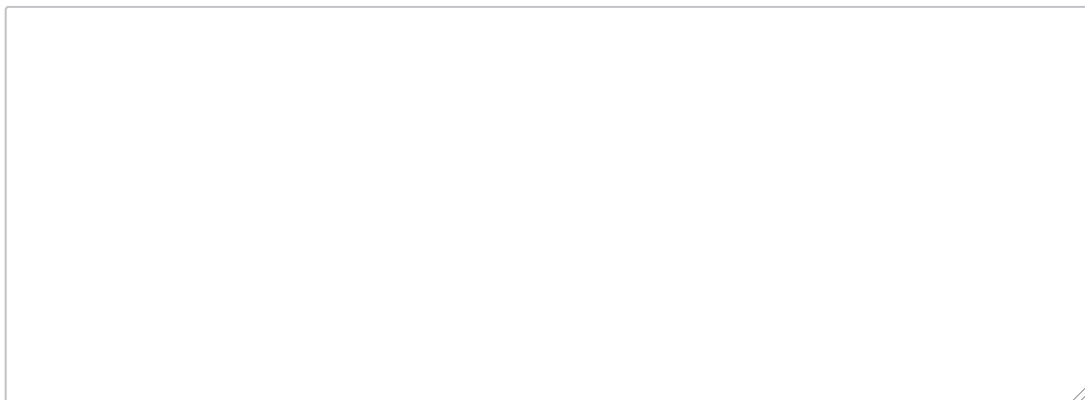
Cultural differences stimulate my curiosity.

The above statement is **relevant** to the construct of global citizenship.

The above statement features a **disposition** rather than knowledge, skills, or behaviors.

The above statement features a **culturally universal**, rather than culturally relative, component of global citizenship.

Please suggest how this item can be improved: Cultural differences stimulate my curiosity.





### IID Block 3

Cultural diversity interests me.

The above statement is **relevant** to the construct of global citizenship.

The above statement features a **disposition** rather than knowledge, skills, or behaviors.

The above statement features a **culturally universal**, rather than culturally relative, component of global citizenship.

Please suggest how this item can be improved: Cultural diversity interests me.

### IID Block 4

I am curious about events that occur beyond the place where I live.

The above statement is **relevant** to the construct of global citizenship.

The above statement features a **disposition** rather than knowledge, skills, or behaviors.

The above statement features a **culturally universal**,

rather than culturally relative, component of global citizenship.

Please suggest how this item can be improved: I am curious about events that occur beyond the place where I live.

## **IID Block 5**

I am interested in the kinds of diverse experiences that globalization can provide.

The above statement is **relevant** to the construct of global citizenship.

The above statement features a **disposition** rather than knowledge, skills, or behaviors.

The above statement features a **culturally universal**, rather than culturally relative, component of global citizenship.

Please suggest how this item can be improved: I am interested in the kinds of diverse experiences that globalization can provide.



## IID Block 6

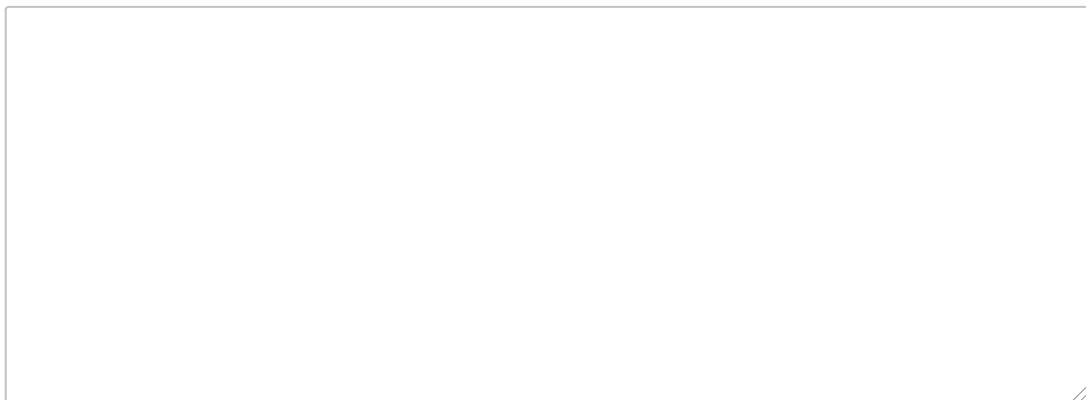
I am open to experiencing new religions.

The above statement is **relevant** to the construct of global citizenship.

The above statement features a **disposition** rather than knowledge, skills, or behaviors.

The above statement features a **culturally universal**, rather than culturally relative, component of global citizenship.

Please suggest how this item can be improved: I am open to experiencing new religions.



## IID Block 7

I am open to living in a culture where people's lifestyles differ from my own lifestyle.

The above statement is **relevant** to the construct of global citizenship.

The above statement features a **disposition** rather than knowledge, skills, or behaviors.

The above statement features a **culturally universal**, rather than culturally relative, component of global citizenship.

Please suggest how this item can be improved: I am open to living in a culture where people's lifestyles differ from my own lifestyle.

## IID Block 8

I believe that places are more interesting if the people there speak a variety of languages.

The above statement is **relevant** to the construct of global citizenship.

The above statement features a **disposition** rather than

knowledge, skills, or behaviors.

The above statement features a **culturally universal**, rather than culturally relative, component of global citizenship.

Please suggest how this item can be improved: I believe that places are more interesting if the people there speak a variety of languages.

## **IID Block 9**

I believe that we should celebrate cultural differences.

The above statement is **relevant** to the construct of global citizenship.

The above statement features a **disposition** rather than knowledge, skills, or behaviors.

The above statement features a **culturally universal**, rather than culturally relative, component of global citizenship.

Please suggest how this item can be improved: I believe that we should celebrate cultural differences.

## IID Block 10

I embrace cultural diversity.

The above statement is **relevant** to the construct of global citizenship.

The above statement features a **disposition** rather than knowledge, skills, or behaviors.

The above statement features a **culturally universal**, rather than culturally relative, component of global citizenship.

Please suggest how this item can be improved: I embrace cultural diversity.

## IID Block 11

I enjoy encountering people from different cultures.

The above statement is **relevant** to the construct of global citizenship.

The above statement features a **disposition** rather than knowledge, skills, or behaviors.

The above statement features a **culturally universal**, rather than culturally relative, component of global citizenship.

Please suggest how this item can be improved: I enjoy encountering people from different cultures.

## IID Block 12

I enjoy when people from various cultures teach me about differences between our ways of life.

The above statement is **relevant** to the construct of global citizenship.

The above statement features a **disposition** rather than knowledge, skills, or behaviors.

The above statement features a **culturally universal**, rather than culturally relative, component of global citizenship.

Please suggest how this item can be improved: I enjoy when people from various cultures teach me about differences between our ways of life.

### **IID Block 13**

I find the cultural complexities that distinguish different groups to be exciting.

The above statement is **relevant** to the construct of global citizenship.

The above statement features a **disposition** rather than knowledge, skills, or behaviors.

The above statement features a **culturally universal**, rather than culturally relative, component of global citizenship.

Please suggest how this item can be improved: I find the cultural complexities that distinguish different groups to be exciting.





## IID Block 14

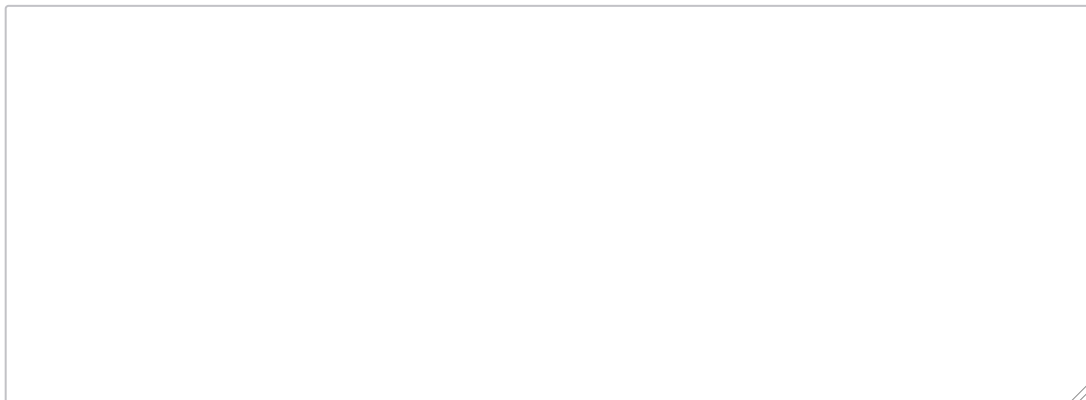
I find the many cultures that have existed in this world to be interesting.

The above statement is ***relevant*** to the construct of global citizenship.

The above statement features a ***disposition*** rather than knowledge, skills, or behaviors.

The above statement features a ***culturally universal***, rather than culturally relative, component of global citizenship.

Please suggest how this item can be improved: I find the many cultures that have existed in this world to be interesting.



## IID Block 15

I intentionally involve people from many cultural backgrounds in my life.

The above statement is ***relevant*** to the construct of global citizenship.

The above statement features a ***disposition*** rather than knowledge, skills, or behaviors.

The above statement features a ***culturally universal***, rather than culturally relative, component of global citizenship.

Please suggest how this item can be improved: I intentionally involve people from many cultural backgrounds in my life.

## IID Block 16

I prefer activities that expose me to people whose lives are different than my own.

The above statement is ***relevant*** to the construct of global citizenship.

The above statement features a **disposition** rather than knowledge, skills, or behaviors.

The above statement features a **culturally universal**, rather than culturally relative, component of global citizenship.

Please suggest how this item can be improved: I prefer activities that expose me to people whose lives are different than my own.

## IID Block 17

I prefer having friends from various cultural backgrounds rather than friends whose lives are just like my own.

The above statement is **relevant** to the construct of global citizenship.

The above statement features a **disposition** rather than knowledge, skills, or behaviors.

The above statement features a **culturally universal**, rather than culturally relative, component of global citizenship.

Please suggest how this item can be improved: I prefer having friends from various cultural backgrounds rather than friends whose

lives are just like my own.



## **IID Block 18**

I welcome experiences that expose me to customs and traditions of various cultures.

The above statement is ***relevant*** to the construct of global citizenship.

The above statement features a ***disposition*** rather than knowledge, skills, or behaviors.

The above statement features a ***culturally universal***, rather than culturally relative, component of global citizenship.

Please suggest how this item can be improved: I welcome experiences that expose me to customs and traditions of various cultures.



## IID Block 19

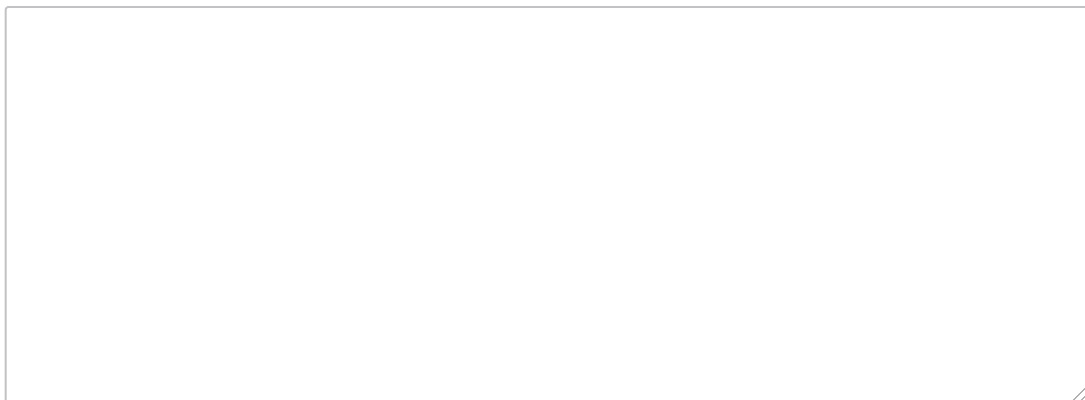
I welcome opportunities to sample cultural variety.

The above statement is **relevant** to the construct of global citizenship.

The above statement features a **disposition** rather than knowledge, skills, or behaviors.

The above statement features a **culturally universal**, rather than culturally relative, component of global citizenship.

Please suggest how this item can be improved: I welcome opportunities to sample cultural variety.



## IID Block 20

I would approve of neighbors moving next to me regardless of their cultural backgrounds.

The above statement is **relevant** to the construct of global citizenship.

The above statement features a **disposition** rather than knowledge, skills, or behaviors.

The above statement features a **culturally universal**, rather than culturally relative, component of global citizenship.

Please suggest how this item can be improved: I would approve of neighbors moving next to me regardless of their cultural backgrounds.

## IID Block 21

I would rather belong to a social group that emphasizes getting to know people from different cultures than a social group where everyone is just like me.

The above statement is **relevant** to the construct of global citizenship.

The above statement features a **disposition** rather than knowledge, skills, or behaviors.

The above statement features a **culturally universal**, rather than culturally relative, component of global citizenship.

Please suggest how this item can be improved: I would rather belong to a social group that emphasizes getting to know people from different cultures than a social group where everyone is just like me.

## IID Block 22

Immersing myself in an unfamiliar culture is exciting.

The above statement is **relevant** to the construct of global citizenship.

The above statement features a **disposition** rather than knowledge, skills, or behaviors.

The above statement features a **culturally universal**, rather than culturally relative, component of global citizenship.

Please suggest how this item can be improved: Immersing myself in an unfamiliar culture is exciting.

### **IID Block 23**

International events interest me.

The above statement is ***relevant*** to the construct of global citizenship.

The above statement features a ***disposition*** rather than knowledge, skills, or behaviors.

The above statement features a ***culturally universal***, rather than culturally relative, component of global citizenship.

Please suggest how this item can be improved: International events interest me.





## IID Block 24

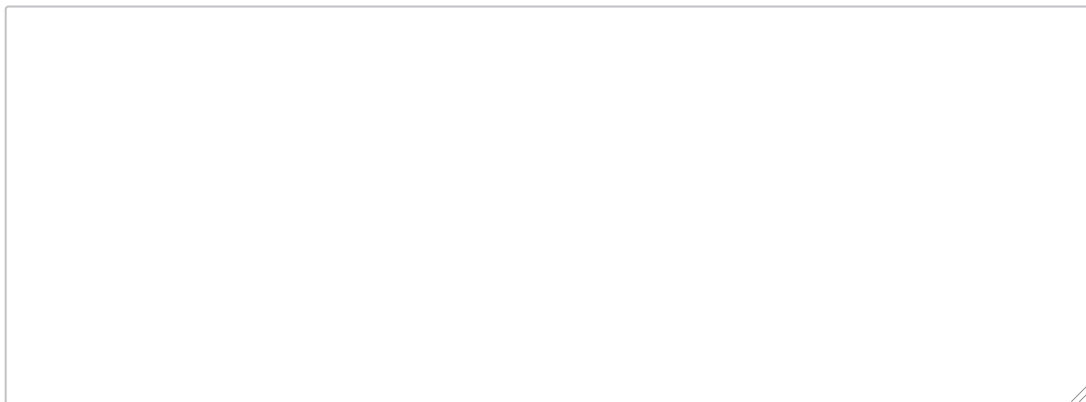
Knowing people from places I have never visited is intriguing.

The above statement is **relevant** to the construct of global citizenship.

The above statement features a **disposition** rather than knowledge, skills, or behaviors.

The above statement features a **culturally universal**, rather than culturally relative, component of global citizenship.

Please suggest how this item can be improved: Knowing people from places I have never visited is intriguing.



## IID Block 25

My friends come from a variety of cultures.

The above statement is **relevant** to the construct of global citizenship.

The above statement features a **disposition** rather than knowledge, skills, or behaviors.

The above statement features a **culturally universal**, rather than culturally relative, component of global citizenship.

Please suggest how this item can be improved: My friends come from a variety of cultures.

## IID Block 26

My friends follow a variety of religions.

The above statement is **relevant** to the construct of global citizenship.

The above statement features a **disposition** rather than knowledge, skills, or behaviors.

The above statement features a **culturally universal**,

rather than culturally relative, component of global citizenship.

Please suggest how this item can be improved: My friends follow a variety of religions.

## IID Block 27

My friends speak a variety of languages.

The above statement is **relevant** to the construct of global citizenship.

The above statement features a **disposition** rather than knowledge, skills, or behaviors.

The above statement features a **culturally universal**, rather than culturally relative, component of global citizenship.

Please suggest how this item can be improved: My friends speak a variety of languages.



## **IID Block 28**

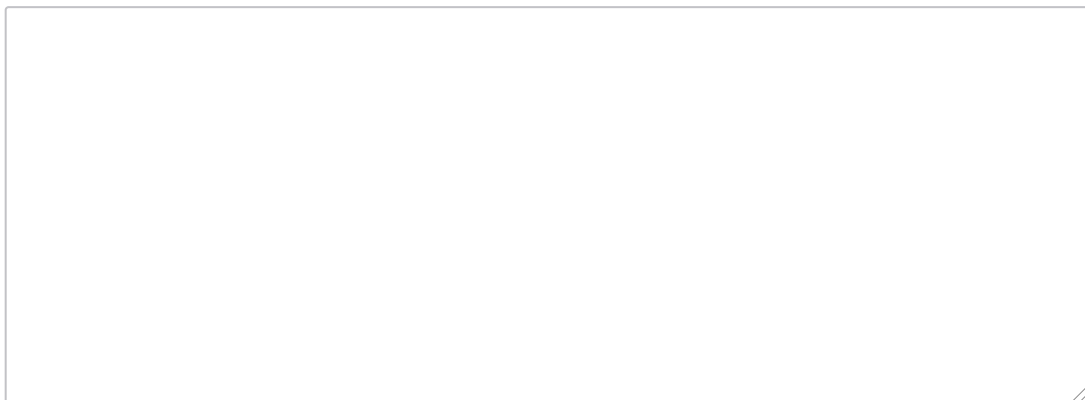
New cultural experiences excite me.

The above statement is **relevant** to the construct of global citizenship.

The above statement features a **disposition** rather than knowledge, skills, or behaviors.

The above statement features a **culturally universal**, rather than culturally relative, component of global citizenship.

Please suggest how this item can be improved: New cultural experiences excite me.



## IID Block 29

People from different cultures stimulate my curiosity.

The above statement is **relevant** to the construct of global citizenship.

The above statement features a **disposition** rather than knowledge, skills, or behaviors.

The above statement features a **culturally universal**, rather than culturally relative, component of global citizenship.

Please suggest how this item can be improved: People from different cultures stimulate my curiosity.

## IID Block 30

People whose customs differ from those of my culture are interesting to me.

The above statement is **relevant** to the construct of global citizenship.

The above statement features a **disposition** rather than knowledge, skills, or behaviors.

The above statement features a **culturally universal**, rather than culturally relative, component of global citizenship.

Please suggest how this item can be improved: People whose customs differ from those of my culture are interesting to me.

### PGA Block 3

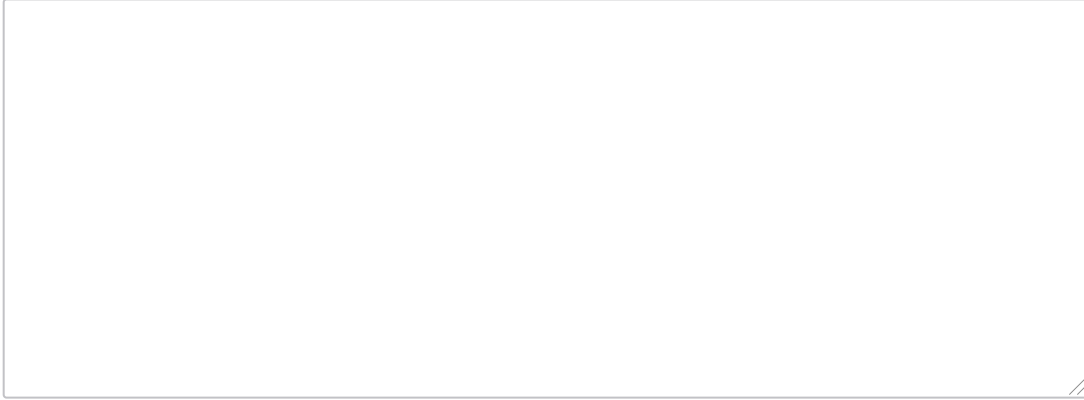
Being human is at least as important to my identity as being a citizen of any nation or region where I have lived.

The above statement is **relevant** to the construct of global citizenship.

The above statement features a **disposition** rather than knowledge, skills, or behaviors.

The above statement features a **culturally universal**, rather than culturally relative, component of global citizenship.

Please suggest how this item can be improved: Being human is at least as important to my identity as being a citizen of any nation or region where I have lived.



## PGA Block 8

I believe that all humanity should take responsibility for global problems that affect local, national, or regional communities.

The above statement is ***relevant*** to the construct of global citizenship.

The above statement features a ***disposition*** rather than knowledge, skills, or behaviors.

The above statement features a ***culturally universal***, rather than culturally relative, component of global citizenship.

Please suggest how this item can be improved: I believe that all humanity should take responsibility for global problems that affect local, national, or regional communities.



## PGA Block 9

I believe that problems impacting the global human community are at least as important as any smaller community's economic interests.

The above statement is ***relevant*** to the construct of global citizenship.

The above statement features a ***disposition*** rather than knowledge, skills, or behaviors.

The above statement features a ***culturally universal***, rather than culturally relative, component of global citizenship.

Please suggest how this item can be improved: I believe that problems impacting the global human community are at least as important as any smaller community's economic interests.





## PGA Block 10

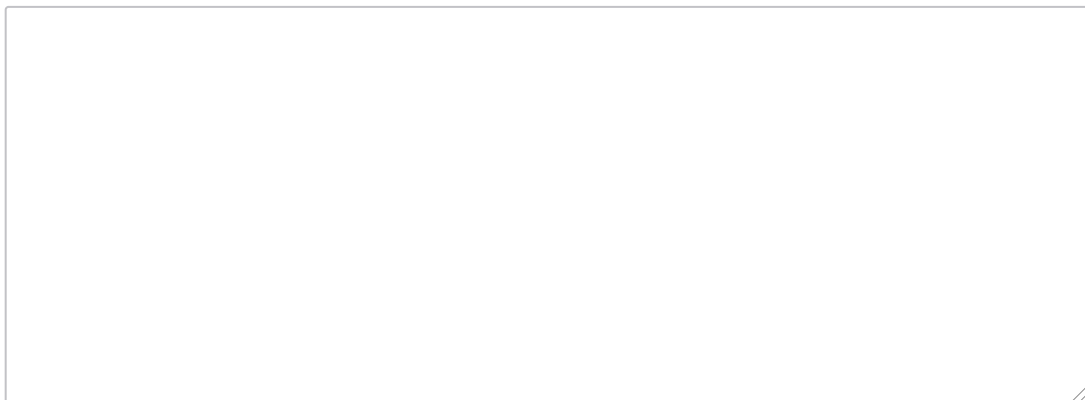
I consider myself to be a global citizen.

The above statement is **relevant** to the construct of global citizenship.

The above statement features a **disposition** rather than knowledge, skills, or behaviors.

The above statement features a **culturally universal**, rather than culturally relative, component of global citizenship.

Please suggest how this item can be improved: I consider myself to be a global citizen.



## PGA Block 17

I feel connected to people all over the world, even if I don't know them personally.

The above statement is **relevant** to the construct of global citizenship.

The above statement features a **disposition** rather than knowledge, skills, or behaviors.

The above statement features a **culturally universal**, rather than culturally relative, component of global citizenship.

Please suggest how this item can be improved: I feel connected to people all over the world, even if I don't know them personally.

## PGA Block 18

I feel equally upset when bad things happen to people anywhere in the world.

The above statement is **relevant** to the construct of global citizenship.

The above statement features a **disposition** rather than

knowledge, skills, or behaviors.

The above statement features a **culturally universal**, rather than culturally relative, component of global citizenship.

Please suggest how this item can be improved: I feel equally upset when bad things happen to people anywhere in the world.

## PGA Block 19

I have an equal amount in common with people anywhere in the world.

The above statement is **relevant** to the construct of global citizenship.

The above statement features a **disposition** rather than knowledge, skills, or behaviors.

The above statement features a **culturally universal**, rather than culturally relative, component of global citizenship.

Please suggest how this item can be improved: I have an equal amount in common with people anywhere in the world.



## PGA Block 22

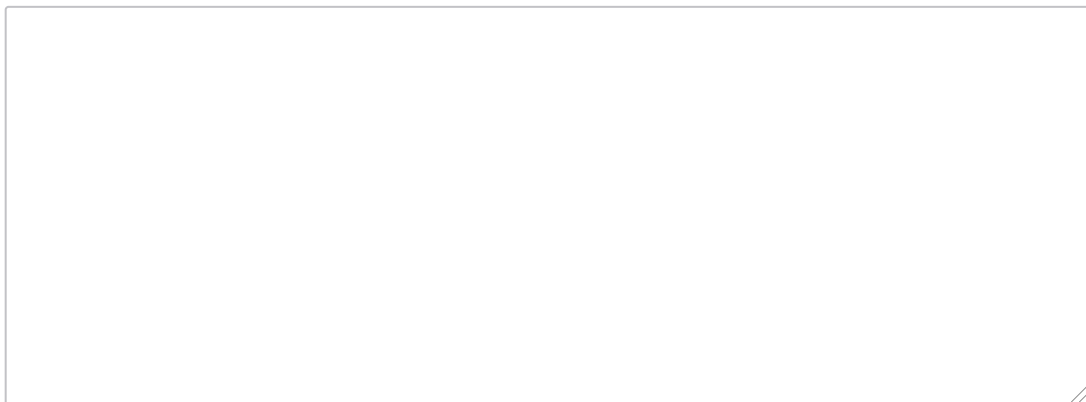
I identify myself as part of the global human community.

The above statement is **relevant** to the construct of global citizenship.

The above statement features a **disposition** rather than knowledge, skills, or behaviors.

The above statement features a **culturally universal**, rather than culturally relative, component of global citizenship.

Please suggest how this item can be improved: I identify myself as part of the global human community.



## PGA Block 23

I see all of us having an obligation to achieve the most equitable world possible.

The above statement is **relevant** to the construct of global citizenship.

The above statement features a **disposition** rather than knowledge, skills, or behaviors.

The above statement features a **culturally universal**, rather than culturally relative, component of global citizenship.

Please suggest how this item can be improved: I see all of us having an obligation to achieve the most equitable world possible.

## PGA Block 26

I trust people equally regardless of where they live in the world.

The above statement is **relevant** to the construct of global citizenship.

The above statement features a **disposition** rather than knowledge, skills, or behaviors.

The above statement features a ***culturally universal***, rather than culturally relative, component of global citizenship.

Please suggest how this item can be improved: I trust people equally regardless of where they live in the world.

## PGA Block 29

I welcome a type of international interdependence that makes us all responsible to the global human community.

The above statement is ***relevant*** to the construct of global citizenship.

The above statement features a ***disposition*** rather than knowledge, skills, or behaviors.

The above statement features a ***culturally universal***, rather than culturally relative, component of global citizenship.

Please suggest how this item can be improved: I welcome a type of international interdependence that makes us all responsible to the global human community.



### PGA Block 30

It would be desirable to have a society with internationally minded people who think about the welfare of the world at least as much as local, national, or regional interests.

The above statement is **relevant** to the construct of global citizenship.

The above statement features a **disposition** rather than knowledge, skills, or behaviors.

The above statement features a **culturally universal**, rather than culturally relative, component of global citizenship.

Please suggest how this item can be improved: It would be desirable to have a society with internationally minded people who think about the welfare of the world at least as much as local, national, or regional interests.



## PGA Block 1

Being a global citizen is at least as important in my daily life as being a citizen of the ***local*** community where I live.

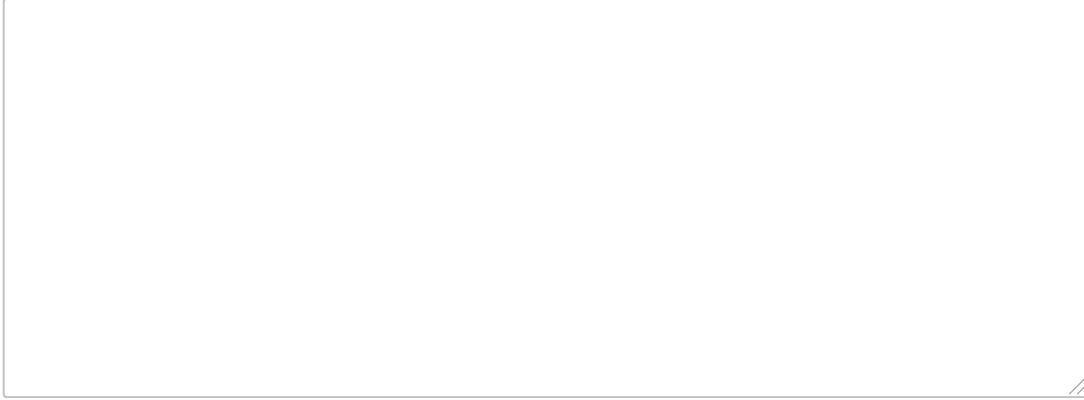
The above statement is ***relevant*** to the construct of global citizenship.

The above statement features a ***disposition*** rather than knowledge, skills, or behaviors.

The above statement features a ***culturally universal***, rather than culturally relative, component of global citizenship.

Please suggest how this item can be improved: Being a global citizen is at least as important in my daily life as being a citizen of the ***local*** community where I live.





## PGA Block 2

Being a global citizen is at least as important in my daily life as being a ***national or regional*** citizen.

The above statement is ***relevant*** to the construct of global citizenship.

The above statement features a ***disposition*** rather than knowledge, skills, or behaviors.

The above statement features a ***culturally universal***, rather than culturally relative, component of global citizenship.

Please suggest how this item can be improved: Being a global citizen is at least as important in my daily life as being a ***national or regional*** citizen.

#### PGA Block 4

I am at least as loyal to all of humanity as I am to the **local** community where I live.

The above statement is **relevant** to the construct of global citizenship.

The above statement features a **disposition** rather than knowledge, skills, or behaviors.

The above statement features a **culturally universal**, rather than culturally relative, component of global citizenship.

Please suggest how this item can be improved: I am at least as loyal to all of humanity as I am to the **local** community where I live.

## PGA Block 5

I am at least as loyal to all of humanity as I am to the **nation or region** where I live.

The above statement is **relevant** to the construct of global citizenship.

The above statement features a **disposition** rather than knowledge, skills, or behaviors.

The above statement features a **culturally universal**, rather than culturally relative, component of global citizenship.

Please suggest how this item can be improved: I am at least as loyal to all of humanity as I am to the **nation or region** where I live.

## PGA Block 6

I am at least as proud to be part of the global human community as I am to be part of the **local** community where I live.

The above statement is **relevant** to the construct of global citizenship.

The above statement features a **disposition** rather than knowledge, skills, or behaviors.

The above statement features a **culturally universal**, rather than culturally relative, component of global citizenship.

Please suggest how this item can be improved: I am at least as proud to be part of the global human community as I am to be part of the **local** community where I live.

## PGA Block 7

I am at least as proud to be part of the global human community as I am to be part of the **nation or region** where I live.

The above statement is **relevant** to the construct of global citizenship.

The above statement features a **disposition** rather than knowledge, skills, or behaviors.

The above statement features a **culturally universal**, rather than culturally relative, component of global citizenship.

Please suggest how this item can be improved: I am at least as proud to be part of the global human community as I am to be part of the **nation or region** where I live.

### PGA Block 11

I feel at least as close to people in different parts of the world as I do to people in the **local** community where I live.

The above statement is **relevant** to the construct of global citizenship.

The above statement features a **disposition** rather than knowledge, skills, or behaviors.

The above statement features a **culturally universal**, rather than culturally relative, component of global citizenship.

Please suggest how this item can be improved: I feel at least as close to people in different parts of the world as I do to people in the **local** community where I live.



## PGA Block 12

I feel at least as close to people in different parts of the world as I do to people in the **nation or region** where I live.

The above statement is **relevant** to the construct of global citizenship.

The above statement features a **disposition** rather than knowledge, skills, or behaviors.

The above statement features a **culturally universal**, rather than culturally relative, component of global citizenship.

Please suggest how this item can be improved: I feel at least as close to people in different parts of the world as I do to people in the **nation or region** where I live.



### PGA Block 13

I feel at least as connected to the global human community as I do to the ***local*** community where I live.

The above statement is ***relevant*** to the construct of global citizenship.

The above statement features a ***disposition*** rather than knowledge, skills, or behaviors.

The above statement features a ***culturally universal***, rather than culturally relative, component of global citizenship.

Please suggest how this item can be improved: I feel at least as connected to the global human community as I do to the ***local*** community where I live.



## PGA Block 14

I feel at least as connected to the global human community as I do to the **nation or region** where I live.

The above statement is **relevant** to the construct of global citizenship.

The above statement features a **disposition** rather than knowledge, skills, or behaviors.

The above statement features a **culturally universal**, rather than culturally relative, component of global citizenship.

Please suggest how this item can be improved: I feel at least as connected to the global human community as I do to the **nation or region** where I live.





## PGA Block 15

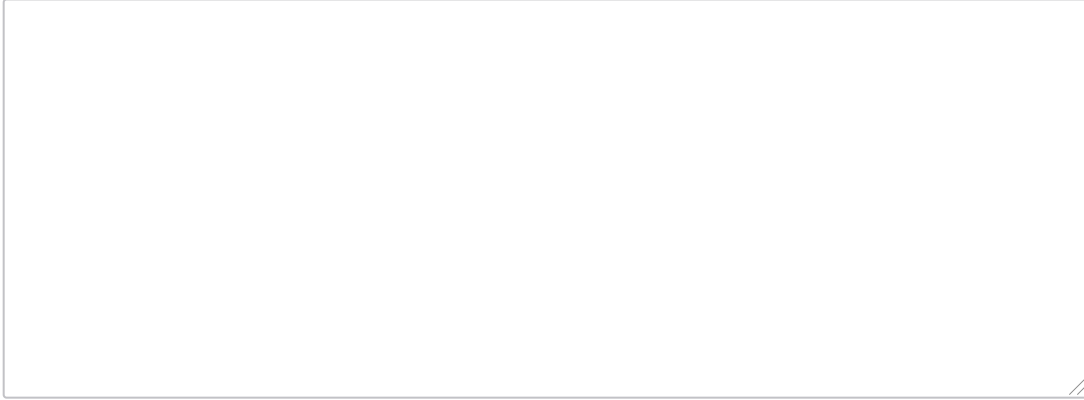
I feel at least as much belonging to the global human community as I do to the ***local*** community where I live.

The above statement is ***relevant*** to the construct of global citizenship.

The above statement features a ***disposition*** rather than knowledge, skills, or behaviors.

The above statement features a ***culturally universal***, rather than culturally relative, component of global citizenship.

Please suggest how this item can be improved: I feel at least as much belonging to the global human community as I do to the ***local*** community where I live.



## PGA Block 16

I feel at least as much belonging to the global human community as I do to the **nation or region** where I live.

The above statement is **relevant** to the construct of global citizenship.

The above statement features a **disposition** rather than knowledge, skills, or behaviors.

The above statement features a **culturally universal**, rather than culturally relative, component of global citizenship.

Please suggest how this item can be improved: I feel at least as much belonging to the global human community as I do to the **nation or region** where I live.



## PGA Block 20

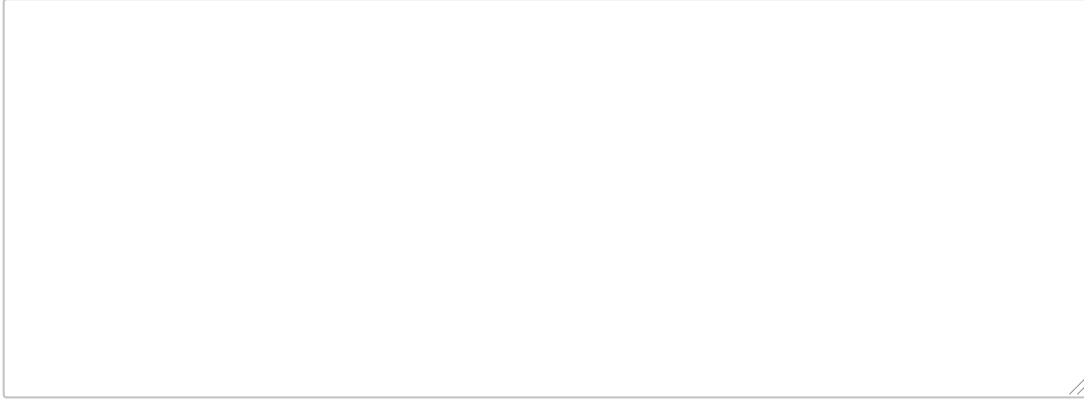
I have at least as much concern for all humanity as I do for people from the **local** community where I live.

The above statement is **relevant** to the construct of global citizenship.

The above statement features a **disposition** rather than knowledge, skills, or behaviors.

The above statement features a **culturally universal**, rather than culturally relative, component of global citizenship.

Please suggest how this item can be improved: I have at least as much concern for all humanity as I do for people from the **local** community where I live.



## PGA Block 21

I have at least as much concern for all humanity as I do for people from the **nation or region** where I live.

The above statement is **relevant** to the construct of global citizenship.

The above statement features a **disposition** rather than knowledge, skills, or behaviors.

The above statement features a **culturally universal**, rather than culturally relative, component of global citizenship.

Please suggest how this item can be improved: I have at least as much concern for all humanity as I do for people from the **nation or region** where I live.



## PGA Block 24

I see myself at least as much a member of the global human community as a member of the ***local*** community where I live.

The above statement is ***relevant*** to the construct of global citizenship.

The above statement features a ***disposition*** rather than knowledge, skills, or behaviors.

The above statement features a ***culturally universal***, rather than culturally relative, component of global citizenship.

Please suggest how this item can be improved: I see myself at least as much a member of the global human community as a member of the ***local*** community where I live.



## PGA Block 25

I see myself at least as much a member of the global human community as a member of the **nation or region** where I live.

The above statement is **relevant** to the construct of global citizenship.

The above statement features a **disposition** rather than knowledge, skills, or behaviors.

The above statement features a **culturally universal**, rather than culturally relative, component of global citizenship.

Please suggest how this item can be improved: I see myself at least as much a member of the global human community as a member of the **nation or region** where I live.



## PGA Block 27

I want to be a responsible member of the global human community at least as much as in the **local** community where I live.

The above statement is **relevant** to the construct of global citizenship.

The above statement features a **disposition** rather than knowledge, skills, or behaviors.

The above statement features a **culturally universal**, rather than culturally relative, component of global citizenship.

Please suggest how this item can be improved: I want to be a responsible member of the global human community at least as much as in the **local** community where I live.



## PGA Block 28

I want to be a responsible member of the global human community at least as much as in the **nation or region** where I live.

The above statement is **relevant** to the construct of global citizenship.

The above statement features a **disposition** rather than knowledge, skills, or behaviors.

The above statement features a **culturally universal**, rather than culturally relative, component of global citizenship.

Please suggest how this item can be improved: I want to be a responsible member of the global human community at least as much as in the **nation or region** where I live.





## Block 112

If you think of any aspects or components of global citizenship that these items did not account for, please feel free to discuss them here.

If you would like to receive access to the final version of the measure that this research study produces, please provide your email address.

Would you like to receive email updates about this study?

Yes

No

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**APPENDIX O – PHASE 3 ACTIVE PARENTAL PERMISSION****Default Question Block****Active Parental Permission for Research Participation**

I am inviting you to give permission for your child to participate in a research study. In the next section, I have highlighted key information about this research for you to consider when making a decision about whether or not to allow your child to participate.

Carefully consider this highlighted information and the more detailed information provided further down this page. Please ask questions about any of the information you do not understand before you decide whether to allow your child to participate, which you can indicate by typing your name at the end of this form.

**Key Information**

**Voluntary Consent.** I would like your child to volunteer for a research study. It is up to you and your child whether to participate or not. Your child would be free to discontinue participation at any time. There will be no penalty or loss of benefits to which your child is otherwise entitled if your child does not participate or discontinues participation. Choosing not to participate or discontinuing participation will not affect your child's relationship with International Baccalaureate (IB), the IB school your child attends, or the University of Oregon in any way.

**Purpose.** The purpose of this research is to develop a way to measure global citizenship dispositions among high school students.

**Duration.** It is expected that your child's participation will last 15-30 minutes.

**Procedures and Activities.** Your child will be asked to respond to a brief survey about global citizenship, or the knowledge, skills, behaviors, and dispositions necessary for living, learning, and working on an increasingly interdependent planet.

**Risks.** There are minimal risks to this study. The main applicable risks would be potential feelings of coercion about consenting to participate in the study or possible misunderstanding regarding the use of the data.

**Benefits.** Participants will receive no direct benefits, but participants like your child might enjoy contributing to generalizable knowledge that can aid school leaders who offer or are considering offering global citizenship education in their schools.

**Alternatives.** Participation is voluntary and the only alternative is not to participate.

### **More Detailed Information**

**Who is conducting this research?** Researcher Michael Thier under the guidance of Dr. Charles Martinez, Jr. at the University of Oregon is asking for your consent to this research, which is Thier's dissertation study.

**Why is this research being done?** The purpose of the research is to create a way to measure global citizenship dispositions that will help leaders of secondary/high schools provide evidence about how their schools prepare students as global citizens. Your child is being asked to participate because he or she attends a school that offers International Baccalaureate programmes, whether or not your child participates in that programme. We estimate that about 2,000-4,000 people will take part in this phase of the research study.

**What happens if I agree to participate in this research?** If you agree to give your child permission to be in this research, your child's participation will include responding to statements on a survey to see how much your child agrees or disagrees with certain aspects of global citizenship. Your child may also be asked to indicate any statements that he or she finds confusing or poorly worded. Participants in this phase will also be asked to provide demographic information about whether they are male or female, whether they are enrolled or have been enrolled in International Baccalaureate programmes, and whether they identify as a member of a nation's majority ethnic group (e.g., Chinese in Singapore or Caucasian in the United States).

**What happens to the information collected for this research?** I will share information collected for this research by making presentations and publishing reports. I will **NEVER** use your child's name, likeness, name of school, or any other information that could identify your child or your family when I share research results with others. I might share deidentified data with other researchers who might conduct unique analyses of information from this research without obtaining additional permission from you or assent from

your child, but the information they will be able to access would always be deidentified; other researchers will NEVER know your child's name or the name of your child's school.

**How will my [child's] privacy and data confidentiality be protected?** I will take measures to protect your child's privacy by storing all deidentified data for three years after the end of this study. I store all data securely in password-protected computer files at the research center where I work at the University of Oregon. Despite taking steps to protect your child's privacy, we can never fully guarantee your child's privacy will be protected. If you and/or your child do not want others to know that your child is participating in this study, you can both help protect your child's privacy by not telling anyone about your child's participation. Individuals and organization that conduct or monitor this research may be permitted access to and inspect the research records. Only myself, my advisor, and the University of Oregon's Institutional Review Board will be able to access any information that identifies your child. Along with myself and my advisor, the Board wants to make sure that everybody who takes part in the study is safe and treated with respect at all times. We are all trained to protect your privacy. Other researchers who work with me would have access only to deidentified data for unique analyses of information from this research without obtaining additional permission from you or assent from your child. If a participant had a follow-up question about the research, a participating child might need to email the researcher (Michael Thier). In such an instance, the child would be directed to email Michael Thier and to also copy his advisor (Dr. Charles Martinez, Jr.) **AND** a representative of the child's school ([NAME AND TITLE REDACTED]).

**What are the risks if I participate in this research?** Although this study presents minimal risk to your child, there may be risks associated with participating in a research study such as possible loss of confidentiality, feelings of coercion about assenting to participate in the study, or possible misunderstanding regarding the use of the data. The research will be conducted within your child's school with a large number of students participating. If you or your child do not want others to know whether your child is participating in this study, you and your child can help protect your child's privacy by not telling anyone about whether your child is participating. If your child feels embarrassed or uncomfortable about any of the survey items about global citizenship, know that your child always has the right not to answer questions. Your child can also choose to stop taking part in the study at any time. Participation is entirely voluntary.

**What are the benefits of participating in this research?** Your child may or may not benefit from participating in this research. There are no known direct benefits from participating in this study. However, it is hoped that information gained from this study will help schools improve education that is available for future students of the school you attended and schools that offer or want to offer similar types of educational programmes.

**What if I want to stop participating in this research?** Taking part in this research study is your and your child's decision. Participation in this study is voluntary. Your child does not have to take part in this study, but if he or she does, he or she can stop at any time. Your child has the right to choose not to participate in any study activity or completely withdraw from continued participation at any point in this study without penalty or loss of benefits to which you

are otherwise entitled. Your and your child's decision of whether or not to participate or to discontinue participation will not affect your child's relationship with the researchers, IB, your child's IB school, or the University of Oregon in any way.

**Will I be paid for participating in this research?** No participant has to pay anything to take part in this research study, nor will participants in this phase receive any direct compensation for participating. However, your child's school will receive a USD \$1,000 honorarium to be used to offset costs for a student-focused event of the school's choice (e.g., a school performance, prom, or other academic, cultural, or social purpose) if your child's school meets certain benchmarks for participation.

### **Who Can Answer My Questions About this Research?**

If you have questions, concerns, or have experienced a research-related injury, contact the research team by emailing or calling all three of the following:

- Michael Thier (mthier@uoregon.edu)  
541.214.3207
- Dr. Charles Martinez, Jr. (charlesm@uoregon.edu)  
512.471.7255
- [NAME AND TITLE REDACTED] ([EMAIL ADDRESS REDACTED])  
[TELEPHONE NUMBER REDACTED]

An Institutional Review Board (“IRB”) is overseeing this research. An IRB is a group of people who perform independent review of research studies to ensure the rights and welfare of participants are protected. The University of Oregon Research Compliance Services is the office that supports the IRB. If you have questions about your rights or wish to speak with someone other than the research team, you may contact:

Research Compliance Services

5237 University of Oregon

Eugene, OR 97403-5237

(541) 346-2510

### **STATEMENT OF PERMISSION**

I have had the opportunity to read and consider the information in this form. I have asked any questions necessary to make a decision about my child’s participation. I understand that I can ask additional questions throughout my child’s participation, should my child choose to assent to participating. I understand that if I want my child to receive an assent form to decide if he or she wants to participate, I must sign by typing my name in the box below. I should either print or screenshot this form for my records. I understand that my child is volunteering to participate in this research. I understand that I am not waiving any legal rights. I have been provided with a copy of this permission form. I understand that if during the time of my child’s participation in this study, there is a change in my ability to permit my child to participate, either I or my legal representative may be asked to re-permit prior to my child’s continued participation in this study.

**Please type your name in the box below.**





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**APPENDIX P – PHASE 3 YOUTH ASSENT FOR SURVEY PARTICIPATION**

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**Youth Assent for Research Participation (Survey)**

**Title:** A Global Set of Dispositions? Applying Discrete-Choice Method to Measure Global Citizenship Dispositions of Secondary-School Students in Multiple Nations

**Sponsor:** The Ryoichi Sasakawa Young Leaders Fellowship Fund

**Researcher(s):** **Michael Thier**, University of Oregon, Principal Investigator  
Dr. Charles Martinez, Jr., University of Oregon, Faculty Advisor

**Researcher Contact Info:** Michael Thier: +1 541.214.3207; [mthier@uoregon.edu](mailto:mthier@uoregon.edu)  
Dr. Charles Martinez, Jr.: +1 541.346.2161; [charlesm@uoregon.edu](mailto:charlesm@uoregon.edu)

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I am inviting you to participate in a research study. The box below highlights key information about this research for you to consider when making a decision about whether or not to participate. Carefully consider this information and the more detailed information provided below. Please ask questions about any of the information you do not understand before you decide whether to participate.

Key Information for You to Consider
<ul style="list-style-type: none"><li>• <b>Voluntary Consent.</b> I would you to volunteer for a research study. It is up to you to participate or not. You would be free to discontinue participation at any time. There will be no penalty or loss of benefits to which you are otherwise entitled if you do not participate or discontinue participation. Choosing not to participate or discontinuing participation will not affect your relationship with International Baccalaureate (IB), the IB school you attend, or the University of Oregon in any way.</li><li>• <b>Purpose.</b> The purpose of this research is to develop a way to measure global citizenship dispositions among high school students.</li><li>• <b>Duration.</b> It is expected that your participation will last 15-30 minutes.</li><li>• <b>Procedures and Activities.</b> You will be asked to respond to a brief survey about global citizenship, or the knowledge, skills, behaviors, and dispositions necessary for living, learning, and working on an increasingly interdependent planet.</li><li>• <b>Risks.</b> There are minimal risks to this study. The main applicable risks would be potential feelings of coercion about consenting to participate in the study or possible misunderstanding regarding the use of the data.</li><li>• <b>Benefits.</b> Participants will receive no direct benefits, but you might enjoy contributing to generalizable knowledge that can aid school leaders who offer or are considering offering global citizenship education in their schools.</li></ul>



- **Alternatives.** Participation is voluntary and the only alternative is not to participate.

### **Who is conducting this research?**

Researcher Michael Thier under the guidance of Dr. Charles Martinez, Jr. at the University of Oregon is asking for your consent to this research, which is Thier's dissertation study.

### **Why is this research being done?**

The purpose of the research is to create a way to measure global citizenship dispositions that will help leaders of secondary/high schools provide evidence about how their schools prepare students as global citizens. Your child is being asked to participate because you attend a school that offers International Baccalaureate programmes, whether or not you participate in that programme. We estimate that about 2,000-4,000 people will take part in this phase of the research study.

### **What happens if I agree to participate in this research?**

If you agree to be in this research, your participation will include responding to statements on a survey to see how much you agree or disagree with certain aspects of global citizenship. You may also be asked to indicate any statements that you find confusing or poorly worded. Participants in this phase will also be asked to provide demographic information about whether they are male or female, whether they are enrolled or have been enrolled in International Baccalaureate programmes, and whether they identify as a member of a nation's majority ethnic group (e.g., Chinese in Singapore or Caucasian in the United States).

### **What happens to the information collected for this research?**

I will share information collected for this research by making presentations and publishing reports. I will not use your name, likeness, the name of your school, or any other information that could identify you when I share research results with others. I might share deidentified data with other researchers who might conduct unique analyses of information from this research without obtaining additional assent from you, but the information they will be able to access would always be deidentified; other researchers will never know your or the name of your school.

### **How will my privacy and data confidentiality be protected?**

I will take measures to protect your privacy by storing all deidentified data for three years after the end of this study. I store all data securely in password-protected computer files at the research center where I work at the University of Oregon. Despite taking steps to protect your privacy, we can never fully guarantee your privacy will be protected. If you do not want others to know that you are participating in this study, you can help protect your privacy by not telling anyone about your participation.



Individuals and organization that conduct or monitor this research may be permitted access to and inspect the research records. Only myself, my advisor, and the University of Oregon's Institutional Review Board will be able to access any information that identifies you. Along with myself and my advisor, the Board wants to make sure that everybody who takes part in the study is safe and treated with respect at all times. We are all trained to protect your privacy. Other researchers who work with me would have access only to deidentified data for unique analyses of information from this research without obtaining additional assent from you.

### **What are the risks if I participate in this research?**

Although this study presents minimal risk, there may be risks associated with participating in a research study such as possible loss of confidentiality, feelings of coercion about assenting to participate in the study, or possible misunderstanding regarding the use of the data. The research will be conducted within your school with a large number of students participating. If you do not want others to know whether you are participating in this study, you can help protect your privacy by not telling anyone about whether you are participating. If you feel embarrassed or uncomfortable about any of the survey items about global citizenship, know that you always have the right not to answer questions. You can also choose to stop taking part in the study at any time. Participation is entirely voluntary.

### **What are the benefits of participating in this research?**

You may or may not benefit from participating in this research. There are no known direct benefits from participating in this study. However, it is hoped that information gained from this study will help schools improve education that is available for future students of the school you attended and schools that offer or want to offer similar types of educational programmes.

### **What if I want to stop participating in this research?**

Taking part in this research study is your decision. Participation in this study is voluntary. Your child does not have to take part in this study, but if he or she does, he or she can stop at any time. Your child has the right to choose not to participate in any study activity or completely withdraw from continued participation at any point in this study without penalty or loss of benefits to which you are otherwise entitled. Your and your child's decision of whether or not to participate or to discontinue participation will not affect your child's relationship with the researchers, IB, your child's IB school, or the University of Oregon in any way.

### **Will I be paid for participating in this research?**

No participant has to pay anything to take part in this research study, nor will participants in this phase receive any direct compensation for participating. However, your child's school will receive a USD \$1,000 honorarium to be used to offset costs for a student-focused event of the school's choice (e.g., a school performance, prom, or other



academic, cultural, or social purpose) if your child’s school meets certain benchmarks for participation.

**Who can answer my questions about this research?**

If you have questions, concerns, or have experienced a research-related injury, contact the research team by emailing *all three of the following*:

**Michael Thier** at [mthier@uoregon.edu](mailto:mthier@uoregon.edu)  
**Dr. Charles Martinez, Jr.** at [charlesm@uoregon.edu](mailto:charlesm@uoregon.edu)  
SCHOOL-SPECIFIC REPRESENTATIVE at SCHOOL.EMAIL

or calling **Michael Thier** at (country code 001) 541.214.3207  
or calling **Dr. Charles Martinez, Jr.** at (country code 001) 541.346.2161  
or calling SCHOOL-SPECIFIC REPRESENTATIVE at SCHOOL NUMBER

An Institutional Review Board (“IRB”) is overseeing this research. An IRB is a group of people who perform independent review of research studies to ensure the rights and welfare of participants are protected. The University of Oregon Research Compliance Services is the office that supports the IRB. If you have questions about your rights or wish to speak with someone other than the research team, you may contact:

Research Compliance Services  
5237 University of Oregon  
Eugene, OR 97403-5237  
(541) 346-2510

**STATEMENT OF ASSENT**

I have had the opportunity to read and consider the information on this page. I have asked any questions necessary to make a decision about participation. I understand that I can ask additional questions throughout my participation. I understand that I am volunteering to participate in this research. I understand that I am not waiving any legal rights.

By typing my full name into the space below, I am assenting to participate voluntarily in this research study.



**APPENDIX Q – PHASE 3 PARENTAL RESPONSE DRAWING EMAIL**

**\$100 gift card drawing for 1-question response about important research at  
[SCHOOL NAME REDACTED]**

[SCHOOL NAME REDACTED] is one of a few schools in two countries (the U.S. and Sweden) selected to participate in ground-breaking research on global citizenship. Student participation in that research would involve completing a short survey during a non-instructional advisory period.

Would you allow your child to receive an invitation to participate?

Whether you say “Yes” to your child receiving an invitation or not, you can be entered into a drawing for 1-of-3 \$100 gift cards. Just click the link below and answer 1 question.

If you say “Yes”, you will be asked to type your name, so the school can provide your child with an invitation to participate and so I can enter you into the drawing. *If you have previously given permission for this study, you will be entered into the drawing automatically.*

If you say “No”, you will be asked to type your email address, so I can enter you into the drawing any way.

[https://oregon.qualtrics.com/jfe/form/SV\\_1EWC8la2bAfvA0d](https://oregon.qualtrics.com/jfe/form/SV_1EWC8la2bAfvA0d)

Please email [mthier@uoregon.edu](mailto:mthier@uoregon.edu) if you have any questions about this opportunity.

Best wishes,

Michael Thier  
Ph.D. candidate  
University of Oregon

**APPENDIX R – PHASE 3 ITEM PILOT INSTRUMENT****GCItems****A Global Set of Dispositions? Applying Discrete-Choice Method to Measure Global Citizenship Dispositions of Secondary-School Students in Multiple Nations**

Sponsor: The Ryoichi Sasakawa Young Leaders Fellowship Fund

Researcher(s): Michael Thier, University of Oregon, Principal

Investigator (*Faculty Advisor*: Dr. Charles Martinez, Jr.)

Researcher Contact Info: Michael Thier: +1 541.214.3207;

mthier@uoregon.edu; Dr. Charles Martinez, Jr.: +1 541.346.2161;

charlesm@uoregon.edu

I am inviting you to participate in a research study. The information below highlights key information about this research for you to consider when making a decision about whether or not to participate. Carefully consider this information and the more detailed information provided below. Please ask questions about any of the information you do not understand before you decide whether to participate.

**Key Information for You to Consider**

Voluntary Consent: I would like you to volunteer for a research study. Participating or not is up to you. You would be free to discontinue participation at any time. There will be no penalty or loss of benefits to which you are otherwise entitled if you do not

participate or discontinue participation. Choosing not to participate or discontinuing participation will not affect your relationship with International Baccalaureate (IB), the IB school you attend, or the University of Oregon in any way.

Purpose: The purpose of this research is to develop a way to measure global citizenship dispositions among high school students.

Duration: It is expected that your participation will last 15-30 minutes.

Procedures and Activities: You will be asked to respond to a brief survey about global citizenship, or the knowledge, skills, behaviors, and dispositions necessary for living, learning, and working on an increasingly interdependent planet.

Risks: There are minimal risks to this study. The main applicable risks would be potential feelings of coercion about consenting to participate in the study or possible misunderstanding regarding the use of the data.

Benefits: Participants will receive no direct benefits, but you might enjoy contributing to generalizable knowledge that can aid school leaders who offer or are considering offering global citizenship education in their schools.

Alternatives: Participation is voluntary and the only alternative is not to participate.

**Who is conducting this research?** Researcher Michael Thier under the guidance of Dr. Charles Martinez, Jr. at the University of Oregon is asking for your consent to this research, which is Thier's dissertation study.

**Why is this research being done?** The purpose of the research is to create a way to measure global citizenship dispositions that will help leaders of secondary/high schools provide evidence about how



their schools prepare students as global citizens. You are being asked to participate because you attend a school that offers International Baccalaureate programmes, whether or not you participate in that programme. We estimate about 2,000-4,000 people will take part in this phase of the research study.

**What happens if I agree to participate in this research?** If you agree to be in this research, your participation will include responding to statements on a survey to see how much you agree or disagree with certain aspects of global citizenship. You may also be asked to indicate any statements that you find confusing or poorly worded. Participants in this phase will also be asked to provide demographic information about whether they are male or female, whether they are enrolled or have been enrolled in International Baccalaureate programmes, and whether they identify as a member of a nation's majority ethnic group (e.g., Swedish in Sweden or Caucasian in the United States).

**What happens to the information collected for this research?** I will share information collected for this research by making presentations and publishing reports. I will not use your name, likeness, the name of your school, or any other information that could identify you when I share research results with others. I might share deidentified data with other researchers who might conduct unique analyses of information from this research without obtaining additional assent from you, but the information they will be able to access would always be deidentified; other researchers will never know your name or the name of your school.

**How will my privacy and data confidentiality be protected?** I will take measures to protect your privacy by storing all deidentified

data for three years after the end of this study. I store all data securely in password-protected computer files at the research center where I work at the University of Oregon. Despite taking steps to protect your privacy, we can never fully guarantee your privacy will be protected. If you do not want others to know that you are participating in this study, you can help protect your privacy by not telling anyone about your participation.

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not to answer questions. You can also choose to stop taking part in the study at any time. Participation is entirely voluntary.

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- Dr. Charles Martinez, Jr. at [charlesm@uoregon.edu](mailto:charlesm@uoregon.edu)
- [NAME REDACTED] at [EMAIL ADDRESS REDACTED]

or calling

- Michael Thier at (country code 001) 541.214.3207
- Dr. Charles Martinez, Jr. at (country code 001) 541.346.2161
- [NAME REDACTED] at (country code 46) [TELEPHONE NUMBER REDACTED]

An Institutional Review Board (“IRB”) is overseeing this research. An IRB is a group of people who perform independent review of research studies to ensure the rights and welfare of participants are protected. The University of Oregon Research Compliance Services is the office that supports the IRB.

If you have questions about your rights or wish to speak with someone other than the research team, you may contact:

### **Research Compliance Services**

5237 University of Oregon  
Eugene, OR 97403-5237  
(541) 346-2510

## **STATEMENT OF ASSENT**

I have had the opportunity to read and consider the information on this page. I have asked any questions necessary to make a decision about participation. I understand that I can ask additional questions throughout my participation. I understand that I am volunteering to participate in this research. I understand that I am not waiving any legal rights.

By typing my full name into the space below, I am assenting to participate voluntarily in this research study.

Directions: Please read each item and rate how much you disagree or agree with it.

I tend to value empathizing with people regardless of any differences between their backgrounds and mine.

Strongly disagree (1)

Disagree (2)

Agree (3)

Strongly agree (4)

This item confuses me so I cannot respond (0)

I tend to value people regardless of any differences between their backgrounds and mine.

Strongly disagree (1)

Disagree (2)

Agree (3)

Strongly agree (4)

This item confuses me so I cannot respond (0)

Rather than a single, dominant culture, I would prefer a culture that is common to, and beneficial to, all humanity.

Strongly disagree (1)

Disagree (2)

Agree (3)

Strongly agree (4)

This item confuses me so I cannot respond (0)

I tend to value differences in moral beliefs across cultures.

Strongly disagree (1)

Disagree (2)

Agree (3)

Strongly agree (4)

This item confuses me so I cannot respond (0)

Problems occur when people believe any specific culture is the best.

Strongly disagree (1)

Disagree (2)

Agree (3)

Strongly agree (4)

This item confuses me so I cannot respond (0)

I am sensitive to the needs of people who experience discrimination both at home and around the world.

Strongly disagree (1)

Disagree (2)

Agree (3)

Strongly agree (4)

This item confuses me so I cannot respond (0)

I tend to value international interactions where everyone respects cultural perspectives that differ from their own.

Strongly disagree (1)

Disagree (2)

Agree (3)

Strongly agree (4)

This item confuses me so I cannot respond (0)

I feel friendly toward people from various cultural groups.

Strongly disagree (1)

Disagree (2)

Agree (3)

Strongly agree (4)

This item confuses me so I cannot respond (0)

I feel comfortable with people from various cultural groups.

Strongly disagree (1)

Disagree (2)

Agree (3)

Strongly agree (4)

This item confuses me so I cannot respond (0)

I feel upset when I notice people both at home and around the world receiving poor treatment based on their cultural group.

Strongly disagree (1)

Disagree (2)



Agree (3)

Strongly agree (4)

This item confuses me so I cannot respond (0)

I find commonalities between myself and people from various cultural groups.

Strongly disagree (1)

Disagree (2)

Agree (3)

Strongly agree (4)

This item confuses me so I cannot respond (0)

I tend to form opinions about people based on reasons besides their backgrounds.

Strongly disagree (1)

Disagree (2)

Agree (3)

Strongly agree (4)

This item confuses me so I cannot respond (0)

I have concern for people regardless of any differences between their backgrounds and mine.

Strongly disagree (1)

Disagree (2)

Agree (3)

Strongly agree (4)

This item confuses me so I cannot respond (0)

I tend to value cultural differences.

Strongly disagree (1)

Disagree (2)

Agree (3)

Strongly agree (4)

This item confuses me so I cannot respond (0)

I believe that all humans should have the same rights regardless of where in the world they live.

Strongly disagree (1)

Disagree (2)

Agree (3)

Strongly agree (4)

This item confuses me so I cannot respond (0)

I see how cultural considerations can influence how people determine “right” from “wrong”.

Strongly disagree (1)

Disagree (2)

Agree (3)

Strongly agree (4)

This item confuses me so I cannot respond (0)

I tend to value people from different cultural groups communicating their ways of living to each other.

Strongly disagree (1)

Disagree (2)

Agree (3)

Strongly agree (4)

This item confuses me so I cannot respond (0)

I tend to value interactions that respect cultural differences.

Strongly disagree (1)

Disagree (2)

Agree (3)

Strongly agree (4)

This item confuses me so I cannot respond (0)

I tend to value efforts aimed at eliminating global inequalities.

Strongly disagree (1)

Disagree (2)

Agree (3)

Strongly agree (4)

This item confuses me so I cannot respond (0)

I think it is unjust when one group exploits another group.

Strongly disagree (1)

Disagree (2)

Agree (3)

Strongly agree (4)

This item confuses me so I cannot respond (0)

I believe policies are unjust if they negatively affect people either at home or around the world.

Strongly disagree (1)

Disagree (2)

Agree (3)

Strongly agree (4)

This item confuses me so I cannot respond (0)

I tend to trust people from various cultural backgrounds.

Strongly disagree (1)

Disagree (2)

Agree (3)

Strongly agree (4)

This item confuses me so I cannot respond (0)

Equity for people both at home and around the world matters to me.

Strongly disagree (1)

Disagree (2)

Agree (3)

Strongly agree (4)

This item confuses me so I cannot respond (0)

The needs of people from cultures that differ from my own are at least as important as the needs of people from my own culture.

Strongly disagree (1)

Disagree (2)

Agree (3)

Strongly agree (4)

This item confuses me so I cannot respond (0)

Appreciating all people's cultural norms is important to me.

Strongly disagree (1)

Disagree (2)

Agree (3)

Strongly agree (4)

This item confuses me so I cannot respond (0)

I tend to value shaping my ideas through exchanges with people from various cultures.

Strongly disagree (1)

Disagree (2)

Agree (3)

Strongly agree (4)

This item confuses me so I cannot respond (0)

Experiencing intercultural relationships broadens my thinking.

Strongly disagree (1)

Disagree (2)

Agree (3)

Strongly agree (4)

This item confuses me so I cannot respond (0)

I account for multiple perspectives when thinking about conflicts between cultural groups both at home and around the world.

Strongly disagree (1)

Disagree (2)

Agree (3)

Strongly agree (4)

This item confuses me so I cannot respond (0)

I tend to value discussions that are informed by cultural groups' differences and commonalities.

Strongly disagree (1)

Disagree (2)

Agree (3)

Strongly agree (4)

This item confuses me so I cannot respond (0)

I believe that global problems would be best solved by teams with diverse perspectives.

Strongly disagree (1)

Disagree (2)

Agree (3)

Strongly agree (4)

This item confuses me so I cannot respond (0)

I tend to value how people live their lives regardless of how much their lives might differ from mine.

Strongly disagree (1)

Disagree (2)

Agree (3)

Strongly agree (4)

This item confuses me so I cannot respond (0)



I believe that people would benefit from learning about various religions that differ from their own.

Strongly disagree (1)

Disagree (2)

Agree (3)

Strongly agree (4)

This item confuses me so I cannot respond (0)

I tend to value globalization when it helps people from different cultures experience new perspectives.

Strongly disagree (1)

Disagree (2)

Agree (3)

Strongly agree (4)

This item confuses me so I cannot respond (0)

I believe that encountering various perspectives at home and from people around the world improve an individual's ideas.

Strongly disagree (1)

Disagree (2)

Agree (3)

Strongly agree (4)

This item confuses me so I cannot respond (0)

I consider perspectives at home and from people around the world before making up my mind about a global issue.

Strongly disagree (1)

Disagree (2)

Agree (3)

Strongly agree (4)

This item confuses me so I cannot respond (0)

I keep an open mind when I encounter people whose life experiences differ from my own.

Strongly disagree (1)

Disagree (2)

Agree (3)

Strongly agree (4)

This item confuses me so I cannot respond (0)

I think it is important to see similarities and differences between groups at home and around the world.

Strongly disagree (1)

Disagree (2)

Agree (3)

Strongly agree (4)

This item confuses me so I cannot respond (0)

I believe that everyone can learn something of value from the perspectives of people at home and around the world.

Strongly disagree (1)

Disagree (2)

Agree (3)

Strongly agree (4)

This item confuses me so I cannot respond (0)

I tend to value accounting for various viewpoints before making decisions.

Strongly disagree (1)

Disagree (2)

Agree (3)

Strongly agree (4)

This item confuses me so I cannot respond (0)

Ideas from people who are culturally different from me stimulate my own thinking.

Strongly disagree (1)

Disagree (2)

Agree (3)

Strongly agree (4)

This item confuses me so I cannot respond (0)

Cultural differences stimulate my curiosity.

Strongly disagree (1)

Disagree (2)

Agree (3)

Strongly agree (4)

This item confuses me so I cannot respond (0)

Cultural diversity interests me.

Strongly disagree (1)

Disagree (2)

Agree (3)

Strongly agree (4)

This item confuses me so I cannot respond (0)

I am curious about events that occur beyond the place where I live.

Strongly disagree (1)

Disagree (2)

Agree (3)

Strongly agree (4)

This item confuses me so I cannot respond (0)

I tend to value a variety of religions.

Strongly disagree (1)

Disagree (2)

Agree (3)

Strongly agree (4)

This item confuses me so I cannot respond (0)

I tend to value experiencing cultures where people's lifestyles differ from my own lifestyle.

Strongly disagree (1)

Disagree (2)

Agree (3)

Strongly agree (4)

This item confuses me so I cannot respond (0)

I tend to embrace cultural diversity.

Strongly disagree (1)

Disagree (2)

Agree (3)

Strongly agree (4)

This item confuses me so I cannot respond (0)

I enjoy encountering people from different cultures.

Strongly disagree (1)

Disagree (2)

Agree (3)

Strongly agree (4)

This item confuses me so I cannot respond (0)

I tend to value people from various cultures teaching me about differences and similarities between our ways of life.

Strongly disagree (1)

Disagree (2)

Agree (3)

Strongly agree (4)

This item confuses me so I cannot respond (0)

I tend to feel stimulated by seeing how cultural groups distinguish themselves from one another.

Strongly disagree (1)

Disagree (2)

Agree (3)

Strongly agree (4)

This item confuses me so I cannot respond (0)

I am interested in the many cultures that exist and have existed in this world.

Strongly disagree (1)

Disagree (2)

Agree (3)

Strongly agree (4)

This item confuses me so I cannot respond (0)

When I have opportunities to involve people from various cultural backgrounds in my life, I tend to value those opportunities.

Strongly disagree (1)

Disagree (2)

Agree (3)

Strongly agree (4)

This item confuses me so I cannot respond (0)

I tend to prefer activities that expose me to people whose lives are different than my own.

Strongly disagree (1)

Disagree (2)

Agree (3)

Strongly agree (4)

This item confuses me so I cannot respond (0)

I enjoy having friends from various cultural backgrounds.

Strongly disagree (1)

Disagree (2)

Agree (3)

Strongly agree (4)



This item confuses me so I cannot respond (0)

I welcome experiences that expose me to customs and traditions of various cultures.

Strongly disagree (1)

Disagree (2)

Agree (3)

Strongly agree (4)

This item confuses me so I cannot respond (0)

I welcome opportunities to experience cultural variety.

Strongly disagree (1)

Disagree (2)

Agree (3)

Strongly agree (4)

This item confuses me so I cannot respond (0)

I would be open to neighbors moving next to me regardless of their backgrounds.

Strongly disagree (1)

Disagree (2)

Agree (3)

Strongly agree (4)

This item confuses me so I cannot respond (0)

I tend to value activities that emphasize getting to know people from different cultures more than activities where everyone is just like me.

Strongly disagree (1)

Disagree (2)

Agree (3)

Strongly agree (4)

This item confuses me so I cannot respond (0)

International events interest me.

Strongly disagree (1)

Disagree (2)

Agree (3)

Strongly agree (4)

This item confuses me so I cannot respond (0)

I tend to value having friends from a variety of cultures.

Strongly disagree (1)

Disagree (2)

Agree (3)

Strongly agree (4)

This item confuses me so I cannot respond (0)

New cultural experiences stimulate me.

Strongly disagree (1)

Disagree (2)

Agree (3)

Strongly agree (4)

This item confuses me so I cannot respond (0)

I tend to be curious about people from different cultures.

Strongly disagree (1)

Disagree (2)

Agree (3)

Strongly agree (4)

This item confuses me so I cannot respond (0)

People whose cultural customs differ from those of my culture are interesting to me.

Strongly disagree (1)

Disagree (2)

Agree (3)

Strongly agree (4)

This item confuses me so I cannot respond (0)

I tend to value both being a citizen of the world and the local community where I live.

Strongly disagree (1)

Disagree (2)

Agree (3)

Strongly agree (4)

This item confuses me so I cannot respond (0)

I tend to value both being a citizen of the world and the nation or region (e.g., Europe) where I live.

Strongly disagree (1)

Disagree (2)

Agree (3)

Strongly agree (4)

This item confuses me so I cannot respond (0)

Being a citizen of the human race is at least as important to my identity as being a citizen of any nation or region (e.g., Europe) where I have lived.

Strongly disagree (1)

Disagree (2)

Agree (3)

Strongly agree (4)

This item confuses me so I cannot respond (0)

I tend to feel engaged both with all of humanity and the local community where I live.

Strongly disagree (1)

Disagree (2)

Agree (3)

Strongly agree (4)

This item confuses me so I cannot respond (0)

I tend to feel engaged both with all of humanity and the nation or region (e.g., Europe) where I live.

Strongly disagree (1)

Disagree (2)

Agree (3)

Strongly agree (4)

This item confuses me so I cannot respond (0)

I feel proud to be part both of a global community and the local community where I live.

Strongly disagree (1)

Disagree (2)

Agree (3)

Strongly agree (4)

This item confuses me so I cannot respond (0)

I feel proud to be part both of a global community and the nation or region (e.g., Europe) where I live.

Strongly disagree (1)

Disagree (2)

Agree (3)

Strongly agree (4)

This item confuses me so I cannot respond (0)

I believe that all humanity should take responsibility for global problems that affect local, national, or regional (e.g., European) communities.

Strongly disagree (1)

Disagree (2)

Agree (3)

Strongly agree (4)

This item confuses me so I cannot respond (0)

I believe that problems which impact the global community are at least as important as any local community's economic interests.

Strongly disagree (1)

Disagree (2)

Agree (3)

Strongly agree (4)

This item confuses me so I cannot respond (0)

I consider myself to be a global citizen.

Strongly disagree (1)

Disagree (2)

Agree (3)

Strongly agree (4)

This item confuses me so I cannot respond (0)

I feel empathy both for people around the world and in the local community where I live.

Strongly disagree (1)

Disagree (2)

Agree (3)

Strongly agree (4)

This item confuses me so I cannot respond (0)

I feel empathy both for people around the world and in the nation or region (e.g., Europe) where I live.

Strongly disagree (1)

Disagree (2)

Agree (3)

Strongly agree (4)

This item confuses me so I cannot respond (0)



I feel connected to a global community and the local community where I live.

Strongly disagree (1)

Disagree (2)

Agree (3)

Strongly agree (4)

This item confuses me so I cannot respond (0)

I feel connected to a global community and the nation or region (e.g., Europe) where I live.

Strongly disagree (1)

Disagree (2)

Agree (3)

Strongly agree (4)

This item confuses me so I cannot respond (0)

I feel connected to people all over the world, even if I don't know them personally.

Strongly disagree (1)

Disagree (2)

Agree (3)

Strongly agree (4)

This item confuses me so I cannot respond (0)

I feel upset when bad things happen to people anywhere in the world just as I do when bad things happen to people at home.

Strongly disagree (1)

Disagree (2)

Agree (3)

Strongly agree (4)

This item confuses me so I cannot respond (0)

I have concern for all humanity and the local community where I live.

Strongly disagree (1)

Disagree (2)

Agree (3)

Strongly agree (4)

This item confuses me so I cannot respond (0)

I have concern for all humanity and the nation or region (e.g., Europe) where I live.

Strongly disagree (1)

Disagree (2)

Agree (3)

Strongly agree (4)

This item confuses me so I cannot respond (0)

I identify myself as part of a global community.

Strongly disagree (1)

Disagree (2)

Agree (3)

Strongly agree (4)

This item confuses me so I cannot respond (0)

I see all of humanity as having an obligation to achieve the most equitable world possible.

Strongly disagree (1)

Disagree (2)

Agree (3)

Strongly agree (4)

This item confuses me so I cannot respond (0)

I see myself as a member of both a global community and the local community where I live.

Strongly disagree (1)

Disagree (2)

Agree (3)

Strongly agree (4)

This item confuses me so I cannot respond (0)

I see myself as a member of both a global community and nation or region (e.g., Europe) where I live.

Strongly disagree (1)

Disagree (2)

Agree (3)

Strongly agree (4)

This item confuses me so I cannot respond (0)

I tend to trust people regardless of where they live in the world.

Strongly disagree (1)

Disagree (2)

Agree (3)

Strongly agree (4)

This item confuses me so I cannot respond (0)

I want to be a responsible member of a global community and the local community where I live.

Strongly disagree (1)

Disagree (2)

Agree (3)

Strongly agree (4)

This item confuses me so I cannot respond (0)

I want to be a responsible member of a global community and the nation or region (e.g., Europe) where I live.

Strongly disagree (1)

Disagree (2)

Agree (3)

Strongly agree (4)

This item confuses me so I cannot respond (0)

I welcome international interdependence in which all humanity is responsible to a global community.

Strongly disagree (1)

Disagree (2)

Agree (3)

Strongly agree (4)

This item confuses me so I cannot respond (0)

I desire a society of internationally minded people who think about the welfare of people around the world at least as much as they do about people at home.

Strongly disagree (1)

Disagree (2)

Agree (3)

Strongly agree (4)

This item confuses me so I cannot respond (0)

Directions: Please read each item and decide whether it is true or false for you.

Before voting, I thoroughly investigate the qualifications of all the candidates.

True

False

I never hesitate to go out of my way to help someone in trouble.

True

False

It is sometimes hard for me to go on with my work if I am not encouraged.

True

False

I have never intensely disliked anyone.

True

False

On occasions, I have had doubts about my ability to succeed in life.

True

False

I sometimes feel resentful when I don't get my way.

True

False

I am always careful about my manner of dress.

True

False

My table manners at home are as good as when I eat out in a restaurant.

True

False

If I could get into a movie without paying and be sure I was not seen, I would probably do it.

True

False

On a few occasions, I have given up something because I thought too little of my ability.

True

False

I like to gossip at times.

True

False

There have been times when I felt like rebelling against people in authority even though I knew they were right.

True

False

No matter who I'm talking to, I'm always a good listener.



True  
False

I can remember “playing sick” to get out of something.

True  
False

There have been occasions when I have taken advantage of someone.

True  
False

I’m always willing to admit it when I make a mistake.

True  
False

I always try to practice what I preach.

True  
False

I don’t find it particularly difficult to get along with loudmouthed, obnoxious people.

True  
False

I sometimes try to get even rather than forgive and forget.

True

False

When I don't know something, I don't mind at all admitting it.

True

False

I am always courteous, even to people who are disagreeable.

True

False

At times, I have really insisted on having things my own way.

True

False

There have been occasions when I felt like smashing things.

True

False

I would never think of letting someone else be punished for my wrong-doings.

True

False

I never resent being asked to return a favor.

True

False

I have never been irked when people expressed ideas very different from my own.

True

False

I never make a long trip without checking the safety of my car.

True

False

There have been times when I was quite jealous of the good fortune of others.

True

False

I have almost never felt the urge to tell someone off.

True

False

I am sometimes irritated by people who ask favors of me.

True

False

I have never felt that I was punished without cause.

True

False

I sometimes think when people have a misfortune they only got what they deserved.

True

False

I have never deliberately said something that hurt someone's feelings.

True

False

Which of these terms for sex/gender best describes you?

Female

Male

Other

Have you ever participated in the International Baccalaureate (IB) Primary Years Programme (PYP)?

No

Yes

Have you ever participated in the International Baccalaureate (IB) Middle Years Programme (MYP)?

- No
- Yes

Which grade are you in?

0 1 2 3 4 5 6 7 8 9 10 11 12

Grade  
0-12

Do you identify yourself as Swedish?

- No
- Yes

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## APPENDIX S – PHASE 1 RATINGS DISTRIBUTIONS

*Alumni/ae Ratings for Eight Socially Valid Dispositions (Personal and Professional Benefits/Limitations and Attributability to Global Citizenship Education)*

Disposition	Personal	9	8	7	6	5	4	3	2	1
AMP	Overall (n = 11)	5 (45.45%)	3 (27.27%)	3 (27.27%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)
	Sweden (n = 7)	5 (71.43%)	0 (0.00%)	2 (28.57%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)
	US (n = 4)	0 (0.00%)	3 (75.00%)	1 (25.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)
IS	Overall (n = 11)	5 (45.45%)	5 (45.45%)	0 (0.00%)	0 (0.00%)	1 (9.09%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)
	Sweden (n = 7)	2 (28.57%)	5 (71.43%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)
	US (n = 4)	3 (75.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	1 (25.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)
IiD	Overall (n = 11)	4 (36.36%)	2 (18.18%)	3 (27.27%)	2 (18.18%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)
	Sweden (n = 7)	2 (28.57%)	1 (14.29%)	3 (42.86%)	1 (14.29%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)
	US (n = 4)	2 (50.00%)	1 (25.00%)	0 (0.00%)	1 (25.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)
Peaceful.	Overall (n = 11)	4 (36.36%)	3 (27.27%)	0 (0.00%)	3 (27.27%)	1 (9.09%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)
	Sweden (n = 7)	3 (42.86%)	2 (28.57%)	0 (0.00%)	2 (28.57%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)
	US (n = 4)	1 (25.00%)	1 (25.00%)	0 (0.00%)	1 (25.00%)	1 (25.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)
PGA	Overall (n = 11)	1 (9.09%)	1 (9.09%)	2 (18.18%)	3 (27.27%)	4 (36.36%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)
	Sweden (n = 7)	1 (14.29%)	0 (0.00%)	2 (28.57%)	2 (28.57%)	2 (28.57%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)
	US (n = 4)	0 (0.00%)	1 (25.00%)	0 (0.00%)	1 (25.00%)	2 (50.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)
PGC	Overall (n = 11)	1 (9.09%)	2 (18.18%)	3 (27.27%)	0 (0.00%)	5 (45.45%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)
	Sweden (n = 7)	1 (14.29%)	1 (14.29%)	3 (42.86%)	0 (0.00%)	2 (28.57%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)
	US (n = 4)	0 (0.00%)	1 (25.00%)	0 (0.00%)	0 (0.00%)	3 (75.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)
Skepticism	Overall (n = 11)	3 (27.27%)	1 (9.09%)	3 (27.27%)	1 (9.09%)	2 (18.18%)	1 (9.09%)	0 (0.00%)	0 (0.00%)	0 (0.00%)
	Sweden (n = 7)	3 (42.86%)	1 (14.29%)	2 (28.57%)	0 (0.00%)	1 (14.29%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)
	US (n = 4)	0 (0.00%)	0 (0.00%)	1 (25.00%)	1 (25.00%)	1 (25.00%)	1 (25.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)
SJO	Overall (n = 11)	2 (18.18%)	3 (27.27%)	1 (9.09%)	3 (27.27%)	2 (18.18%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)
	Sweden (n = 7)	2 (28.57%)	1 (14.29%)	0 (0.00%)	2 (28.57%)	2 (28.57%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)
	US (n = 4)	0 (0.00%)	2 (50.00%)	1 (25.00%)	1 (25.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)

*Note.* Personal = personally beneficial/limiting; AMP = Appreciation of Multiple Perspectives; IS = Intercultural Sensitivity; IiD = Interest in Diversity; Peaceful. = Peacefulness; PGA = Plural Geographic Allegiance; PGC = Preference for Global Communication; SJO = Social Justice Orientation; Black-colored cell = 0.00% of the distribution; Orange-colored cell = 0.01% - 49.99% of the distribution; Green-colored cell = ≥ 50.00% of the distribution

*(continued)*

Disposition	Professional	9	8	7	6	5	4	3	2	1
AMP	Overall ( <i>n</i> = 11)	7 (63.64%)	2 (18.18%)	2 (18.18%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)
	Sweden ( <i>n</i> = 7)	5 (71.43%)	1 (14.29%)	1 (14.29%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)
	US ( <i>n</i> = 4)	2 (50.00%)	1 (25.00%)	1 (25.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)
IS	Overall ( <i>n</i> = 11)	6 (54.55%)	2 (18.18%)	2 (18.18%)	0 (0.00%)	1 (9.09%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)
	Sweden ( <i>n</i> = 7)	3 (42.86%)	2 (28.57%)	2 (28.57%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)
	US ( <i>n</i> = 4)	3 (75.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	1 (25.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)
IiD	Overall ( <i>n</i> = 11)	4 (36.36%)	1 (9.09%)	3 (27.27%)	1 (9.09%)	1 (9.09%)	1 (9.09%)	0 (0.00%)	0 (0.00%)	0 (0.00%)
	Sweden ( <i>n</i> = 7)	3 (42.86%)	0 (0.00%)	2 (28.57%)	1 (14.29%)	1 (14.29%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)
	US ( <i>n</i> = 4)	1 (25.00%)	1 (25.00%)	1 (25.00%)	0 (0.00%)	0 (0.00%)	1 (25.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)
Peace.	Overall ( <i>n</i> = 11)	5 (45.45%)	2 (18.18%)	1 (9.09%)	1 (9.09%)	2 (18.18%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)
	Sweden ( <i>n</i> = 7)	3 (42.86%)	1 (14.29%)	1 (14.29%)	1 (14.29%)	1 (14.29%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)
	US ( <i>n</i> = 4)	2 (50.00%)	1 (25.00%)	0 (0.00%)	0 (0.00%)	1 (25.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)
PGA	Overall ( <i>n</i> = 11)	2 (18.18%)	1 (9.09%)	3 (27.27%)	1 (9.09%)	3 (27.27%)	1 (9.09%)	0 (0.00%)	0 (0.00%)	0 (0.00%)
	Sweden ( <i>n</i> = 7)	2 (28.57%)	0 (0.00%)	2 (28.57%)	1 (14.29%)	1 (14.29%)	1 (14.29%)	0 (0.00%)	0 (0.00%)	0 (0.00%)
	US ( <i>n</i> = 4)	0 (0.00%)	1 (25.00%)	1 (25.00%)	0 (0.00%)	2 (50.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)
PGC	Overall ( <i>n</i> = 11)	1 (9.09%)	5 (45.45%)	2 (18.18%)	0 (0.00%)	2 (18.18%)	1 (9.09%)	0 (0.00%)	0 (0.00%)	0 (0.00%)
	Sweden ( <i>n</i> = 7)	1 (14.29%)	4 (57.14%)	2 (28.57%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)
	US ( <i>n</i> = 4)	0 (0.00%)	1 (25.00%)	0 (0.00%)	0 (0.00%)	2 (50.00%)	1 (25.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)
Skepticism	Overall ( <i>n</i> = 11)	6 (54.55%)	1 (9.09%)	1 (9.09%)	1 (9.09%)	1 (9.09%)	0 (0.00%)	0 (0.00%)	1 (9.09%)	0 (0.00%)
	Sweden ( <i>n</i> = 7)	4 (57.14%)	1 (14.29%)	1 (14.29%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	1 (14.29%)	0 (0.00%)
	US ( <i>n</i> = 4)	2 (50.00%)	0 (0.00%)	0 (0.00%)	1 (25.00%)	1 (25.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)
SJO	Overall ( <i>n</i> = 11)	1 (9.09%)	1 (9.09%)	2 (18.18%)	1 (9.09%)	3 (27.27%)	3 (27.27%)	0 (0.00%)	0 (0.00%)	0 (0.00%)
	Sweden ( <i>n</i> = 7)	1 (14.29%)	0 (0.00%)	2 (28.57%)	0 (0.00%)	2 (28.57%)	2 (28.57%)	0 (0.00%)	0 (0.00%)	0 (0.00%)
	US ( <i>n</i> = 4)	0 (0.00%)	1 (25.00%)	0 (0.00%)	1 (25.00%)	1 (25.00%)	1 (25.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)

*Note.* Professional = professionally beneficial/limiting; AMP = Appreciation of Multiple Perspectives; IS = Intercultural Sensitivity; IiD = Interest in Diversity; Peaceful. = Peacefulness; PGA = Plural Geographic Allegiance; PGC = Preference for Global Communication; SJO = Social Justice Orientation; Black-colored cell = 0.00% of the distribution; Orange-colored cell = 0.01% - 49.99% of the distribution; Green-colored cell =  $\geq$  50.00% of the distribution

(continued)

Disposition	Attributable	9	8	7	6	5	4	3	2	1
AMP	Overall ( <i>n</i> = 11)	3 (27.27%)	3 (27.27%)	5 (45.45%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)
	Sweden ( <i>n</i> = 7)	2 (28.57%)	1 (14.29%)	4 (57.14%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)
	US ( <i>n</i> = 4)	1 (25.00%)	2 (50.00%)	1 (25.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)
IS	Overall ( <i>n</i> = 11)	1 (9.09%)	3 (27.27%)	5 (45.45%)	2 (18.18%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)
	Sweden ( <i>n</i> = 7)	1 (14.29%)	2 (28.57%)	4 (57.14%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)
	US ( <i>n</i> = 4)	0 (0.00%)	1 (25.00%)	1 (25.00%)	2 (50.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)
IiD	Overall ( <i>n</i> = 11)	0 (0.00%)	2 (18.18%)	3 (27.27%)	3 (27.27%)	2 (18.18%)	1 (9.09%)	0 (0.00%)	0 (0.00%)	0 (0.00%)
	Sweden ( <i>n</i> = 7)	0 (0.00%)	2 (28.57%)	2 (28.57%)	1 (14.29%)	2 (28.57%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)
	US ( <i>n</i> = 4)	0 (0.00%)	0 (0.00%)	1 (25.00%)	2 (50.00%)	0 (0.00%)	1 (25.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)
Peace.	Overall ( <i>n</i> = 11)	0 (0.00%)	1 (9.09%)	0 (0.00%)	3 (27.27%)	3 (27.27%)	2 (18.18%)	0 (0.00%)	1 (9.09%)	1 (9.09%)
	Sweden ( <i>n</i> = 7)	0 (0.00%)	0 (0.00%)	0 (0.00%)	2 (28.57%)	3 (42.86%)	0 (0.00%)	0 (0.00%)	1 (14.29%)	1 (14.29%)
	US ( <i>n</i> = 4)	0 (0.00%)	1 (25.00%)	0 (0.00%)	1 (25.00%)	0 (0.00%)	2 (50.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)
PGA	Overall ( <i>n</i> = 11)	2 (18.18%)	1 (9.09%)	2 (18.18%)	2 (18.18%)	3 (27.27%)	1 (9.09%)	0 (0.00%)	0 (0.00%)	0 (0.00%)
	Sweden ( <i>n</i> = 7)	2 (28.57%)	1 (14.29%)	1 (14.29%)	1 (14.29%)	1 (14.29%)	1 (14.29%)	0 (0.00%)	0 (0.00%)	0 (0.00%)
	US ( <i>n</i> = 4)	0 (0.00%)	0 (0.00%)	1 (25.00%)	1 (25.00%)	2 (50.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)
PGC	Overall ( <i>n</i> = 11)	4 (36.36%)	1 (9.09%)	0 (0.00%)	2 (18.18%)	2 (18.18%)	2 (18.18%)	0 (0.00%)	0 (0.00%)	0 (0.00%)
	Sweden ( <i>n</i> = 7)	4 (57.14%)	0 (0.00%)	0 (0.00%)	2 (28.57%)	0 (0.00%)	1 (14.29%)	0 (0.00%)	0 (0.00%)	0 (0.00%)
	US ( <i>n</i> = 4)	0 (0.00%)	1 (25.00%)	0 (0.00%)	0 (0.00%)	2 (50.00%)	1 (25.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)
Skepticism	Overall ( <i>n</i> = 11)	4 (36.36%)	4 (36.36%)	3 (27.27%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)
	Sweden ( <i>n</i> = 7)	3 (42.86%)	2 (28.57%)	2 (28.57%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)
	US ( <i>n</i> = 4)	1 (25.00%)	2 (50.00%)	1 (25.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)
SJO	Overall ( <i>n</i> = 11)	1 (9.09%)	3 (27.27%)	2 (18.18%)	4 (36.36%)	0 (0.00%)	0 (0.00%)	1 (9.09%)	0 (0.00%)	0 (0.00%)
	Sweden ( <i>n</i> = 7)	1 (14.29%)	3 (42.86%)	0 (0.00%)	3 (42.86%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)
	US ( <i>n</i> = 4)	0 (0.00%)	0 (0.00%)	2 (50.00%)	1 (25.00%)	0 (0.00%)	0 (0.00%)	1 (25.00%)	0 (0.00%)	0 (0.00%)

*Note.* Attributable = attributable to global citizenship education; AMP = Appreciation of Multiple Perspectives; IS = Intercultural Sensitivity; IiD = Interest in Diversity; Peace. = Peacefulness; PGA = Plural Geographic Allegiance; PGC = Preference for Global Communication; SJO = Social Justice Orientation; Black-colored cell = 0.00% of the distribution; Orange-colored cell = 0.01% - 49.99% of the distribution; Green-colored cell =  $\geq 50.00\%$  of the distribution



## APPENDIX T – PHASE 1 RATINGS RATIONALES

<i>Alumni/ae Ratings' Rationales for Personal and Professional Benefits/Limitations; Global Citizenship Education (GCE) Attributability</i>	
Disposition	Rationale (Rating, Component, Participant)
Appreciation of Multiple Perspectives	<ul style="list-style-type: none"> <li>• Diverse ideas drive innovation (9, Professional, US4)</li> <li>• Definitely a remnant from the [Theory of Knowledge] module in IB, and something that I am truly grateful for (9, GCE, SWE1)</li> <li>• More exploration of valuable perspectives from classmates/others than in other parts of my life (8, GCE, US2)</li> <li>• Valuable for cooperation skills (7, Personal, US2)</li> <li>• Very valuable for decision-making (7, Professional, US2)</li> <li>• I recall my Theory of Knowledge and English (HL) classes in particular exposing us to different perspectives through religion and writing (7, GCE, SWE2)</li> </ul>
Intercultural Sensitivity	<ul style="list-style-type: none"> <li>• Critical to any role working with other humans! (9, Professional, US4)</li> <li>• Other factors that contributed to my Intercultural Sensitivity were the fact that I was born into a multicultural family and later moved from a less tolerant culturally homogenic country to a more multicultural one. (8, GCE, SWE4)</li> <li>• My secondary-school class was small (30 students), where at least half were international students. This exposure to many different cultural perspectives definitely shaped how I approached/what I learned from college and beyond (7, GCE, SWE2)</li> <li>• Discussion of other cultures of the world and my classmates (7, GCE, US2)</li> <li>• I think people with inter-cultural sensitivity may be more drawn to this kind of program (6, GCE, US1)</li> <li>• A preexisting element (5, Personal, US2)</li> <li>• Hasn't often come up (5, Professional, US2)</li> </ul>
Interest in Diversity	<ul style="list-style-type: none"> <li>• [I] think, in particular, about understanding cultural differences in business negotiations/ contracts and communication, as well as wanting to learn different languages (9, Professional, SWE3)</li> <li>• Again, being in an international school, within a capital [E]uropean city, definitely exposed me to contexts I would not have experienced otherwise! (7, GCE, SWE2)</li> <li>• [P]eople with this interest are more likely to be drawn to this program (6, GCE, US1)</li> <li>• Was encouraged by my previous educational situation (6, GCE, US2)</li> <li>• I think it's also partially the Interest in Diversity that drove me to do IB, so while IB may have enhanced it, it was definitely there to begin with (5, GCE, SWE1)</li> <li>• Already had an interest, wasn't challenged much in the program in terms of thinking about other contexts/cultures, other than ToK (4, GCE, US4)</li> </ul>
Peacefulness	<ul style="list-style-type: none"> <li>• Connected to Appreciation of Multiple Perspectives, but seems less deliberate/active (6, GCE, US2)</li> <li>• Indecisiveness (5, Personal, US2)</li> <li>• Unwillingness to make waves (5, Professional, US2)</li> <li>• While this is something that IB helped to develop, I noticed this quality across the board among the students alongside me. This makes me question if people with this disposition are more likely to take a program like IB (5, GCE, SWE1)</li> <li>• I would say I learned about thoughtful negotiation tactics later on in my academic career. That being said, open-mindedness and respect [were] a big part of our secondary school culture (5, GCE, SWE2)</li> </ul>

(continued)

Disposition	Rationale (Rating, Component, Participant)	
Plural Geographic Allegiance	<ul style="list-style-type: none"> <li>I would say that it rather made my life incredibly interesting but at the same time it also created some difficulties in my personal life, for example, having all my friends all over the world and having difficulties of choosing a place (a country, town) to live in (9, Personal, SWE4)</li> <li>[I]n the sense that [I] could relocate to most places for work and feel at home there [I] think, or at least adapt to the area (9, Professional, SWE3)</li> <li>[I]t might have limited my personal life also though in the sense that we as a family moved a bit when [I] was little, [I] thought it was easy to move and shift countries, but the visa situation is not always straight forward and its expensive to keep moving countries. on the positive side it's influenced me to study overseas and work and live overseas and make multiple cities my home (7, Personal, SWE3)</li> </ul>	
	<ul style="list-style-type: none"> <li>It had a double effect on my professional life. In some cases it limited my options of professions but at the same time it directed me into a more specific choice of my career (7, Professional, SWE4)</li> </ul>	
	<ul style="list-style-type: none"> <li>In a personal sense, it's important to recognize how we fit into the world—to get outside our bubble (6, Personal, SWE2)</li> </ul>	
	<ul style="list-style-type: none"> <li>[People with this allegiance are more likely to be drawn to this program] (6, GCE, US1)</li> </ul>	
	<ul style="list-style-type: none"> <li>[P]ersonally, [I] think [I] already had this disposition before starting secondary school as [I]'m [D]anish/[T]hai but grew up in [S]weden having lived in all three countries before I turned 13. [S]ince then [I]'ve also lived in the US and now NZ so I definitely think of myself as a citizen of the world! (5, GCE, SWE3)</li> </ul>	
	<ul style="list-style-type: none"> <li>Not brought up significantly in my IB experience (5, GCE, US2)</li> </ul>	
	<ul style="list-style-type: none"> <li>While I was exposed to many cultures throughout my secondary-school experiences, I would say this allegiance is something I more formally formed as an adult, as I'm navigating my career path and determining what kind of impact I want to have on my community (both locally and globally) (4, GCE, SWE2)</li> </ul>	
	<ul style="list-style-type: none"> <li>Sometimes I get overwhelmed when I think of how my actions (or inactions) impact the wider world. While it's important to acknowledge our part in where the world is now, my professional approach is to think small and local, otherwise it can be unnerving and daunting to acknowledge all of the world's problems (4, Professional, SWE2)</li> </ul>	
	Preference for Global Communication	<ul style="list-style-type: none"> <li>In general, speaking (or attempting to speak) the language that your audience/partners are most comfortable in is best for connection, respect (8, Professional, SWE2)</li> </ul>
		<ul style="list-style-type: none"> <li>Some positive professional impacts from learning second, less global language (4, Professional, US2)</li> </ul>
<ul style="list-style-type: none"> <li>I would say English is my native language, so this is hard to say (4, GCE, SWE2)</li> </ul>		
<ul style="list-style-type: none"> <li>Encouraged to learn second, less global language (4, GCE, US2)</li> </ul>		
Skepticism	<ul style="list-style-type: none"> <li>Political activism and civic responsibility [are] important to me, and so healthy skepticism will help me navigate information so I can stay true to my values (9, Personal, SWE2)</li> </ul>	
	<ul style="list-style-type: none"> <li>[Another] ToK remnant that I love (9, GCE, SWE1)</li> </ul>	
	<ul style="list-style-type: none"> <li>As long as Skepticism is accompanied by compassion and diplomacy it is beneficial to my personal life (8, Personal, SWE4)</li> </ul>	
	<ul style="list-style-type: none"> <li>I would say healthy Skepticism is important for understanding the context of situation and any data presented meant to inform decision-making (8, Professional, SWE2)</li> </ul>	
	<ul style="list-style-type: none"> <li>I feel like my secondary-school experience helped me start to develop this disposition, and then in college I learned more about implicit biases. (7, GCE, SWE2)</li> </ul>	
<ul style="list-style-type: none"> <li>Discourages laziness in decision making (6, Professional, US2)</li> </ul>		

(continued)

Disposition	Rationale (Rating, Component, Participant)
Skepticism	<ul style="list-style-type: none"> <li>• It's good and bad in terms of personal relationships, as while it's beneficial to question the information received in other scenarios, personal relationships may sometimes benefit from less Skepticism, and a more emotional approach based on pure human trust (5, Personal, SWE1)</li> <li>• I struggle to be friends with folks who don't exercise Skepticism but it's not a big impact (5, Personal, US4)</li> <li>• Unwillingness to trust (4, Personal, US2)</li> <li>• From my experience (internships with various organisations) Skepticism has created complex situations which were not exactly beneficial for that professional life but it has also directed me into knowing exactly what I stand for and what I want to do regarding my professional life (2, Professional, SWE4)</li> </ul>
Social Justice Orientation	<ul style="list-style-type: none"> <li>• It has helped me (together with peacefulness and intercultural sensitivity, including subcultural sensitivity) to meet and become friends with like-minded people but also to look for ways to be empathic and understanding towards people with other opinions from mine (9, Personal, SWE4)</li> <li>• I feel like I will be most fulfilled in my career when I can contribute to social justice goals (9, Professional, SWE2)</li> <li>• It's good to set boundaries with people who are intolerant etc. (8, Personal, US4)</li> <li>• My secondary-school experiences definitely initiated the creation of Social Justice Orientation in me but it was heavily enhanced throughout my university studies (8, GCE, SWE4)</li> <li>• Also a result of other life experiences, but encouraged by IB (7, GCE, US2)</li> <li>• Helps me to meet like-minded people (6, Personal, US2)</li> <li>• I have a vivid memory of my Theory of Knowledge project (over 10 years ago) being about human rights in southeast Asia, and it having a big impact on how I view the responsibilities of countries to fight for human rights everywhere (6, GCE, SWE2)</li> <li>• [U]nsure because it led me to wanting to work in environmental conservation which [I] did for a few years, but [I] also struggled with working in a lab and seeing how much disposable plastic waste we use every day (e.g., pipette tips and gloves and plastic tubes) (5, Professional, SWE3)</li> <li>• It depends a lot on the person I think. In my case as a recent post-graduate where I am still in the process of building my professional life, I exclude a lot of professional options due to my high Social Justice Orientation. For instance, I have been actively excluding job opportunities in unethical companies/organisations and institutions. By unethical I mean those that infringe human rights and disrespect planetary boundaries. At the same time, I think that once I acquire a satisfying professional occupation in the framework of social justice, this orientation will be very helpful (4, Professional, SWE4)</li> <li>• May not be shared by coworkers (4, Professional, US2)</li> </ul>

**APPENDIX U – PHASE 3 INTER-ITEM CORRELATIONS PER DISPOSITION**

*Appreciation of Multiple Perspective (N = 16 Items): All Inter-Item Correlations Significant (100.00%,  $p < .05$ )*

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
2	42														
3	49	46													
4	47	53	42												
5	51	52	51	54											
6	36	32	39	30	35										
7	38	44	32	41	41	36									
8	54	32	43	32	40	42	32								
9	56	39	57	41	33	30	33	41							
10	38	55	43	44	45	27	28	35	45						
11	35	40	28	44	34	39	47	29	31	33					
12	47	36	53	34	47	40	39	34	51	45	25				
13	51	43	47	45	47	51	41	28	46	35	38	45			
14	46	41	41	48	37	37	38	29	31	39	43	36	49		
15	39	43	43	46	42	40	47	40	39	36	46	40	41	35	
16	45	48	45	37	43	30	38	40	46	38	23	37	37	33	38

*Note.* Number in cell indicates  $r$  value (i.e., correlational magnitude); green-colored cell indicates  $p < .001$ ; blue-colored cell indicates  $p < .01$ ; yellow-colored cell indicates  $p < .05$ ; red-colored cell indicates  $p > .05$ .

*Intercultural Sensitivity (N = 24 Items): Nearly All Inter-Item Correlations Significant (99.28%, p < .05)*

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
2	54																						
3	43	43																					
4	43	39	39																				
5	28	30	40	32																			
6	32	39	27	30	15																		
7	45	52	34	34	37	30																	
8	63	56	39	49	21	40	47																
9	47	54	40	45	33	37	41	53															
10	47	48	30	29	21	47	36	45	36														
11	45	41	46	48	32	34	50	40	42	42													
12	34	37	15	30	16	23	33	22	23	26	33												
13	41	52	48	40	29	43	33	41	43	43	35	23											
14	62	48	42	49	26	43	51	54	44	55	52	32	36										
15	31	39	30	23	24	45	26	33	31	43	38	25	51	37									
16	29	45	16	21	28	39	40	29	23	42	33	39	29	33	36								
17	49	44	53	46	35	38	46	44	48	31	46	18	41	44	23	30							
18	59	49	52	44	30	33	50	53	47	45	53	32	41	52	38	36	54						
19	40	40	40	46	34	47	42	42	34	42	49	28	44	53	48	25	35	42					
20	22	31	27	19	20	36	18	26	28	40	28	31	45	21	39	31	29	28	42				
21	30	36	44	46	28	44	36	30	37	37	43	26	45	34	32	22	47	35	48	34			
22	49	42	33	30	36	39	42	42	47	33	41	28	33	49	24	29	46	48	40	31	35		
23	49	44	49	51	36	41	52	57	43	51	52	20	44	51	47	34	51	58	47	26	47	32	
24	48	54	47	39	29	34	48	45	50	36	48	32	40	45	41	30	44	43	44	24	33	50	46

*Note.* Number in cell indicates *r* value (i.e., correlational magnitude); green-colored cell indicates  $p < .001$ ; blue-colored cell indicates  $p < .01$ ; yellow-colored cell indicates  $p < .05$ ; red-colored cell indicates  $p > .05$ .

*Interest in Diversity (N = 22 Items): Nearly All Inter-Item Correlations Significant (99.57%,  $p < .05$ )*

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
2	58																				
3	30	33																			
4	33	46	17																		
5	53	64	37	41																	
6	53	60	24	38	62																
7	54	57	41	41	64	59															
8	51	51	39	37	66	63	60														
9	45	40	38	36	43	36	49	52													
10	50	58	44	29	50	47	52	52	36												
11	53	52	35	37	60	52	53	53	50	43											
12	42	49	36	35	53	45	47	49	44	36	48										
13	38	48	35	39	49	52	63	51	42	37	58	49									
14	53	58	32	39	70	60	61	58	36	49	57	58	51								
15	52	59	34	39	67	55	74	63	48	50	65	54	58	69							
16	33	35	33	25	48	47	46	44	30	38	41	40	29	35	46						
17	52	50	38	37	55	47	52	47	38	39	50	55	50	54	58	43					
18	26	30	46	14	24	29	32	31	28	36	21	29	22	33	29	16	29				
19	40	51	35	33	52	50	51	51	31	46	42	34	58	43	55	30	46	27			
20	59	55	40	32	56	48	54	56	59	46	52	50	43	56	55	40	40	31	44		
21	57	56	43	26	56	48	56	57	38	63	48	39	40	54	59	37	49	38	51	56	
22	62	61	33	40	63	53	64	60	51	54	59	45	52	52	59	34	49	35	49	56	56

*Note.* Number in cell indicates  $r$  value (i.e., correlational magnitude); green-colored cell indicates  $p < .001$ ; blue-colored cell indicates  $p < .01$ ; yellow-colored cell indicates  $p < .05$ ; red-colored cell indicates  $p > .05$ .

*Plural Geographic Allegiance (N = 27 Items): Nearly All Inter-Item Correlations Significant (99.34%,  $p < .05$ )*

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
2	61																									
3	52	55																								
4	43	44	44																							
5	58	51	42	54																						
6	57	56	43	47	51																					
7	60	63	44	47	56	61																				
8	47	28	33	34	39	34	39																			
9	31	25	28	39	37	11	29	48																		
10	67	54	38	44	51	61	56	42	23																	
11	40	41	37	40	37	30	45	39	43	30																
12	28	42	40	41	28	30	37	22	36	25	57															
13	59	55	52	54	55	59	58	37	22	61	34	31														
14	49	54	42	54	54	56	57	30	10	57	36	25	64													
15	42	40	40	38	54	30	39	27	31	39	30	24	46	45												
16	30	32	43	47	38	30	34	38	45	26	52	44	22	30	37											
17	40	35	49	37	41	36	39	38	49	38	49	53	31	29	30	57										
18	34	36	49	28	37	34	42	46	43	36	44	47	26	25	31	48	64									
19	58	51	48	45	65	56	51	50	29	70	34	24	61	56	54	28	31	35								
20	49	42	52	39	46	44	45	50	38	43	47	37	46	38	35	41	45	56	44							
21	59	52	49	59	60	63	58	32	23	68	30	30	71	68	40	34	38	37	70	48						
22	57	62	34	40	56	60	60	32	24	64	28	25	61	59	48	30	26	31	68	35	61					
23	33	26	39	42	32	27	33	25	38	25	26	34	29	26	21	31	32	26	26	32	36	24				
24	44	43	44	37	46	42	55	33	41	47	37	45	38	27	36	40	46	47	36	47	39	38	36			
25	44	49	43	35	38	41	49	44	32	47	56	49	43	41	32	37	45	51	47	47	48	40	26	53		
26	49	46	49	36	52	36	45	47	38	51	41	41	49	34	41	39	52	54	47	51	46	40	25	44	47	
27	34	36	50	45	33	34	31	39	47	27	45	49	31	27	25	48	53	52	30	53	30	21	30	39	43	48

*Note.* Number in cell indicates  $r$  value (i.e., correlational magnitude); green-colored cell indicates  $p < .001$ ; blue-colored cell indicates  $p < .01$ ; yellow-colored cell indicates  $p < .05$ ; red-colored cell indicates  $p > .05$ .

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