

This chapter defines the knowledge, skills and attitudes that constitute the four dimensions of global competence that are needed to thrive in an interconnected world. It explores the methods used to measure them and highlights topics of policy relevance explored in detail in subsequent chapters.

Twenty-first century students live in an interconnected, diverse and rapidly changing world. Economic, social, cultural, digital, demographic, environmental and epidemiological forces are shaping young people's lives. This complex environment presents both opportunities and challenges.

As we moved from 2019 into 2020, the world was swept with a global pandemic the like of which had not been seen for more than a century. The disruption created by the pandemic was unprecedented, as were reactions to it. Global efforts to counter the spread of the virus ensued, as well as creative solutions to respond to its consequences.

It was a time of contradictions. The virus moved along the routes of international trade and travel, challenging the essence of the interconnected world we live in. Travel stopped, trade was disrupted, and schools were closed as students, parents and teachers were on lockdown. As countries grappled with the consequences of the pandemic, questions arose on what the future would hold. Would there be more global collaboration to tackle the aftermath of the crisis, or would it lead to increased isolation and the decline of global connections?

The two scenarios are not mutually exclusive. As we build highly integrated global networks, we become vulnerable to risks such as global pandemics and economic crises. Since the financial crisis of 2008, the world has witnessed growing scepticism about interconnectedness, with protectionism back on the agenda in some countries. The current pandemic only added to this phenomenon, with countries closing their borders to avoid further spread of the virus and the world economy slowing down as a result. However, the decline of global links in one sphere could give rise to new connections in another.

In 2008 and the years that followed, countries mobilised their resources to counter the consequences of the financial crisis, with the largest concerted monetary policy action in world history. Currently, in response to the COVID-19 pandemic, co-ordinated efforts are being made to establish new norms and standards of response. Teams of scientists around the world are working on finding a vaccine for the virus. If their efforts are successful, it would be the most rapidly developed vaccine in human history.

Public health is not the only pressing issue on the global stage. In the last two decades, the world faced a different challenge: extremism and radicalisation with concerted worldwide efforts being mobilised to counter this threat. More recently, in May 2020 and the months that followed, the world was swept with protests challenging racial discrimination and the misuse of power. Two years earlier, the #MeToo movement put sexual harassment and abuse in the spotlight. One issue focused on racial equality, the other on gender equality, but both had justice, empowerment and breaking the silence at their heart, and both relied on the willingness of people to show solidarity and to take action for collective well-being.

In education, although the process of global collaboration is still in its infancy, global events highlighted the potential for countries to learn from each other's experience. So far, if there is one thing that the different crises have shown, it is that international collaboration is needed more than ever.

In 2018, the OECD Programme for International Student Assessment (PISA) conducted its first evaluation of students' capacity to live in an interconnected world. The assessment focused on students' knowledge of issues of local and global significance, including public health, economic and environmental issues, and on their intercultural knowledge, skills and attitudes. It explored how schools foster those skills through learning. The survey also covered the inclusion of global and intercultural learning in the curriculum and teacher preparedness to integrate those topics in their lessons.

Even though the PISA 2018 global competence assessment did not specifically cover the COVID-19 crisis or the other recent global events, it focused on many themes of global relevance such as: gender equality, environmental sustainability, poverty, hunger and malnutrition, economic crises, migration and cultural diversity. More importantly, the cognitive assessment covered skills that are valuable beyond the scope of topics included in the assessment such as critical thinking, ability to examine issues of global and local significance, ability to understand the perspectives of others and to evaluate actions and consequences.

Education systems that embrace the need for such competences are likely to be the ones that equip students to live in an interconnected and diverse world and to benefit from it. In the spirit of the United Nations Sustainable Development Goals, the ultimate objective is to allow learners to acquire the knowledge and skills needed to promote human rights, gender equality, sustainable lifestyles, a culture of peace and non-violence, global citizenship, and an appreciation of cultural diversity and of culture's contribution to sustainable development.

The rest of this chapter presents the concept of global competence, its dimensions and how it was assessed in PISA 2018.

WHAT IS GLOBAL COMPETENCE?

In its 2018 cycle of data collection among 15-year-old students, PISA assessed the global competences needed to live in an interconnected and changing world. Global competence is defined as a multidimensional capacity that encompasses the ability to: 1) examine issues of local, global and cultural significance; 2) understand and appreciate the perspectives and worldviews of others; 3) engage in open, appropriate and effective interactions across cultures; and 4) take action for collective well-being and sustainable development (OECD, $2019_{[1]}$). Students in 27 countries and economies both sat the global competence test and completed the global competence module in the student questionnaire. Students in a further 39 countries and economies completed the global competence module in the questionnaire only. The list of participating countries and economies is provided in Table VI.A2.16 in annex A2.

WHY DO STUDENTS NEED SPECIFIC INTERCULTURAL AND GLOBAL SKILLS?

To live harmoniously in multicultural societies

Multicultural societies are a reality almost everywhere. In recent decades, the cost of human mobility has declined, and the number of people moving in search of education and employment has dramatically increased. Moreover, the end of the cold war ushered in a significant rise in ethno-cultural conflicts that are challenging governments' ability to maintain peace and harmony between diverse communities living side by side (Brubaker and Laitin, 1998_[2]; Kymlicka, 1995_[3]). Such conflicts highlight the interconnectedness of our world. A conflict in one region can result in an influx of refugees in countries thousands of miles away. In 2015 alone, an estimated 4.8 million migrants arrived in OECD countries, a wave that reinforced a long and steady upward trend in migration (OECD, 2019_[4]).

With the movement of people between countries, communities have redefined their identity and local culture. Complex forms of citizenship have emerged at multiple levels (national, regional, municipal and local), as have new forms of belonging. Against this backdrop, individuals must interact with distant regions, people and ideas while also deepening their understanding of their local environment and the diversity within their own communities. By appreciating the cultural diversity of the communities to which they belong, young people can learn to live together as global citizens (UNESCO, 2014_[5]; UNESCO, 2015_[6]). While education cannot bear the sole responsibility for ending racism and discrimination, it can teach young people the importance of challenging cultural biases and stereotypes in multicultural societies.

To thrive in a changing labour market

Workplaces around the world are becoming more diverse and interconnected. Professional success in the 21st century requires skills that go beyond disciplinary knowledge. In today's world, it is essential to operationalise knowledge across disciplines, to understand different perspectives and to communicate with others who may not share the same worldview or speak the same language. Effective communication and appropriate behaviour within multicultural teams are the key to success and will remain so, even as some skills are partially or completely automated. Employers increasingly seek to attract learners who adapt easily and are able to apply and transfer their skills and knowledge to new contexts. They value employees who are capable of navigating the complex dynamics of globalisation, who are open to people from different cultural backgrounds, who can build trust in diverse teams and who demonstrate respect for others (British Council, 2013_{[71}).

To use media platforms effectively and responsibly

In the past two decades, radical transformations of information and communication technologies have changed our lives and shaped young people's outlook on the world, their interactions with others and their perceptions of their surrounding environment. Social media, online networks and interactive technologies connect young people to their friends, family members and people well beyond these circles. They also deliver an unprecedented amount of information and online content to young people. Such networks are giving rise to new forms of learning, where the source of knowledge is decentralised and learners have ever-increasing autonomy in how they learn.

However, these new media and technologies also pose some risks to young people, including exposure to harmful or inappropriate content, lack of awareness about how online behaviour can affect others and a dependence on the Internet or social networking that could lead to disconnection from the real world. Moreover, while technology helps people connect easily with others, online behaviour suggests that young people tend to "flock together", favouring interactions with a small set of people with whom they have much in common (Graf and Aday, 2008₍₈₎; Tewksbury and Riles, 2015₍₉₎). Likewise, access to an unlimited amount of information is often paired with insufficient media literacy, to the extent that young people are easily influenced by partisan, biased or "fake" news. In this context, cultivating students' skills in intercultural communication can help them to capitalise on digital spaces, better understand the world they live in and responsibly express their opinions on line.

To support the UN Sustainable Development Goals

Education for living in an interconnected world should ultimately contribute to forming new generations of citizens who care about global issues and who are able to take action for sustainability and collective well-being. As stated in the Sustainable Development Goal for education, by 2030, all learners should acquire the knowledge and skills needed to promote sustainable development, including through education for sustainable development and sustainable lifestyles, human rights, gender equality, promotion of a culture of peace and non-violence, global citizenship, and appreciation of cultural diversity and of culture's contribution to sustainable development (Education 2030, Incheon Declaration and Framework for Action).

ASSESSING GLOBAL COMPETENCE

Many education systems have introduced learning activities related to global citizenship as schools try to prepare their students to live in an increasingly diverse and interconnected environment. As these programmes become more widespread, new learning objectives and different types of assessments need to be developed. In this context, PISA aims to provide a comprehensive overview of the efforts of education systems to create learning environments that invite young people to understand the world beyond their immediate surroundings, interact with others while respecting their rights and dignity and take action towards building sustainable and thriving communities. A fundamental goal of this work is to support evidence-based decisions on how to improve curricula, teaching, assessments and schools' responses to cultural diversity and global challenges in order to prepare young people to become active citizens in an interconnected world.

THE CONCEPT OF GLOBAL COMPETENCE AND ITS FOUR DIMENSIONS

Education for living in an interconnected world builds on the ideas of different models of education, such as intercultural education, global citizenship education and education for democratic citizenship (UNESCO, 2014_[5]; Council of Europe, 2016_[10]). Despite differences in their focus and scope, these models share a common goal: to promote students' understanding of the world and empower them to express their views and participate in society.

PISA contributes by proposing a new perspective on the definition and assessment of the knowledge, skills, attitudes and values needed to achieve the goals encompassed by these models. These conceptual foundations and assessment guidelines will help policy makers and school leaders create learning resources and curricula that regard global competence as a multifaceted cognitive, socio-emotional and civic learning goal (Boix Mansilla, 2016_[11]). They will also facilitate governments' ability to monitor progress and ensure systematic long-term support.

Global competence is not a specific skill, but rather a combination of knowledge, skills, attitudes and values successfully applied both in face-to-face, virtual or mediated encounters with people who are perceived to be from a different cultural background and in individuals' engagement with global issues (i.e. situations that require an individual to reflect upon problems that know no national borders and that have deep implications for current and future generations). Acquiring the necessary knowledge, skills, attitudes and values is a life-long process; there is no single point at which an individual becomes completely competent in this domain. PISA assesses where 15-year-old students are situated in this process and whether their schools are effective in helping them to develop the necessary knowledge, skills and dispositions.

As defined in PISA 2018, global competence is composed of four highly interdependent dimensions:

- the capacity to examine issues and situations of local, global and cultural significance (e.g. poverty, economic interdependence, migration, inequality, environmental risks, conflicts, cultural differences and stereotypes)
- the capacity to understand and appreciate different perspectives and worldviews
- the ability to establish positive interactions with people of different national, ethnic, religious, social or cultural backgrounds or gender
- the capacity and disposition to take constructive action towards sustainable development and collective well-being.

Box VI.1.1. Defining culture

Culture is difficult to define because cultural groups are always internally heterogeneous and contain individuals who adhere to a range of diverse beliefs and practices. Furthermore, the core cultural beliefs and practices that are most typically associated with any given group are also constantly changing and evolving over time. However, distinctions may be drawn between the material, social and subjective aspects of culture, that is, between the material artefacts that are commonly used by the members of a cultural group (e.g. tools, foods, clothing), the social institutions of the group (e.g. language, communicative conventions, folklore, religion), and the beliefs, values, discourses and practices that group members commonly use as a frame of reference for thinking about and relating to the world. Culture is a composite of all three of these aspects, consisting of a network of material, social and subjective resources. The full set of cultural resources is distributed across the entire group, but each individual member of the group only uses a subset of all of the cultural resources that are potentially available to them (Barrett et al., 2014_[12]; Council of Europe, 2016_[10]).

Defining culture in this way means that any kind of social group can have its own distinctive culture: national groups, ethnic groups, faith groups, linguistic groups, occupational groups, generational groups, family groups, etc. . The definition also implies that all individuals belong to multiple groups and therefore have multiple cultural affiliations and identities (e.g. national, religious, linguistic, generational, familial). Although all people belong to multiple cultures, each person participates in a different constellation of cultures, and the way in which a person relates to any one culture depends, at least in part, on perspectives that are shaped by the other cultures to which he or she also belongs. In other words, cultural affiliations intersect, and each individual has a unique cultural positioning.

A person's cultural affiliations are dynamic and fluid. What individuals think defines them culturally fluctuates as they move from one situation to another. These fluctuations depend on the extent to which a social context focuses on a particular identity and on an individual's needs, motivations, interests and expectations within that situation (Council of Europe, 2016_[10]).

Figure VI.1.1 shows how global competence is defined as the combination of the four dimensions and how each dimension builds on specific knowledge, skills, attitudes and values.

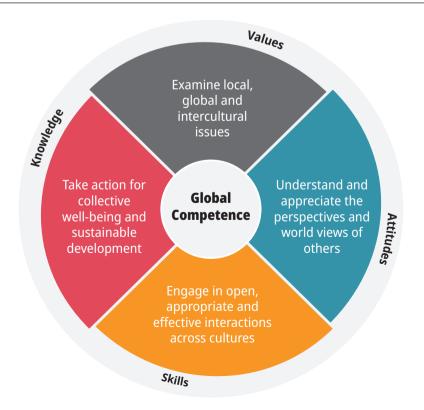


Figure VI.1.1 The dimensions of global competence

Dimension 1: Examine issues of local, global and cultural significance

People with the skills and attitudes needed to live in an interconnected world are able to combine knowledge about the world and critical reasoning whenever they form their own opinion about a global issue. They use higher-order thinking skills, such as selecting and weighing appropriate evidence, to reason about global developments. Such students can draw on and combine the disciplinary knowledge and modes of thinking acquired in school to ask questions, analyse data and arguments, explain phenomena and develop a position concerning a local, global or cultural issue (Boix Mansilla and Jackson, 2011_[13]). Development in this dimension also requires media literacy, defined as the ability to access, analyse and critically evaluate media messages (Buckingham, 2007_[14]; Kellner and Share, 2005_[15]).

Dimension 2: Understand and appreciate the perspectives and worldviews of others

People with the skills and attitudes needed to thrive in an interconnected world are capable of considering global problems and other people's perspectives and behaviours from multiple viewpoints. As individuals acquire knowledge about the history, values, communication styles, beliefs and practices of other cultures, they acquire the means to recognise that their own perspectives and behaviours are shaped by multiple influences, that they are not always fully aware of these influences and that others have views of the world that are profoundly different from their own (Hanvey, 1982_[16]).

Engaging with different perspectives and worldviews requires individuals to examine the origins and implications of others and their own assumptions. This in turn implies a profound respect for and interest in others, their concept of reality and their emotions. Individuals with this competence also account for and appreciate the connections (e.g. basic human rights and needs and common experiences) that enable them to bridge differences and find common ground. They retain their cultural identity but are simultaneously aware of the cultural values and beliefs of the people around them. Recognising another's position or belief does not necessarily mean accepting that position or belief. However, the ability to see through another cultural filter provides opportunities to question and deepen one's own perspectives and thus make more mature decisions when dealing with others (Fennes and Hapgood, 1997_[17]).

Dimension 3: Engage in open, appropriate and effective interactions across cultures

People who have the skills and attitudes needed to thrive in an interconnected world are able to understand the cultural norms, interactive styles and degrees of formality of intercultural contexts, and they can adapt their behaviour and communication accordingly. This dimension encompasses appreciation for respectful dialogue, the desire to understand others and efforts to include marginalised groups. It emphasises individuals' capacity to interact with others across differences in ways that are open, appropriate and effective. Open interactions are those in which all participants demonstrate sensitivity towards, curiosity about and willingness to engage with others and their perspectives. "Appropriate" refers to interactions that respect the expected cultural norms of both parties. In effective communication, all participants are able to make themselves understood and to understand the others (Barrett et al., 2014_[12]).

Dimension 4: Take action for collective well-being and sustainable development

This dimension focuses on young people's role as active and responsible members of society. It refers to individuals' readiness to respond to a given local, global or intercultural issue or situation. People who can thrive in interconnected and multicultural societies are able to create opportunities to take informed, reflective action and have their voices heard. Taking action may imply standing up for a schoolmate whose dignity is being threatened, initiating a global media campaign at school or disseminating a personal viewpoint on the refugee crisis via social media. These people are engaged to improve living conditions in their own communities and to build a more just, peaceful, inclusive and environmentally sustainable world.

Box VI.1.2. The universal roots of global competence

Which concepts are universal, and which are the product of particular times and places with no resonance outside of those contexts?

The modern literature on global competence emerges predominantly in the Western, Euro-American context. However, global competence has older, more universal roots. Many philosophical traditions and cultures have an equivalent concept for global competence that falls under the broader categories of humanism and humanness. They all share certain ethical principles, such as connectedness, respect, openness, tolerance, empathy, compassion, knowledge of the other, self-awareness and an ideal of universal kinship.

In Confucianism, Ren (Chinese: 仁), the good feeling a person experiences by being altruistic, is considered to be the outward expression of Confucian ideals. Confucius's social philosophy depended on the cultivation of Ren by every person

in a community. In the Analects, or the collected sayings of Confucius, Ren is mentioned about 60 times with no clear definition. Throughout the Analects, Confucius's students request a definition of Ren. Confucius instead responds by giving examples of behaviours that embody the concept and illustrate how it can be achieved. According to Confucius, a person with a developed sense of Ren is kind, respectful, tolerant, diligent and trustworthy (Analects 17.6). He or she speaks carefully and with modesty (Analects 12.3), and shows empathy towards and understanding of others (Analects 12.22).

樊遲問仁。子曰。愛人。

Fan Chi asked about the meaning of Ren. The Master said, «It is to love all Men.» He asked about knowledge. The Master said, «It is to know all Men.»

The Analects of Confucius (12.22)

In the Indian subcontinent, the term Ahimsa (Sanskrit: अहसिंग) refers to a key virtue of doing no harm. This concept is a major tenet of Hinduism, Jainism and Buddhism and underpins respect for all living beings and avoidance of violence towards others. An ancient concept, Ahimsa gained political and practical significance in the first half of the 20th century as it formed the cornerstone of the nonviolent philosophy of Mahatma Gandhi known as Satyagraha (Sanskrit: सत्याग्रह). In Mahatma Gandhi's words: "Truth implies love, and firmness engenders force. I thus began to call the Indian movement Satyagraha; that is to say, the force that is born of truth and love."

मित्रस्याहं चक्षुषा सर्वाणि भूतानि समीक्षे। मित्रस्य चक्षुषा समीक्षामहे।

May all beings look at me with a friendly eye, may I do likewise, and may we look at each other with the eyes of a friend.

Yajurveda यजुर्वेद (36.18)

In Japan, one word, Kokoro (Japanese: 心) has come to signify Heart, Mind and Spirit. The word is difficult to translate. Using three distinct words implies division, while in Japanese the concept means the unity of the three aspects forming the substance of a human being. The word Kokoro originates in Shinto understanding that "kami no kokoro" (Japanese: 神の心), or heart of the deity forms a bond between humans and the spiritual world. With Buddhist influence, the concept of Kokoro evolved to become an ideal for a way of life. Cultivating one's Kokoro requires one to act with sincerity (Makoto; Japanese: 誠) towards others and the world and in harmony (Chowa; Japanese: 調和) with nature. This communion between all human beings and nature is the manifestation of the will of the deity and the tie that binds all together.

花の陰 赤の他人は なかりけり In the city fields Contemplating cherry trees Strangers are like friends

Japanese Haiku, Kobayashi Issa 小林 一茶 (1763 –1828)

Philanthropy (*philanthrôpía*; Greek: $\Phi \iota \lambda \alpha \nu \theta \rho \omega \pi(\alpha)$ is the love of humanity, a word that made its first appearance in the classical age of Greece. Although the word as used by Aristophanes, Plato, Xenophon and others had theological and philosophical meanings, over time the meaning of philanthropy evolved to include an innate affection towards human beings and the possession of certain social graces, such as courtesy, kindness, friendliness and gregariousness, combined with good deeds. The concept of philanthropy came to be associated with the Christian virtue of charity. In modern times, philanthropy denotes private initiatives for the public good as distinct from business (private initiative for the private good) and government (public initiative for the public good).

The affection of parents for offspring and of offspring for parents seems to be a natural instinct, not only in man but also in birds and in most animals, as also is friendship between members of the same species. This is especially strong in the human race, for which reason we praise those who love their fellow men (*philanthrô'pous* [$\varphi \iota \lambda d \nu \theta \rho \omega \pi \sigma \varsigma$] is used in the ancient Greek text). And in our travels we can observe that a natural affinity and friendship exists between humans universally.

(Aristotle, Nicomachean Ethics, Book 8, 1155a)

In South Africa, the tradition of Ubuntu emphasises the importance of connectedness, compassion, empathy, common humanity and humility, as the Zulu proverb, *Umuntu Ngumuntu Ngabantu* ("a person is a person because of others"),

implies. Ubuntu is a social philosophy that stresses the place of the human being within the community. It consists of a code of ethics embedded in African cultures that seeks to honour the dignity of each person while having the communal good at its heart. In Archbishop Desmond Tutu's words: "One of the sayings in our country is Ubuntu – the essence of being human. Ubuntu speaks particularly about the fact that you cannot exist as a human being in isolation. It speaks about our interconnectedness. We think of ourselves far too frequently as just individuals, separated from one another, whereas you are connected and what you do affects the whole world. When you do well, it spreads out; it is for the whole of humanity."

Your pain is my pain, My wealth is your wealth, Your salvation is my salvation.

60

Ubuntu saying

In Judaism and Islam, compassion is amongst the highest virtues. The word compassion shares the same root in both Arabic and Hebrew. Rachamim in Hebrew (בحمة) and Rahmah in Arabic (حمة) originate from the same word, meaning womb (Rehem; יכש, בחח; אוווי). The word implies sibling love or the bond between those born from the same womb. In both religious traditions, compassion is one of the divine attributes of God that should be reflected in the norms of human behaviour.

Echoing Aristotle, Moses Maimonides (ןומיימ ן ב השמ יבר), 1135-1204), the great Jewish scholar, discussed the existence of an emotion - compassion - most prominent in the relationship between parents and their offspring. In his words: "There is no difference between the pain of man and the pain of other living beings, since the love and tenderness of the mother for her young is not produced by reasoning, but by imagination, and this faculty exists not only in man but in most living things. As such, if the law provides that grief should not be caused to cattle or birds, how much more careful must we be that we should not cause grief to our fellowmen (The Guide for the Perplexed, ביכובנ הרומ 3:48)".

In Arabic, the term denotes the tenderness that stimulates an urge to show empathy towards others. It covers qualities such as love, benevolence, kindness and generosity. As such, "Rahmah", a divine attribute of the creator, is reflected in the ethical conduct of his creation. Ibn Arabi, a medieval Muslim scholar and poet, describes the relationship between God and human beings as an object reflected in a countless number of mirrors. God is the object and human beings are the mirrors. In this sense, the divine attributes are reflected and magnified infinitely by humanity.

	فَمَرعىَّ لِغِزلانٍ وَدَيرٌ لِرُهبانِ وَأَلواحُ تَوراةٍ وَمُصحَفُ قُرآنِ رَكائِبُهُ فَالحُبُّ دَيني وَإِيمانِي	لَقَد صارَ قَلبي قابِلاً كُلِّ صورَةٍ وَبَيتٌ لِأَوثانٍ وَكَعبَةُ طائِفٍ أَدينُ بِدَينِ الحُبَّ أَنِّي تَوَجَّهَت		
My heart can take on many forms:				
A meadow for gazelles,				
A cloister for monks,				
For the idols, sacred ground,				
Ka'ba for the circling pilgrim,				
The tables of the Torah,				
The scrolls of the Quran.				
My creed is Love;				
Wherever its caravan turns along the way,				
That is my belief and my faith.				
	Arabic poetry, Ibn Arabi محي الدين بن عربي (1165 – 1240)			

THE CORE COMPONENTS OF GLOBAL COMPETENCE: KNOWLEDGE, SKILLS, ATTITUDES AND VALUES

The four dimensions are underpinned by four inseparable components: knowledge, skills, attitudes and values. For example, examining a global issue such as climate change requires a good knowledge of that particular topic, the skill to transform this awareness into deeper understanding, the ability to reflect on this issue from multiple cultural perspectives and the willingness to take action for sustainability and collective well-being.

Effective education for living in an interconnected world helps students mobilise their knowledge, skills, attitudes and values while reflecting on and exchanging ideas on topics of global or local significance both in and outside of school, or while interacting with people from other cultures. This section provides a conceptual description of the knowledge areas, skills, attitudes and values students need to thrive in an interconnected world. This description is not exhaustive, as other perspectives on this area of education might emphasise certain elements more than others.

Knowledge about the world and other cultures

Knowledge about issues of global and local significance and about similarities, differences and relations between cultures helps young people to engage critically in everyday situations, challenge disinformation and stereotypes about other cultures and counter oversimplified views of the world.

Global issues are those that affect all individuals, regardless of their nation or social group. They include trade, poverty, human rights, geopolitics and the environment. Global issues reveal how different regions around the world are interconnected, as they shed light on the diversity and commonality of their experiences (Boix Mansilla and Jackson, 2011_[13]). For example, pollution in one place affects the ozone layer somewhere else, and floods in agricultural areas not only ruin the local environment and economy, but also affect markets worldwide and drive waves of migration. Global issues are, therefore, also local issues. They are global in their reach, but local communities experience them in different ways.

As global issues emerge when ecological and socio-economic interests cross borders, intercultural issues arise from the interaction of people from different cultural backgrounds. In this interaction, each party's ways of thinking, believing, feeling and acting are interpreted by the other. These interactions can be enjoyable and rewarding if differences between cultures are not too large, and/or if individuals are open to learning about and accepting those differences. But intercultural interactions can also be marked by miscommunication and misunderstanding. In the worst cases, misunderstandings can degenerate into negative stereotypes, discrimination and even violent conflict.

The ability to thrive in an interconnected world requires engaging with controversial issues. Schools can provide a space in which students can explore complex and controversial global or intercultural issues that they encounter through the media and in their own experiences.

The list of relevant global or intercultural issues that can be introduced to children and adolescents in school is long. There have been recent attempts to systematise these issues and their components into a coherent sequence of lessons and learning materials at all curriculum levels (OXFAM, 2015_[18]; Fernando M. Reimers, 2017_[19]). An effective curriculum addresses four knowledge domains: culture and intercultural relations; socio-economic development and interdependence; environmental sustainability; and global institutions, conflicts and human rights. When teaching these four domains, differences in opinions and perspectives should be highlighted, and facts and evidence should be scrutinised.

Culture and intercultural relations are related to the manifold expressions of languages, arts, knowledge, traditions and norms. Acquiring knowledge in this domain can help young people become more aware of their own cultural identity, help them understand differences and similarities among and within cultures and encourage them to value the importance of protecting cultural differences and diversity. As they learn about other cultures and individual differences, students start to recognise multiple, complex identities and avoid categorising people through single markers of identity (e.g. black, white, woman, poor). Students can acquire knowledge in this domain by reflecting on their own cultural identity and that of their peers, by analysing common stereotypes towards people in their community or by studying illustrative cases of conflict or successful integration between cultural groups.

The domain of **socio-economic development and interdependence** refers to the study of development patterns in different regions of the world, with a focus on the links between societies and economies. Students can analyse, at different levels of complexity, the many forms of globalisation, such as international migration, transnational production, global brands and technologies. By doing so, they can start to make sense of how local, national and global processes jointly shape the development of countries and the inequalities in opportunities available to individuals.

Students need a solid foundation in environmental issues to promote and support sustainability. For example, learning activities in the domain of **environmental sustainability** help them understand the complex systems and policies surrounding the demand for and use of natural resources.

The fourth knowledge domain focuses on **formal and informal institutions that support peaceful relationships** between people and the respect of fundamental human rights. Students can learn how international institutions, such as the United Nations, were established. They can reflect on the contested nature of global governance in a world with highly unbalanced power relationships and review the causes of and solutions for current and historical conflicts between countries, or ethnic or social groups. Acquiring deep knowledge in this domain is instrumental in helping young people to develop attitudes of tolerance and respect and values such as peace, non-discrimination, equality, justice and non-violence.

Skills to understand the world, communicate with others and take action

Skills are defined as the capacity to carry out a complex and well-organised pattern of thinking (in the case of a cognitive skill) or behaviour (in the case of a socio-emotional skill) in order to achieve a particular goal. Living in interconnected and multicultural societies requires numerous skills, including reasoning, communication in intercultural contexts, perspective taking, conflict resolution and adaptability.

Students who can **reason with information** from different sources (textbooks, peers, influential people, and traditional and digital media) can autonomously identify their information needs and select sources purposefully on the basis of their relevance and reliability. These students use a logical, systematic and sequential approach to examine information in a text or any other form of media, analysing connections and discrepancies. They can evaluate the worth, validity and reliability of any material on the basis of its internal consistency and its consistency with evidence and with their own knowledge and experience. Competent students question and reflect on an author's motives, purposes and points of view, the techniques used to attract attention, the use of image, sound and language to convey meaning and the range of different interpretations.

Students who are skilled in intercultural communication are able to **communicate effectively and respectfully** with people who are perceived to be from different cultural backgrounds. Effective communication requires being able to express oneself clearly, confidently and politely, even when expressing a fundamental disagreement. Respectful communication requires understanding the expectations and perspectives of diverse interlocutors and applying that understanding to meet the interlocutors' needs. Respectful communicators also check and clarify the meanings of words and phrases when they engage in an intercultural dialogue. Speaking more than one language is a clear asset for effective intercultural communication. Effective communication in intercultural contexts is also facilitated by active listening. This means not only listening to what is being said, but also how it is being said, through the use of voice and accompanying body language. Competent students are capable speakers who can use their body language and voice effectively when they discuss and debate global issues, express and justify a personal opinion or seek to persuade others to pursue a particular course of action.

Perspective taking refers to the cognitive and social skills individuals need to understand how other people think and feel. It is the capacity to identify and temporarily adopt a different point of view, "stepping into someone else's shoes". Perspective taking does not only involve imagining another person's point of view, it also entails understanding how various perspectives are related to one another. Understanding others' perspectives facilitates more mature and tolerant interpretations of differences among groups.

Students who can thrive in an interconnected world approach conflicts in a constructive manner, recognising that conflict is a process to be managed, not something to be denied or ignored. Taking an active part in **conflict management and resolution** requires listening and seeking common solutions. Possible ways to address conflict include: 1) analysing key issues, needs and interests (e.g. power, recognition of merit, division of work, equity); 2) identifying the origins of the conflict and the perspectives of those involved, recognising that the parties might differ in status or power; 3) identifying areas of agreement and disagreement; 4) reframing the conflict; 5) managing and regulating emotions (interpreting changes in one's own and others' underlying emotions and motivation and dealing with stress, anxiety and insecurity, both in oneself and in others); and 6) prioritising needs and goals, deciding on possible compromises and the circumstances under which to reach them (Rychen and Salganik, 2003_[20]). However, approaches to managing and resolving conflict may vary, depending on the societies involved.

Adaptability refers to the ability to adapt one's thinking and behaviours to the prevailing cultural environment or to novel situations and contexts that might present new demands or challenges. Individuals who acquire this skill are able to handle feelings of culture shock, such as frustration, stress and alienation in ambiguous situations in different environments. Adaptable learners can more easily develop long-term interpersonal relationships with people from other cultures and remain resilient in changing circumstances.

Attitudes of openness, respect for people from different cultural backgrounds and agency regarding global issues

The ability to thrive in multicultural settings is both composed of and propelled by key dispositions or attitudes. Attitudes refer to the mindset that an individual adopts towards a person, a group, an institution, an issue, a behaviour or a symbol. This mindset integrates beliefs, evaluations, feelings and tendencies to behave in a particular way. Living with others requires an attitude of **openness** towards people from other cultural backgrounds, an attitude of **respect** for cultural differences and **agency regarding global issues** (i.e. that one is a citizen of the world with commitments and obligations towards the planet and others, irrespective of their particular cultural or national background). Such attitudes can be fostered explicitly, through participatory and learner-centred teaching, and implicitly, through a curriculum characterised by fair practices and a welcoming school climate for all students.

Openness towards people from other cultural backgrounds involves sensitivity towards, curiosity about and willingness to engage with other people and other perspectives (Byram, $2008_{[21]}$; Council of Europe, $2016_{[10]}$). It requires a willingness to seek out and embrace opportunities to engage with people from other cultural backgrounds, to discover and learn about their perspectives and how they interpret familiar and unfamiliar phenomena, and to learn about their linguistic and behavioural conventions. Another important characteristic of open learners is their willingness to suspend their own cultural values, beliefs and judgement when interacting with others and not assume that their own values, beliefs and behaviours are the only correct ones. The attitude of openness towards cultural otherness needs to be distinguished from only being interested in collecting exotic experiences merely for one's own personal enjoyment or benefit. Rather, intercultural openness is demonstrated through a willingness to engage, co-operate and interact with those who are perceived to have cultural affiliations that differ from one's own, on an equal footing.

Respect consists of positive regard and esteem for someone or something based on the judgement that they have intrinsic worth. In this framework, respect assumes the dignity of all human beings and their inalienable right to choose their own affiliations, beliefs, opinions or practices. Being respectful of cultural differences does not require minimising or ignoring significant and profound differences that might exist between oneself and others, nor does it require agreeing with, adopting or converting to others' beliefs. Respect for others also has certain limits that are set by the principle of human dignity. For example, respect should not be accorded to the contents of beliefs and opinions or to lifestyles and practices that undermine or violate the dignity of others (Council of Europe, 2016_[10]).

The concept of respect should be distinguished from the concept of tolerance. Tolerance may, in some contexts, simply mean enduring difference. Respect is a less ambiguous and more positive concept. It is based on recognition of the dignity, rights and freedoms of the other in a relationship of equality.

Agency regarding global issues is defined as a worldview in which one sees oneself as connected to the world community and feels a sense of responsibility for its members. A person who exhibits agency regarding global issues has concerns for other people in other parts of the world, as well as feelings of moral responsibility to try to improve others' living conditions irrespective of distance and cultural differences (Boix Mansilla, $2016_{[11]}$). People who exhibit agency regarding global issues care about future generations and so act to preserve the environmental integrity of the planet. They exercise agency and voice with a critical awareness of the fact that other people may have a different vision of what humanity needs and are open to reflecting on and changing their vision as they learn about these different perspectives. Rather than believing that all differences can be eliminated, they strive to create space for different ways of living with dignity.

Valuing human dignity and diversity

Values go beyond attitudes and transcend specific objects or situations. They are more general beliefs about the desirable goals that individuals strive for in life, reflecting modes of conduct or states of being that an individual finds preferable to all other alternatives. In this way, values serve as standards and criteria that people use both consciously and unconsciously in their judgements. They have a normative prescriptive quality about what ought to be done or thought in different situations. Values therefore motivate certain behaviours and attitudes. For example, people for whom independence is an important value are alarmed if their independence is threatened, feel despair when they are helpless to protect it and are happy when they can enjoy it (Schwartz, 2012_[22]).

Valuing human dignity and cultural diversity helps people live together because both are critical filters through which individuals process information about other cultures and decide how to engage with others and the world. Individuals who cultivate these values become more aware of themselves and their surroundings and are strongly motivated to fight against exclusion, ignorance, violence, oppression and war.

Education has a deep influence on the values of individuals. During their time at school, young people form habits of mind, beliefs and principles that will stay with them throughout their lives. This is why it is crucial to reflect on the type of education that best "cultivates humanity" (Nussbaum, 1997_[23]). An education that encourages valuing dignity, human rights and diversity emphasises the commonalities that unite people around the world, rather than the issues that divide them.

Respecting human beings' core rights and dignity is, in most cases, compatible with respecting and valuing cultural diversity. Students should not only have a positive attitude towards cultural diversity, they should also value cultural diversity as an asset for societies and a desirable goal for the future. However, valuing cultural diversity has certain limits that are determined by the inviolability of human dignity (UNESCO, $2001_{[24]}$; UNESCO, $2006_{[25]}$). The possible tension between valuing cultural diversity and valuing human rights can be resolved by establishing a normative hierarchy between the two: in cases where the two values are in conflict with each other, valuing core human rights is more important than valuing cultural diversity.

Evaluating how much students care about the values of human dignity and cultural diversity is complex and calls for a broad repertoire of assessment strategies, ranging from interviews or conversations to observation of students in more and less structured situations. While assessing such values was beyond the scope of the PISA 2018 assessment of global competence, the discussion about values is intended to stimulate a productive debate on how education can shape the development of adolescents' ethical decision making.

THE PISA ASSESSMENT OF GLOBAL COMPETENCE

The PISA assessment strategy

Assessing global competence in all of its complexity requires a multi-method, multi-perspective approach. The PISA 2018 assessment of global competence went some way in this direction, although clear challenges and limitations remain. The biggest challenge for the PISA assessment is accounting for the large variety of geographic and cultural contexts represented in participating countries/economies in a single instrument. For example, students who perform well on a question assessing their reasoning about a global issue are likely to have some prior knowledge of the issue, and the types of knowledge about global issues that students have already acquired may be influenced by their experiences within their unique social context. On the one hand, cultural diversity in the tested population requires that the test material cannot be too biased towards a particular perspective (e.g. the perspective of a student in a developed country who thinks about a problem in a developing country). On the other hand, leaning too much towards cultural neutrality in the design of scenarios and questions reduces the authenticity and relevance of the tasks. Finally, the test units should focus on issues that are relevant for 15-year-old students in all countries/economies. The test design is further limited by the time constraints of the PISA assessment and the challenges in measuring the behavioural elements of global competence.

Accounting for these limitations and challenges, the PISA 2018 global competence assessment developed two instruments:

- a cognitive test focused on the cognitive aspects, including knowledge and cognitive skills of three dimensions of global competence: examining issues of local, global and cultural significance; understanding and appreciating the perspectives and worldviews of others; and taking action for collective well-being and sustainable development.
- a set of questionnaire items collecting self-reported information on students' awareness of global issues and cultures, skills (both cognitive and social) and attitudes, plus information from schools, teachers and parents on activities to promote global competence. The student questionnaire covered all four dimensions of global competence.

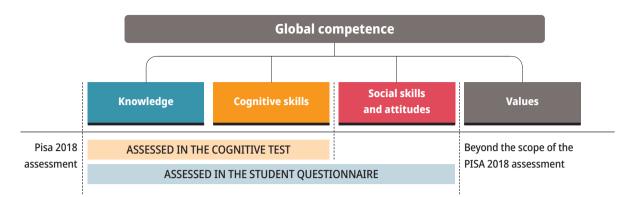
It is important to note that the cognitive test only covers the cognitive aspects of global competence. Those include knowledge and cognitive skills. Answers to the test items were used to create a unidimensional scale of those cognitive aspects (i.e. plausible values). However, the concept of global competence itself is multidimensional and includes cognitive aspects in addition to non-cognitive skills, attitudes and values.

Figure VI.1.2 (next page) shows the PISA assessment strategy and what the cognitive test and questionnaires covered.

The PISA global competence cognitive test

The global competence test was taken by 27 countries and economies and was fully integrated into the assessment design, together with the core domains of reading, mathematical and scientific literacy.¹ The global competence assessment consisted of 69 test items organised in 18 units and in 4 clusters.² Under the fully integrated design, all sampled students responded to 60 minutes of reading items, 41% responded to mathematics items, 41% responded to science items and 30% responded to global competence items.³ As such, all students did the reading test in addition to one or more other tests. Further information on the development of the global competence test is provided in Chapter 2 of the *PISA 2018 Technical Report* (OECD, forthcoming_[26]).





As discussed earlier, the global competence framework identifies four cognitive processes covering knowledge and skills associated with the four dimensions of global competence. They form the foundation of a student's ability to understand global and intercultural issues and situations. Only three of the four cognitive processes were assessed in the 2018 main survey. The cognitive process covering the third dimension of "engage in open, appropriate and effective communication across cultures" was not assessed, because assessing communication skills is difficult, if not impossible, using a written test.

The cognitive aspects of the first dimension of examining local, global and intercultural issues was tested using 37 test items covering cognitive sub-processes such as selecting sources, weighing sources' reliability and relevance, employing sources as a form of reasoning with evidence, and describing and explaining complex situations or problems. The cognitive aspects of the second dimension of understanding and appreciating the perspectives and worldviews of others was assessed using 18 test items covering cognitive sub-processes such as recognising perspectives and world views and identifying connections. The cognitive aspects of the fourth dimension of taking action for collective well-being and sustainable development was assessed using 14 test items covering cognitive sub-processes such as considering actions and assessing consequences and implications.

Each test unit in the assessment had a primary focus on a particular global or intercultural issue. Some units had a secondary focus. The framework specified four major knowledge domains that were deemed relevant to students regardless of their specific socio-cultural background. The scenarios were developed to cover one of those domains with the objective of achieving the widest coverage across the test units. The major knowledge domains were 1) culture and intercultural relations; 2) socio-economic development and interdependence; 3) environmental sustainability; and 4) institutions, conflicts and human rights.

The five released test units (i.e. published online on the PISA website) are labelled single story, refugee Olympians, ethical clothing, language policy and rising sea levels. They cover the cognitive processes associated with the three dimensions of global competence and five levels of proficiency. Single story deals with culture and intercultural relations, with a focus on cognitive skills such as perspective taking and the ability to identify stereotypes, discrimination and intolerance. Refugee Olympians focuses on institutions, conflicts, human rights and local traditions and on recognising perspectives. Ethical clothing covers policies, practices and behaviours for environmental sustainability, in addition to socio-economic development, economic interactions and interdependence, and considering actions and implications. Language policy focuses on culture and intercultural relations, recognising perspectives, stereotypes, discrimination and intolerance. Rising sea levels covers socio-economic development and economic interactions and interdependence, in addition to environmental sustainability, natural resources, environmental risks, reasoning with evidence and considering actions and implications. Table VI.1.1 presents the number of released test items for each of the five units by global competence dimension (relevant cognitive processes) and proficiency levels. The test units and items are presented in detail and discussed in Annex C.

Table VI.1.2 Number of test items per released unit

		Test units				
		Single story	Refugee Olympians	Language policy	Ethical clothing	Rising sea levels
Dimensions (relevant cognitive process)	Dimension 1	4	2	0	0	2
	Dimension 2	1	3	0	1	1
	Dimension 4	0	0	4	3	2
Proficiency levels	Level 1	1	0	0	0	1
	Level 2	2	1	1	1	0
	Level 3	0	2	1	1	1
	Level 4	0	1	2	2	1
	Level 5	2	1	0	0	2
Total		5	5	4	4	5

Note

- 1. Table 16 in Annex A2 provides a list of countries/economies that participated in the global competence test and in the different questionnaires (Table VI.A2.16).
- 2. The global competence item pool included 18 units with 86 test items in the field trial, from which 21 items were scored by people.
- 3. Under the fully integrated design, students could do multiple tests. In other words, a student might do the reading test in addition to mathematics and global competence, depending on how the tests were assigned.

References

Barrett, M. et al. (2014), Developing intercultural competence through education, Council of Europe, Strasbourg.	[12]
Boix Mansilla, V. (2016), "How to be a global thinker", Educational Leadership, Vol. 74/4, pp. 10 - 16.	[11]
Boix Mansilla, V. and A. Jackson (2011), Educating for Global Competence: Preparing Our Youth to Engage the World, Asia Society, New York.	[13]
British Council (2013), Culture at Work : The Value of Intercultural Skills in the Workplace, British Council, London.	[7]
Brubaker, R. and D. Laitin (1998), "Ethnic and Nationalist Violence", Annual Review of Sociology, Vol. 24/1, pp. 423-452, http://dx.doi.org/10.1146/annurev.soc.24.1.423.	[2]
Buckingham, D. (2007), "Digital Media Literacies: Rethinking Media Education in the Age of the Internet", Research in Comparative and International Education, Vol. 2/1, pp. 43-55, <u>http://dx.doi.org/10.2304/rcie.2007.2.1.43</u> .	[14]
Byram, M. (2008), From foreign language education to education for intercultural citizenship : essays and reflections, Multilingual Matters, Clevedon.	[21]
Council of Europe (2016), Competences for democratic culture: Living together as equals in culturally diverse democratic societies, Council of Europe, Strasbourg.	[10]
Deardorff, D. (2009), The SAGE Handbook of Intercultural Competence, Sage Publications, Thousand Oaks.	[28]
Delors, J. (1996), Learning: the treasure within, UNESCO, Paris.	[27]
Donnelly, J. (2007), "The Relative Universality of Human Rights", Human Rights Quarterly, Vol. 29/2, pp. 281-306.	[29]
Fennes, H. and K. Hapgood (1997), Intercultural Learning in the Classroom: Crossing Borders, Continuum International Publishing Group Ltd, New York.	[17]
Fernando M. Reimers (2017), Empowering Students to Improve the World in Sixty Lessons., CreateSpace Independent Publishing Platform.	[19]
Graf, J. and S. Aday (2008), "Selective Attention to Online Political Information", <i>Journal of Broadcasting & Electronic Media</i> , Vol. 52/1, pp. 86-100, <u>http://dx.doi.org/10.1080/08838150701820874</u> .	[8]
Hanvey, R. (1982), "An Attainable Global Perspective", Robert G. Hanvey, Vol. 21/3, pp. 162 - 167.	[16]
Ikeda, K. and J. Boase (2010), "Multiple Discussion Networks and Their Consequence for Political Participation", <i>Communication Research</i> , Vol. 38/5, pp. 660-683, <u>http://dx.doi.org/10.1177/0093650210395063</u> .	[30]
Kellner, D. and J. Share (2005), "Toward Critical Media Literacy: Core concepts, debates, organizations, and policy", Discourse: Studies in the Cultural Politics of Education, Vol. 26/3, pp. 369-386, http://dx.doi.org/10.1080/01596300500200169 .	[15]
Kymlicka, W. (1995), Multicultural citizenship : a liberal theory of minority rights, Clarendon Press, Oxford.	[3]
Nussbaum, M. (1997), Cultivating Humanity: A Classical Defense of Reform in Liberal Education, Harvard University Press, Cambridge, MA.	[23]
OECD (forthcoming), PISA 2018 Technical Report, OECD Publishing, Paris.	[26]
OECD (2019), PISA 2018 Assessment and Analytical Framework, PISA, OECD Publishing, Paris, https://dx.doi.org/10.1787/b25efab8-en.	[1]
OECD (2019), <i>PISA 2018 Results (Volume II): Where All Students Can Succeed</i> , PISA, OECD Publishing, Paris, https://dx.doi.org/10.1787/b5fd1b8f-en.	[4]
OXFAM (2015), <i>Education for Global Citizenship: A guide for schools</i> , OXFAM, New Zealand, http://globalcitizen.nctu.edu.tw/wp-content/uploads/2016/12/1Education-for-Global-Citizenship-A-Guide-for-Schools.pdf.	[18]
Rychen, D. and L. Salganik (2003), Key Competencies for a Successful Life and a Well-Functioning Society, Hogrefe & Huber, Boston.	[20]
Schwartz, S. (2012), "An Overview of the Schwartz Theory of Basic Values", Online Readings in Psychology and Culture, Vol. 2/1, http://dx.doi.org/10.9707/2307-0919.1116.	[22]
Tewksbury, D. and J. Riles (2015), "Polarization as a Function of Citizen Predispositions and Exposure to News on the Internet", Journal of Broadcasting & Electronic Media, Vol. 59/3, pp. 381-398, <u>http://dx.doi.org/10.1080/08838151.2015.1054996</u> .	[9]
UN General Assembly (1948), <i>Universal Declaration of Human Rights</i> , UN General Assembly, https://www.refworld.org/docid/3ae6b3712c.html.	[31]
UNESCO (2015), Global citizenship education: topics and learning objectives, UNESCO, Paris.	[6]
UNESCO (2014), Global Citizenship Education Preparing learners for the challenges of the 21st century, UNESCO, Paris.	[5]
UNESCO (2006), Guidelines on Intercultural Education, UNESCO, Paris, http://unesdoc.unesco.org/images/0014/001478/147878e.pdf.	[25]
UNESCO (2001), Universal Declaration of Cultural Diversity, UNESCO, Paris.	[24]



From: **PISA 2018 Results (Volume VI)** Are Students Ready to Thrive in an Interconnected World?

Access the complete publication at: https://doi.org/10.1787/d5f68679-en

Please cite this chapter as:

OECD (2020), "Learning to live together", in *PISA 2018 Results (Volume VI): Are Students Ready to Thrive in an Interconnected World?*, OECD Publishing, Paris.

DOI: https://doi.org/10.1787/d64c458c-en

This work is published under the responsibility of the Secretary-General of the OECD. The opinions expressed and arguments employed herein do not necessarily reflect the official views of OECD member countries.

This document, as well as any data and map included herein, are without prejudice to the status of or sovereignty over any territory, to the delimitation of international frontiers and boundaries and to the name of any territory, city or area. Extracts from publications may be subject to additional disclaimers, which are set out in the complete version of the publication, available at the link provided.

The use of this work, whether digital or print, is governed by the Terms and Conditions to be found at <u>http://www.oecd.org/termsandconditions</u>.

