

Teaching for Global Competence in a Rapidly Changing World



About Asia Society

Asia Society is the leading educational organization dedicated to promoting mutual understanding and strengthening partnerships among peoples, leaders, and institutions of Asia and the United States in a global context. Founded in 1956 by John D. Rockefeller 3rd, Asia Society today is a global institution—with offices throughout the United States and Asia—that fulfills its educational mandate through a wide range of cross-disciplinary programming. Across the fields of arts, business, culture, education, and policy, the Society provides insight, generates ideas, and promotes collaboration to address present challenges and create a shared future.

The Center for Global Education at Asia Society partners with education leaders and institutions from the US, Asia, and around the world to tackle one of the most critical education challenges today: how to educate all students for employability and citizenship in a global era. Our mission is to develop global competence in students and educators as the foundation for understanding between people in the Asia Pacific region and throughout the world. We accomplish this by working with educators, school districts, parents, and communities to ensure they have the tools and support they need to globalize learning and prepare young people for our global future.

www.AsiaSociety.org/Education
[@AsiaSocietyEDU](#) and [Facebook.com/AsiaSocietyEDU](#)

About OECD

The OECD is a unique forum where governments work together to address the economic, social and environmental challenges of globalization. The OECD is also at the forefront of efforts to understand and to help governments respond to new developments and concerns, such as corporate governance, the information economy and the challenges of an aging population. The Organisation provides a setting where governments can compare policy experiences, seek answers to common problems, identify good practice and work to coordinate domestic and international policies.

The OECD member countries are: Australia, Austria, Belgium, Canada, Chile, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Israel, Italy, Japan, Korea, Latvia, Luxembourg, Mexico, the Netherlands, New Zealand, Norway, Poland, Portugal, the Slovak Republic, Slovenia, Spain, Sweden, Switzerland, Turkey, the United Kingdom and the United States. The European Union takes part in the work of the OECD.

www.OECD.org/Education
[@OECDeduSkills](#)

Table of Contents

Preface and Acknowledgments	4
Executive Summary	5
Introduction	7
Why Teach for Global Competence?	10
What Is Global Competence?	12
1. Examine issues of local, global, and cultural significance	14
2. Understand and appreciate the perspectives and world views of others....	14
3. Engage in open, appropriate, and effective interactions across cultures	15
4. Take action for collective well-being and sustainable development.....	15
Assessing Students' Global Competence.....	17
Programme for International Student Assessment (PISA).....	17
The Cognitive Assessment.....	17
The Student Questionnaire	18
Classroom-Based Formative Assessment.....	18
Implications for Educators	20
Science	21
Mathematics.....	21
Literature and Language Arts	22
Social Studies and History	22
Visual and Performing Arts	22
Interdisciplinary Explorations	22
Teaching for Global Competence.....	23
Classroom Culture	23
Structured Debates.....	24
Organized Discussions	24
Learning from Current Events.....	24
Learning from Play	25
Project-Based Learning	25
Service Learning.....	27
Implementing Education for Global Competence at Scale.....	28
Teacher Leadership.....	28
Engaging the Whole School.....	28
School Leadership.....	31
System Leadership.....	32
Toronto, Ontario, Canada.....	32
Washington, District of Columbia, United States	33
Republic of Singapore.....	33
Putting It All Together	34
References.....	35

Preface and Acknowledgements

For some years, educators and education systems worldwide have been engaged in a reassessment of the knowledge, skills, and dispositions students need for success in today's rapidly changing and complex world. In a remarkable moment of global consensus, the member states of both the United Nations (UN), through its adoption of the Sustainable Development Goals (SDGs) in 2015, and the Organisation for Economic Co-operation and Development (OECD), through its Programme for International Student Assessment (PISA) in 2018, prioritized education for global citizenship and global competence.

In 2018, OECD launched a new assessment of global competence as part of PISA. PISA is a triennial international survey that aims to evaluate education systems worldwide by testing the skills and knowledge of 15-year-old students. The PISA 2018 assessment of global competence will report on how well students are prepared to live and succeed in today's global economy and multicultural societies. The data that results will help education systems identify what is working and what needs to be implemented more intentionally and systematically to ensure all students develop global competence.

Many countries around the world are already working to integrate global competence into primary and secondary education. However, without a broader understanding of how global competence is defined and how it can be taught and assessed, educators and education systems will be unable to provide global competence and global citizenship education at scale for all students, and unable to assess how well they are preparing their students for today's interconnected world.

In its development of the PISA global competence framework, OECD conducted a comprehensive review

of research and literature related to global competence, including the Center for Global Education at Asia Society's definition of global competence in primary and secondary education, described in *Educating for Global Competence: Preparing Our Youth to Engage the World* (2011) by Veronica Boix Mansilla of Harvard Project Zero and Anthony Jackson of the Center for Global Education.

This new publication sets forward the PISA framework for global competence developed by OECD, which aligns closely with the definition developed by the Center for Global Education. Based on the Center's extensive experience supporting educators in integrating global competence into their teaching, the publication also provides practical guidance and examples of how educators can embed global competence into their existing curriculum, instruction, and assessment.

We are grateful for the contributions of educators from around the world, who were recommended by multiple networks and organizations, many of which also contributed their expertise to the creation of this publication. They include the following: the Center for Global Education at Asia Society's International Studies Schools Network (ISSN) and Global Cities Education Network (GCEN), the OECD Education 2030 Informal Working Group and the OECD Japan Innovative Schools Network (ISN), the UNESCO Associated Schools Project Network (ASPnet), the Mahatma Gandhi Institute of Education for Peace and Sustainable Development (MGIEP), Asia-Pacific Centre of Education for International Understanding (APCEIU), the Varkey Foundation, the Center for Universal Education (CUE) at Brookings, the Learning Metrics Task Force Global Citizenship Education Working Group, British Council, Teach for All, International Baccalaureate Organization, Council of International Schools, AFS International, Aga Khan Foundation, Tony Blair Institute for Global Change, iEARN, World Savvy, Primary Source, High Resolves, and education departments and ministries around the world.

The primary authors of this paper are Richard Lee Colvin and Virginia Edwards. At the Center for Global Education, Alexis Menten directed the development and publication of this paper, in collaboration with Mario Piacentini at OECD.

We thank Citi Foundation for its support of the development, publication, and dissemination of this paper.



Anthony Jackson

Anthony Jackson
Vice President, Education
Director, Center for Global Education
Asia Society



Andreas Schleicher

Andreas Schleicher
Director, Directorate for Education and Skills
Special Advisor on Education Policy to the Secretary-General
Organisation for Economic Co-operation and Development

Executive Summary

Inexorable economic, cultural, technological, environmental, and political forces are affecting every society on earth and making nations and peoples more interdependent than ever before. Responding effectively to these forces, lessening their damage or harnessing them for good, will require creative multinational solutions to be negotiated and carried out by individuals who can and do participate simultaneously in local, national, and global civic life. Put simply, if individuals and their communities are to thrive in the future, schools must prepare today's students to be globally competent.

The Organisation for Economic Co-operation and Development (OECD) and the Center for Global Education at Asia Society have worked with academics, educators, and stakeholders in the global education field over several years to define global competence for primary and secondary education.

Both OECD and the Center for Global Education have identified four key aspects of global competence. Globally competent youth:

- (1) investigate the world beyond their immediate environment by examining issues of local, global, and cultural significance;
- (2) recognize, understand, and appreciate the perspectives and world views of others;
- (3) communicate ideas effectively with diverse audiences by engaging in open, appropriate, and effective interactions across cultures; and
- (4) take action for collective well-being and sustainable development both locally and globally.

The definition that undergirds a new assessment of students' global competence that will be part of OECD's 2018

Programme for International Student Assessment (PISA) is the following:

Global competence is the capacity to examine local, global, and intercultural issues; to understand and appreciate the perspectives and world views of others; to engage in open, appropriate, and effective interactions with people from different cultures; and to act for collective well-being and sustainable development.

PISA is a triennial international survey that aims to evaluate education systems worldwide by testing the skills and knowledge of 15-year-old students. In 2015, more than half a million students, representing 28 million 15-year-olds in 72 countries and economies, took the internationally agreed-upon two-hour test.

The purpose of the PISA 2018 assessment of global competence is to gather data on how well students are prepared to examine contemporary issues of local, global, and intercultural significance and live in multicultural societies. It also aims to identify what is working in global education in order to motivate educators to pursue global competence more intentionally and systematically.

This publication will explain the definition of global competence and its implications for education; describe the assessment and what it is designed to measure; and outline the teaching methods that are relevant to developing students' global competence, illustrated by a variety of examples from teachers who are preparing students to thrive in a rapidly changing world.

Global competence is multi-faceted and includes cognitive development, socioemotional skills, and civic learning. It has four overlapping dimensions that students will need to develop to interact successfully with people face-to-face as well as virtually in their communities and in other regions and nations. Skills in these dimensions are also needed to examine and work toward the resolution of issues with local and global significance.

The first dimension is the capacity to critically examine issues such as poverty, trade, migration, inequality, environmental justice, conflict, cultural differences, and stereotypes. The second is the capacity to understand and appreciate different perspectives and world views. The third dimension is the ability to interact positively with people of different national, social, ethnic, and religious backgrounds, as well as those of different genders. The fourth dimension builds on the first three and stresses being willing to act constructively to address issues of sustainability and well-being. Taken

together, these are the four aspects of a singular concept, which is global competence.

The 2018 PISA assessment of global competence contains two parts – a cognitive assessment and a student questionnaire. The cognitive assessment measures how well students can use their general knowledge and experience of global issues and cultural differences to understand specific cases presented in various scenarios. The student questionnaire is designed to elicit information about students' attitudes, knowledge, skills, and the opportunities they have had to learn about other cultures and global issues.

Nations, foundations, scholars, international organizations, and educators around the globe are already working to develop students' knowledge, skills, attitudes, and values that are the components of global competence. Global competence can be developed through discrete courses, such as those on poverty and its causes or the science of climate change. More commonly, however, educators integrate global education across the curriculum, using crosscutting themes that are explored in each of the subject areas or by transforming existing lessons to include global perspectives and address global issues.

Regardless of the subject in which it is embedded, or the instructional approach through which it is developed, global competence requires a culture that promotes student engagement and interaction, in which students believe they can express differing perspectives and discuss complex topics constructively with fellow students and their teacher.

Instructional approaches for global competence include the following:

- **Structured debates** in which teams of students defend opposing positions on global issues provide students an opportunity to delve deeply into a topic and also practice their communication skills.
- **Organized discussions** help students learn to express their perspectives, back up their opinions with evidence, listen for understanding, and be willing to change their minds when confronted with new information.
- **Current events discussions** allow students to find out what is happening around the globe and in their local communities, and how those events connect to what they are learning in the classroom.
- **Playing games** that require the players to follow rules and work as teams teaches students how to collaborate with others to find solutions.
- **Project-based learning** enables students to work in groups on an authentic project that professionals undertake in

the world beyond school, requiring students to plan, communicate respectfully, consider the perspectives of others, manage conflict, and be adaptable.

- **Service learning** involves students participating in, and reflecting upon, an organized activity to benefit their communities, in order to deepen their knowledge of a topic or perspective they have learned about in the classroom.

The fundamental changes required in education to develop young people who are globally competent are more likely to become integral to everything that schools do if global competence is an explicit priority of entire systems of education across a community, a state, a nation, or a region. Such changes will shape the design of the curriculum as well as the pedagogical approach.

“Fostering students’ global competence is an accessible, practical possibility that is not beyond the reach of the average teacher.”

Although the challenge is great, and the need increasingly urgent, developing global competence through education does not require a massive infusion of resources, nor does it call for heroic, extraordinary educators. There is, nevertheless, a significant opportunity for nations and economies seeking to prosper in today's interconnected world to invest in educators' professional development so that global competence becomes integral to the core of educational practice.

“Fostering students’ global competence is an accessible, practical possibility that is not beyond the reach of the average teacher,” says Anthony Jackson, who leads the Center for Global Education, “It is happening right now, around the world. However, in order to reach every student – and especially the most marginalized students, in every country – inspiring the creativity and developing the capacity of educators needs to be much more systematic.”

Introduction

It was during a required unit in the German curriculum on people who made a difference in the world that Mareike Hachemer, an English, German, and drama teacher in Wiesbaden, first integrated global competence into her teaching. Previously, she had taught that lesson in a traditional fashion: she would have her 15- and 16-year-old students read about notable individuals and their great achievements, discuss what they'd learned, write reports, and then go on to the next topic.

This time, she wanted her students to make a deeper, more personal connection with the ideas. She wanted them to understand that they, too, could have a positive effect on their school, their families, their community, and perhaps even the world, even though they were still students. Hachemer had her students learn about young people such as Melati and Isabel Wijsen, who were only 12 and 10 years old when they started a campaign to reduce the amount of garbage produced on the island of Bali by banning plastic bags. Melati and Isabel said they were inspired by the difference in the world made by figures such as Princess Diana with her campaign against land mines and Mahatma Gandhi leading a nonviolent fight for Indian independence. “We were learning about these significant people and we also wanted to be significant,” Isabel Wijsen says in her video talk, “Why should we wait until we’re adults to be significant? We want to do something now.”¹

Hachemer wanted the same thing for her students. “I wanted them to not just talk about it,” she says. “I wanted them to actually make a difference.”

But her students doubted that they could. Asked to identify serious world issues, her students’ responses were not surprising. War, poverty, hunger, refugees, climate change, and so on, they said. She then asked them if they thought they could do anything about these issues. No, her students said emphatically. The problems were just too monumental, not just for adolescents, but for anyone.

To change their minds, she had each student identify a local concern or problem and come up with a plan to address it. She helped the students set goals, define success, anticipate challenges, and determine how they would assemble the resources they needed. Among their projects: students volunteered in an animal shelter, had lunch with the homeless and listened to their stories, shared nutrition tips with kindergarten students, and coached children’s football.

Hachemer’s approach, while grounded in the local community, helped her students both to examine issues of local, global, or cultural significance and to take action for collective well-being and sustainable development locally and globally.

“Efficacy is the best thing we can teach our students,” Hachemer says. “If they know that if they do something, that they can change something, even if it is a small thing, the next time it will be something bigger.”

Since then, she has volunteered in an international, teacher-led, volunteer effort to help teachers incorporate into their lessons the United Nations’ 17 Sustainable Development Goals (SDGs) to make education universal, fight poverty, protect the environment, create gender equality, improve health care, and create prosperity for all by 2030. She has written widely about the SDGs, spoken at conferences all over the world about helping students gain global competence, and taught online classes for teachers.

“We want to show teachers that, for every unit, students can research and take relevant actions,” she says. “The more relevant learning is, the better it is. Why wouldn’t we want to teach them something that makes the world a better place?”



Educators and schools around the world are working in ways small and large, in isolation and in collaboration, to help students gain the knowledge, skills, attitudes, and values that are the components of global competence. Students in a biology class at a school in northern Virginia in the United States learn about the connectedness of the world by studying the Ebola virus outbreak in Western Africa and the availability of medical treatment in that region. Students from Hiroshima, Japan, which was devastated by the atomic bomb at the end of World War II, tour the memorial honoring men and women who died in the attack on Pearl Harbor to gain a new perspective on the war. Students at a high school in Bergen, Norway, use communications technology to interview a police officer in Chicago about shootings, people in South Africa about their experiences under apartheid, and older people in Russia regarding their perspective on the Cold War. Political science students in Jammu, India, learn about the global problem of people displaced by war, oppression, persecution, and famine by talking with refugees from Myanmar living in a nearby camp.

“The more relevant learning is, the better it is. Why wouldn’t we want to teach them something that makes the world a better place?”

The experience of the students in Jammu relates to the two other dimensions of global competence: recognizing, understanding, and appreciating the perspectives and world views of others and engaging in open, appropriate, and effective communication and interactions with people from different cultures and contexts.

“We need to take our students out and see these things, so they can acquire a real education beyond the four walls of the classroom,” says Mubeen Butt, the political science teacher in Jammu. “Let them face the big, bad world out there. Let them have these experiences. The knowledge they gain will remain with them for eternity... and will help them become global citizens in a very real sense.”

Educating for global competence is not a new idea, and many academics, educators, and others have been advocating for global competence to be more intentionally fostered through education for decades. In 2002, the 47-nation Council of Europe approved the *Maastricht Global Education Declaration*, a framework for global education designed to “open people’s eyes and minds to the realities of the world

and awaken them to bring about a world of greater justice, equity, and human rights for all.” The declaration states that global education includes “education for human rights, sustainability, peace and conflict prevention, interculturality, and citizenship.”²

More recently, the organizations producing this report have published works examining the need and dimensions of educating for global competence, including the Center for Global Education’s *Educating for Global Competence: Preparing Our Youth to Engage the World*³ and OECD’s *Preparing Our Youth for an Inclusive and Sustainable World: The OECD PISA Global Competence Framework*.⁴

As technology has made global communications even easier, and the interconnectedness of the world has grown, the urgent need for students to develop these skills has become widely recognized. In 2015, the 193 members of the UN General Assembly adopted the SDGs to mobilize governments, non-governmental organizations (NGOs), and individuals to work toward meeting shared targets for reducing poverty and improving the quality of life by 2030. Target 4.7 of SDG 4, which focuses on education, is a call for global competence: “By 2030, ensure that all learners acquire the knowledge and skills needed to promote sustainable development, including, among others, through education for sustainable development and sustainable lifestyles, human rights, gender equality, promotion of a culture of peace and nonviolence, global citizenship and appreciation of cultural diversity and of culture’s contribution to sustainable development.”⁵

Inspired by these declarations, many individual teachers, school networks, school systems, organizations, states, and whole nations are all working in different ways to help students take action to promote the Sustainable Development Goals. (See text box on following page.)

These efforts have become so widespread that the OECD is adding an assessment of global competence to its 2018 Programme for International Student Assessment (PISA). PISA is a triennial international survey that aims to evaluate education systems worldwide by testing the skills and knowledge of 15-year-old students. In 2015, more than half a million students, representing 28 million 15-year-olds in 72 countries and economies, took the internationally agreed-upon two-hour test.

The definition of global competence on which the assessment will be based is as follows:

Global competence is the capacity to examine local, global, and intercultural issues; to understand and appreciate the perspectives and world views of others; to engage in open, appropriate, and effective interactions with people from different cultures; and to act for collective well-being and sustainable development.

School Networks Focused on Developing Global Competence

The **Center for Global Education** has worked with urban education systems across North America and Asia serving an estimated 5 million students through its Global Cities Education Network (GCEN), and more than 50 schools across the United States as part of its International Studies Schools Network (ISSN). In those schools, global competence is composed of the knowledge, skills, and dispositions that a productive, involved citizenry uses to meet the problems and opportunities of the world. The Center for Global Education provides school development support and executive coaching for school leaders, as well as professional development for educators that enables them to integrate global competence across the curriculum at all ages.

More than 4,800 schools are part of the **International Baccalaureate** program, operating in countries around the world to help students “develop the intellectual, personal, emotional, and social skills needed to live, learn, and work in a rapidly globalizing world.”

The Associated Schools Network (ASPnet) of the **United Nations Educational, Scientific, and Cultural Organization (UNESCO)** supports more than 9,900 educational institutions in 180 countries that are using innovative approaches to help students confront complex social, economic, cultural, and environmental challenges that cannot be understood or solved locally but instead require a collaborative response across borders.

The purpose of the assessment is to gather data on how well students are prepared to examine contemporary issues of local, global, and intercultural significance and live in multicultural societies. It also aims to identify what is working in global education and motivate educators to pursue global competence more intentionally and systematically.

“The extent to which the vision outlined in the UN’s Sustainable Development Goals becomes a reality will depend on today’s classrooms; and it is educators who hold the key to ensuring that the SDGs become a real social contract with citizens,” says Andreas Schleicher, Director of the OECD Directorate on Education and Skills. “Goal 4, which commits to quality education for all, is intentionally not limited to foundation knowledge and skills such as literacy, mathematics and science, but places strong emphasis on learning to live together sustainably. But such goals are only meaningful if they become visible.”

This publication will explain the definition of global competence and its implications for education; describe the assessment and what it is designed to measure; and outline the teaching methods that are relevant to developing students’ global competence, illustrated by a variety of examples from teachers who are preparing students to thrive in a rapidly changing world.

This publication draws on work done by OECD, the Center for Global Education at Asia Society, UNESCO, the Council of Europe, Harvard Project Zero, and other leading organizations and scholars in the field. In addition, educators from around the world who are dedicated to developing their students’ global competence were interviewed about their practices and contributed to this publication.

It is important to note that helping students become globally competent does not require adding new subjects to the curriculum. Instead, says Veronica Boix Mansilla, principal investigator of Harvard University’s Project Zero and one of the experts who developed the PISA framework, teachers should see educating for global competence as extending what they are already teaching, regardless of the subject. It is a matter of teaching students to ask about whatever they are learning, “why does this matter to me, to my people and place, and to the world,” she says. “It’s about the habitual orientation toward connecting the local and the global.”

Although the challenge is great, and the need urgent, developing global competence through education does not require a massive infusion of resources nor does it call for heroic, extraordinary teachers. There is, nevertheless, a significant opportunity for nations and economies seeking to prosper in today’s interconnected world to invest in educators’ professional development so that global competence becomes integral to the core of educational practice.

“It’s about the habitual orientation toward connecting the local and the global.”

“Fostering students’ global competence is an accessible, practical possibility that is not beyond the reach of the average teacher,” says Anthony Jackson, who leads the Center for Global Education. “It is happening right now, around the world. However, in order to reach every student – and especially the most marginalized students, in every country – inspiring the creativity and developing the capacity of educators needs to be much more systematic.”

Why Teach for Global Competence?

Inexorable economic, cultural, technological, environmental, and political forces are affecting every society on earth and making nations and peoples more interdependent than ever before. Responding effectively to these forces, lessening their damage or harnessing them for good, will require creative multinational solutions to be negotiated and carried out by individuals who can and do participate simultaneously in local, national, and global civic life. Put simply, if individuals and their communities are to thrive in the future, schools must prepare today's students to be globally competent.

Global competence is necessary for employability in the global economy. When today's students enter the world of work, they will be working with the world itself. As the UN states, they will “work for international companies, be involved in international trade; collaborate with peers around the world on multinational ventures; tackle global problems (such as disasters, disease, and climate change); collaborate with employees from a variety of cultures; and compete with peers around the world for jobs and markets.”⁶

To be effective participants in this increasingly complex, diverse, and interdependent global economy, students will need to be highly literate and able to analyze situations and solve novel problems in creative ways. They will need to be knowledgeable about issues of global significance in areas such as engineering, business, science, history, politics, and the environment. Students also will need to be comfortable in unfamiliar settings and willing to learn from others.

Global competence is necessary for living cooperatively in multicultural communities. Today's students are growing up in communities that are becoming much more diverse due to unprecedented global migration. They are already studying side-by-side with children from multiple countries and regions, and they must be able to learn from people from other cultures who may speak other languages or hold values or worship in ways that are different from their own. They will need to be able to make sense of these differences and learn to see them as potential assets that can benefit entire communities, rather than as threats. They will also have to be able to reflect on their own world views and be aware of the dangers of xenophobia and religious extremism.

This does not mean that people should sacrifice their own identity, traditions, or history. Rather, it means that they should recognize that other cultures also have traditions and histories that shape their views of the world. They should be able to communicate in ways that anticipate how people of different backgrounds are likely to receive their words or images or ideas. They will need to listen for understanding, rather than for judgment. They should be able to find kinship despite differences, and be quick to see commonalities, and slow to find offense. All of these capabilities are essential for living successfully in communities as they become more diverse.

Global competence is necessary for young people to communicate and learn effectively and responsibly with old and new media. It is possible for anyone with a smartphone or Internet access to communicate instantly and inexpensively with anyone similarly equipped anywhere in the world. The opportunities for communicating are astonishing and should make it easier to learn from one another, establish shared understandings, and solve mutual problems. But it is clear that social media has also made it possible for people to shut themselves off from others who do not share their views, insulating them from moderating influences. The anonymity the Internet affords has reduced the potential risk or embarrassment of expressing extremist religious views, racism, and ethnic hatred. Those dynamics have also created a welcoming environment for hyper-partisan, biased, or “fake” news. At the same time that the means of communication are hastening the free flow of accurate information needed to solve global issues, they are also making it easier for people to embrace alternative realities. The only antidote is media literacy. Schools must help young people learn to differentiate

between propaganda and information that can be trusted. Young people also need to learn how to express themselves constructively, online as well as off.

Global competence is necessary for achieving the United Nations' Sustainable Development Goals. The purpose of the 17 SDGs is to unite the UN countries around a shared agenda focused on reducing poverty and increasing the quality of life in a sustainable way. Among them are goals having to do with climate change, economic inequality, innovation, peace, and justice. Education is crucial for reaching all of the SDGs. Educating for global competence can help engage a rising generation in managing and even solving the social,

political, economic, and environmental challenges outlined in the SDGs by 2030.

Preparing today's students to live and thrive in this increasingly interdependent world, characterized by international markets, unprecedented migration of peoples, growing economic inequalities, increasing ethnic and religious tensions and violence, and massive changes in the environment will require the transformation of education. Many schools and school systems around the world have not begun to institute the educational changes that will be required. But some teachers and schools are showing the way.

What Is Global Competence?

Various educators, scholars, governmental entities, and advocacy groups have put forward many definitions of global competence over the years. The definitions include concepts such as intercultural education, global citizenship education, twenty-first-century skills, deeper learning, and social and emotional learning.

Global competence is multi-faceted and includes cognitive development, socioemotional skills, and civic learning. It has four overlapping dimensions that students will need to interact successfully with people face-to-face as well as virtually in their communities and in other nations and regions of the world. Skills in these dimensions are also needed to examine and work toward the resolution of issues with local and global significance.

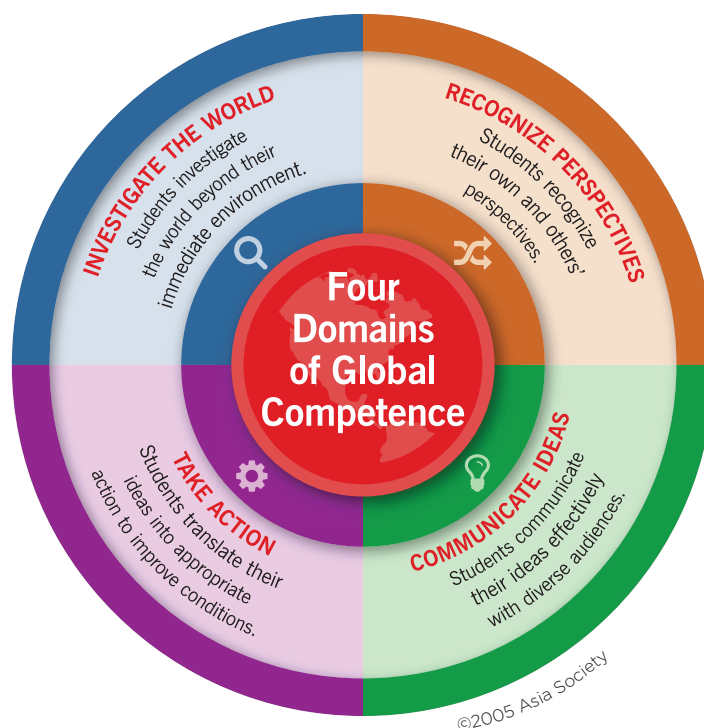
The first dimension is the capacity to critically examine issues such as poverty, trade, migration, inequality, environmental justice, conflict, cultural differences, and stereotypes. The second is the capacity to understand and appreciate different perspectives and world views. The third dimension is the ability to interact positively with people of different national, social, ethnic, and religious backgrounds, as well as those of different genders. The fourth dimension builds on the first three and stresses being willing to act constructively to address issues of sustainability and well-being. Taken together, these are the four aspects of a singular concept, which is global competence.

Globally competent students understand that the world is a system in which their actions, as well as the actions of nations, have consequences across the globe. They see the interconnectedness of humans with the landscape and environment; they understand why people settle and live where they do; they are attuned to their local economy and understand how it is affected by global economic forces; they see history as an ongoing story with many threads, rather than a series of unconnected events; they are aware of the big questions doctors, scientists, and policymakers are trying to answer and recognize the forces that impede or accelerate progress; and they are attuned to the differences as well as the similarities of cultures.

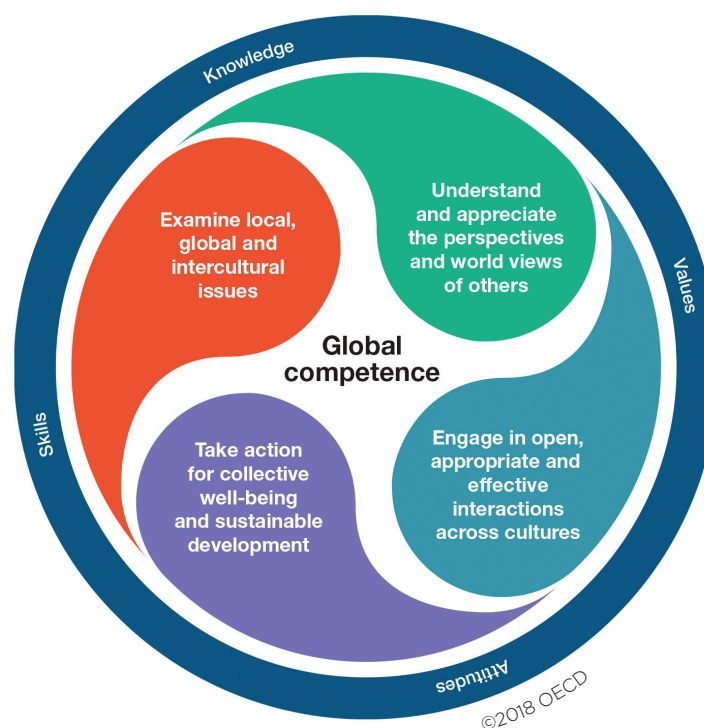
Both OECD and the Center for Global Education have identified four key aspects of global competence. Globally competent youth:

- (1) investigate the world beyond their immediate environment by examining issues of local, global, and cultural significance;
- (2) recognize, understand, and appreciate the perspectives and world views of others;
- (3) communicate ideas effectively with diverse audiences by engaging in open, appropriate, and effective interactions across cultures; and
- (4) take action for collective well-being and sustainable development both locally and globally.

Global competence is defined by the Center for Global Education at Asia Society as the combination of four domains (investigate the world, recognize perspectives, communicate ideas, and take action).



Global competence is defined in the PISA framework as the combination of four dimensions (examining issues, understanding perspectives, interacting, and acting), each of which necessitates a combination of knowledge, skills, attitudes, and values.



Educators who integrate the four aspects of global competence into the subjects they teach can help their students do the following:

1. Examine issues of local, global, and cultural significance.

Students should be able to use what they know to develop an informed opinion about issues such as poverty and economic opportunity, migration, inequality, environmental risks, conflicts, cultural differences and stereotypes, and others. They can use what they have learned from studying mathematics, literature, music, media and the visual arts, science, history, and so on to help them formulate questions, analyze data, evaluate arguments and counterarguments, and explain events and situations. They are also able to choose and communicate relevant evidence to back up their ideas. To be competent, students should be able to determine the trustworthiness of information, based on its source, and also to use a variety of new media to express their ideas.

Example: Exploring Local and Global Issues

At Eltham High School outside of Melbourne, Australia, students research a variety of issues; come up with solutions; discuss them with members of the community, university faculty, or representatives of the local or national government; and then, in some cases, after finishing their school assignment, continue working to make a difference on the issue.

“One of the drivers for this curriculum was that, the way it was taught previously, students got the content, but didn’t apply it,” teacher Loren Clarke says. “Now we do more real-world problem solving so they get a great sense of where they fit within the world.”

For a unit on controversial issues, students study nuclear power or stem cell research or how to tackle world hunger or the amount of money spent to prevent and treat AIDS. “They have to understand both sides of the issue and make an informed judgment about it,” Clarke says.

For example, for 20 years the Australian Transport Commission has been airing anti-drunk driving and anti-speeding videos that, in some cases, feature graphic images of automotive crashes, injuries, and deaths. Students at Eltham researched the effectiveness of those ads with 17- and 18-year-old peers and then shared their results with the Commission. In another project, a student researched recycling and its benefits and then worked to get the community more involved.

2. Understand and appreciate the perspectives and world views of others.

Students who are globally competent routinely consider global problems and the behavior of other people from multiple points of view. They are eager to learn about the history, values, communications styles, beliefs, and practices of other cultures and how they affect people’s world views. They understand how differences in power, wealth, and access to knowledge affect opportunities for individuals and social groups. They learn to recognize that their own views and behaviors are also influenced by their own experiences, their family’s history, and how they make sense of that history.

People who are globally competent ask questions before making assumptions about other people. They appreciate that people have a great deal in common, and that all people have needs and deserve basic human rights, enabling them to get past differences. This does not mean that when individuals recognize another’s culture and beliefs that they give up their own identity. But it does mean that they are less likely to embrace stereotypes and are more willing to interact with others as individuals, not solely as members of a group.

Example: Understanding Faith and Identity

Patrick Morse, an English teacher in Virginia in the United States, was teaching a 10th-grade world literature class. He wanted his students, most of whom identify as Christian, to gain a better understanding of the Islamic faith. He had taught them about the basic tenets of Islam, but he wanted them to appreciate the idea that “faith is faith, no matter the religion.” He also wanted them to understand that people’s faith is often tested by their experiences.

So he chose to have his students read the graphic memoir of an Iranian girl who grew up under the shah and lived through the 1979 revolution before leaving for Europe. She had left her family and gained her independence, but she was searching for her identity. Eventually, she returned to Iran, her spiritual homeland.

The name of the book is *Persepolis*, by Marjane Satrapi. Written in French, the book is widely taught in the United States but has also been controversial because of its portrayals of extremism and violence. The book is banned in Iran.

To put *Persepolis* in context, Morse had students research Iranian history, politics, culture, and Islam before and after the revolution and identify similarities and differences. They watched a documentary from inside Iran and they listened

to a podcast by an Iranian Christian. That helped them make sense of the main character's journey as she struggles to be a loyal daughter, a woman, an Iranian, and a Muslim. "Our essential question for the year was how does the journey lead to the discovery of identity," Morse says. "That was the overarching question of every text we read."

Morse wanted his students to understand the difference between how Muslims portray their religion and how non-Muslims portray it. He also wanted them to think about how non-Christians portray Christianity, and how that made his students feel.

It was a "big win to get Christian students to make a connection with Islamic characters and for them to see that faith is faith no matter the religion," Morse says.

3. Engage in open, appropriate, and effective interactions across cultures.

Globally competent students understand that people from different cultural backgrounds might interact in different ways. They also make an effort to adapt their behavior and style of communicating to the norms of the person with whom they are interacting. They are careful how they express their beliefs, state their needs, ask questions, attempt to change someone's mind, or handle a difference of opinion. They are sensitive to the needs and feelings of others, they are curious, and they are sincerely interested in others' ideas.

Example: Communicating Across Cultural Divides

Teachers can take several steps to create opportunities for students to learn from one another in regular lessons. They can create multicultural teams to work on projects, help students establish norms for how they work together, take note of and call out interactions that demonstrate global competence, and ask students to share what they learned about one another from the experience.

For example, two students from different cultures who work together on a school project demonstrate global competence as they get to know each other better, are receptive to each other's perspective, work through any misunderstandings, communicate their ideas and reactions clearly, and take away from the project and their work together insights that they then use in their subsequent interactions inside and outside of school.

Students in Terje Pedersen's English and social studies classes at Rothaugen skole in Bergen, Norway, routinely speak with people in other countries as part of their lessons. They first research an issue, formulate questions, and then engage in

discussions via computer with people from different cultures. For example, his students read in a local newspaper about the challenges girls in some parts of India face in getting an education. They researched the issue through newspaper accounts, videos, podcasts, and other materials they found online. Then, they discussed the issue with students at a girls-only school in India.

Since then, Pedersen has expanded his global network to include teachers from around the world who make their students available to speak with his students. They have also spoken with a police officer in Chicago; a politician from Brooklyn, New York; Russian grandparents who lived through the Cold War; and people who experienced apartheid in South Africa.

By talking to people around the world, Pedersen's students are learning how to be culturally sensitive, developing empathy and gaining multiple perspectives. "Students need to connect with others around the world," he says. "We need to be giving them the tools to understand different points of view. Plus, they love to debate their peers."

4. Take action for collective well-being and sustainable development.

Globally competent people are able to respond effectively and responsibly to a local, global, or cross-cultural issue or situation. Although students are young, they can create positive change and influence friends and adults in their community as well as people they communicate with digitally. Globally competent students are not afraid to stand up for others when their rights or dignity is threatened. They research issues and reflect on how they can help as individuals or by organizing others. They feel empowered and obligated to do what they can on behalf of others, whether it is raising funds to help out with relief from natural disasters or researching environmental problems in their own community and raising the awareness of local elected officials and business leaders.

Example: Examining the Effects of Corruption

Sandra Arredondo Rodriguez teaches a class called "Mexico and the Global Agenda" at a private secondary school outside of Mexico City. She wanted her students to learn from experience about the rule of law and what it means to be an active citizen in a democracy. She had introduced them to the UN's Sustainable Development Goals and helped them understand the concept of social justice. She also wanted them to realize that they could make a difference in their community. "We don't have to go to another country to understand poverty or issues having to do with social justice," she says. "We can see them in our closest communities."

As part of a unit to teach students how to evaluate a political, social, or economic challenge, and then come up with a solution, she had them work with their counterparts at another secondary school that primarily serves lower-income students in the region. Their project was to create and administer to the public a survey about their attitudes and experiences with corruption. They learned that about 75 percent of the people in both places had been victims of corruption but that many did not even recognize it, because it was so commonplace. The students also found that many of those who did realize corruption was wrong had done nothing about it, either because they felt powerless or they did not know how to effectively register a complaint or seek a resolution.

Her students then came up with a plan for how to reduce corruption and presented it to local elected officials. “They don’t usually get to have a voice, everything they learn is hypothetical, so when they’re actually doing things and their voices are heard, they feel what it’s like to make a difference, and they feel empowered,” Rodriguez says.

Reflecting on her students’ work to actively investigate the world around them, Rodriguez says, “This is what democracy is all about. Everyone being part of the community, and to be part of the community, you have to participate.”

As these examples demonstrate, global competence is not esoteric, and it is not something that is only necessary for elites whose personal and business travel takes them to other countries and continents. Everyone, those in the remote villages as well as those who live in urban megacities, is affected by the global climate, by international trade, by migration, and by international conflicts. Global competence is not something that is only useful after students leave school, visit other countries, and meet or work with people of different nationalities. As the examples illustrate, the four dimensions of global competence can be developed and practiced in any classroom and while teaching any subject. The teacher’s role is to create a classroom culture that makes these interactions routine, connects them to broader global issues and trends, and explicitly recognizes the skills students are learning and using.

Assessing Students' Global Competence

Programme for International Student Assessment (PISA)

In 2014, the PISA governing board assembled an interdisciplinary group of experts from countries around the world to consider an intriguing question: Would it be possible to use an international assessment to measure the global competence of 15-year-olds around the globe?

Given the importance of preparing students for the complexities and challenges of the world that awaits them after secondary school, the governing board decided, despite the challenges of the task, to commission the development of such a test. The 79 countries that participate in PISA collaborated in creating the assessment, which is designed to not only measure how well students are prepared to live in multicultural societies but also to identify what works in global education, and to accelerate progress toward the UN's Sustainable Development Goals.

The global competence assessment is part of the 2018 round of PISA, and it will report on how well schools, school systems, and nations are preparing young people to contribute to the development of peaceful, diverse communities. The assessment will provide data on how well countries are helping young people understand their communities and the world that lies beyond them, interact respectfully with others, and take action toward creating sustainable communities that help their residents thrive.

The global competence assessment is also valuable because it establishes for the world's educators that global competence is critical for creating equitable, prosperous, and conflict-free futures for students and their countries.

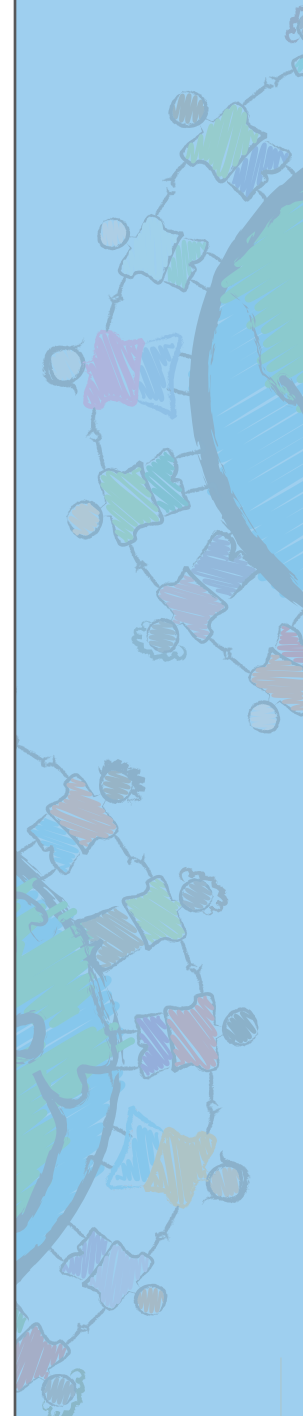
The assessment has two parts – a cognitive assessment and a student questionnaire. Teachers, school leaders, and parents will also be asked to complete a survey.

The Cognitive Assessment

The one-hour cognitive assessment is not a knowledge-based quiz: students will not be asked about the exact change in global temperature over the past 30 years or about the language spoken by a particular indigenous group. Rather, the goal is to assess how well students can use their general knowledge and experience of global issues and cultural differences to understand specific cases presented in various scenarios.

The scenarios were determined by experts and by representatives of nations around the globe to be meaningful, relevant, and accessible to 15-year-olds. Some scenarios simulate assignments a teacher might give in the classroom, such as a discussion of a new report that denies the existence of climate change. Another type of scenario presents students with situations they might experience that call on them to use the competencies they've developed. For example, a scenario might ask students to imagine that they have a classmate who has just emigrated from another country; their task would be to describe the difficulties the new student might be having. In general, the scenarios concern global issues and intercultural situations in which people might have different perspectives.

Scenarios will also present students with tasks that call on them to reason using information supplied, analyze conflicting perspectives, understand differences in communication, and evaluate actions and consequences. For example, students might be asked to select from several sources of information, the one that is most authoritative; evaluate whether a statement is valid and based on solid evidence; choose the best of several summaries of a text; identify parts of an article that



spread stereotypes or that make unfounded generalizations; or list the possible consequences of a proposed solution to a problem.

The Student Questionnaire

The second part of the assessment is a questionnaire that will elicit information about students' attitudes, knowledge, and skills. Students will be asked to report on their familiarity with global issues such as climate change, poverty, trade, and migration; on their sense of their own linguistic and communications skills; and on their attitudes regarding important characteristics such as their interest in other cultures, their adaptability, and their respect for people from other cultures. The questionnaire will also ask students about the opportunities they have in school to learn about other cultures and global issues. It will ask students whether they participate in events celebrating cultural diversity and their activities outside of school, such as volunteering, participating in campaigns, or practicing eco-friendly habits.

Additionally, the PISA 2018 assessment of global competence will survey teachers and school leaders to gain a more comprehensive understanding of the variation in learning opportunities in various countries. It will ask questions about how well countries are integrating global, international, and intercultural perspectives throughout the curriculum, into teacher-preparation programs, and as part of classroom activities. In addition to serving as a mirror in which countries can assess their own performance, the assessment will highlight best practices and help countries learn from one another.

Schools that wish to determine what their students know about the world and their responsibilities as members of a local as well as a global community could adapt the PISA approach of combining a cognitive assessment using scenarios with questionnaires for students and staff. However, PISA is an international, large-scale assessment and its primary objective is to understand where students are in their learning, and not to support students' learning. It is no substitute for formative assessments of global competence at the classroom and school levels.

Classroom-Based Formative Assessment

Darla Deardorff, who advised OECD on the framework for PISA and is the executive director of the Association of International Education Administrators at Duke University, in North Carolina in the United States, has worked with educators around the world on how to assess global competence and, she says, "no one size fits all; it is so context-dependent."

She does, however, have some general advice. First, she says, it's important to keep in mind that global competence is about much more than just being knowledgeable about the world, although that is also important. Second, global competence has multiple dimensions and, given that, no single measure is sufficient. In planning assessments, educators should be clear on just which dimension of global competence they are trying to measure. Third, formative assessments that provide teachers and students feedback about the process of acquiring global competence are more important than summative assessments. Also, the rubrics used in formative assessments should include more than just performance levels, such as low, medium, or high. They should describe in some detail the behaviors at each level.

Eltham High School near Melbourne, Australia, has spent four years developing assessments to measure twenty-first-century skills, including global competence, across the curriculum. The school has restructured its curriculum, making it more project based and interdisciplinary, and teachers and leaders wanted to find out if what they were doing was working.

"We thought our students were getting better at problem solving, critical thinking, and collaboration, but we didn't have the data," says Loren Clarke, the head of curriculum at the school. "We knew, anecdotally, that our students did a lot of group work, and we figured they did some problem solving and engaged in rich, complex problems, but we didn't really know."

To understand students' collaboration skills, the school sought out researchers at the University of Melbourne who were developing an online program that could monitor two students using different computers to work together to solve a problem. The program provides each student with different information about the problem; students use text-based messages to communicate with each other to put the pieces together and figure out a solution. The program tracks who makes the decisions, what options they try, how they arrive at a solution, and whether the solution is appropriate. Clarke says teachers use the information from the assessment to design activities that require problem solving and critical thinking; they also use it to decide how to group their students for projects.

The Center for Global Education provides professional development for educators internationally to advance global competence. Among the Center's teacher resources are a series of learning outcomes and rubrics for each of the four domains of global competence, integrated into six core disciplines (math, science, language, arts, social studies/history, and world languages) and benchmarked at key age levels across primary and secondary education. They also include "I can" statements that help students

better understand what they've learned and are able to do. "Teachers wanted statements that were student-friendly and easy for them to internalize so they could take responsibility for their learning and monitor their progress," says Neelam Chowdhary of the Center for Global Education.

The Center also provides overviews for educators of more than a dozen global issues related to the UN's Sustainable Development Goals. Each overview includes background information, essential questions, and enduring understandings, as well as examples of performance assessments for students at various age levels and in various subjects to develop and demonstrate their global competence across the four domains. These formative and summative assessments involve authentic demonstrations of what students have learned and how they have applied their knowledge and skills to address a global issue through projects, presentations, videos, artwork, and other work products shared with relevant public audiences outside the school.

Another source of ideas for how to assess student learning is "Measuring Global Citizenship Education: A Collection of Practices and Tools," which lists 49 global-citizenship assessment practices assembled by UNESCO, the UN, and the Center for Universal Education at the Brookings Institution in Washington, D.C.⁷ The assessments can be used to provide students with feedback on their learning and to provide teachers with information on the effectiveness of their teaching. As just one example, collaboration skills can be measured by observing groups of students in action and assigning scores based on clearly defined rubrics. Teachers can monitor how a group plans its work, assigns roles, and supports its members as they work on the project.

Teachers are also using more traditional types of classroom assessments to determine whether students have absorbed key concepts and ideas related to global competence.

Patrick Morse, the teacher from Virginia whose students read *Persepolis*, says his students' final papers for the year showed him that they understood the nature of identity and how it is formed. "They really could relate what they'd learned about faith, about how a person could become independent of their family but still be part of the family, and about the challenges to faith, no matter what the religion," he says.

Mubeen Butt, the teacher whose students visited the refugee camp near their school, had her students write a paper on the global issue of displaced peoples and on what it means to be a global citizen. She was pleased with what they produced and what they had learned.

"Part of my aim had been achieved; they understood the refugee crisis and the global dimensions of it, and, now, they can draw a line between being a refugee and how it's different from being a migrant," she says.

Sandra Arredondo Rodriguez, the Mexico City-area teacher whose students conducted a survey on corruption, had her students reflect afterward on their own perspective on the issue and how they had come to think that way. She also had them think about the process their team used to carry out the project, how they developed their goals, what they learned about working with students from a different socioeconomic background, and whether they were motivated to work on community or global issues in the future.

Implications for Educators

Global education is often thought of as a set of topics to be added to social studies and foreign language classes in the upper grade levels. Global competence as defined in this publication, however, goes far beyond knowledge to include skills, attitudes, and values. Some schools offer discrete courses that focus on topics of global importance, such as poverty and its causes; or on human rights; or, even, the science of climate change.

More commonly, however, educators work to integrate a global perspective into the existing curriculum, sometimes by creating crosscutting themes that are then explored from the perspective of each subject area. However, any teacher in any subject or grade can take steps to globalize the curriculum.

Teachers may already be teaching elements of global competence and not even be aware of it. Hye-Won Lee, a global education researcher with the Korean Institute for Curriculum and Evaluation in Seoul, who was part of the group of experts who developed the PISA framework, is studying how teachers in a dozen schools in six countries are helping their students become globally competent. She says many teachers are concerned that global competence will be just one more thing they have to teach. When she talks to teachers in her own country, she tells them that the tenets of global competence can already be found in the Korean national curriculum that they teach every day. The same is true in many other countries and school systems where a national curriculum does not exist. “Teachers may not even recognize that they’re already teaching global competence so we have to help them realize that,” she says.

Teaching for global competence does not make the disciplines or subjects traditionally taught in school any less important. To be globally competent, students need to write and speak cogently and purposefully, be scientifically and mathematically literate, understand history, appreciate the arts, and be able to use technology. Adding a global perspective to the disciplines may even engage students more deeply in their learning and result in better outcomes overall.

For globally competent students, however, disciplinary knowledge and skills are not simply what one learns in school with little purpose beyond that. Instead, they are tools for interpreting the world; explaining phenomenon; solving problems; asking informed questions that get at fundamental truths that may not be obvious; and making the world a better, more peaceful, more productive, and more equal place.⁸

Every educator and school differs in terms of their interest in and capacity for preparing students to be globally competent. For those unfamiliar with the concept of global competence, getting started can be as simple as raising awareness about global issues. For example, teachers can inform students about the 17 Sustainable Development Goals by hanging up a poster and explaining what they are and why 193 countries have agreed to pursue them.

Another strategy is to substitute an example, a reading assignment, a significant person from history, or even a set of statistics in a mathematics class in the traditional curriculum with one from another country, culture, or context.

However, educators who are more comfortable and skilled in teaching to develop global competence will redesign their lessons to advance academic outcomes at the same time.

Fernando Reimers, a Harvard University professor and a well-known expert in the field, says that no matter what approach teachers take, they should keep in mind that helping students become globally competent is “serious and rigorous work,” not just a nice thing to do. “We’re not going to educate global citizens by organizing a food festival in a school once a year in which we celebrate the heritage of all students,” Reimers says. “That’s nice, but it’s not the way we teach physics or trigonometry or literature or history.”

In thinking about how to globalize their lessons, teachers need to work through the questions they would have for any other type of lesson:

- What topics and skills are the most important to teach for preparing students to live in the complex, interdependent world they will enter after school or college?
- What exactly will a student take away from a unit, project, visit, or course?
- What will students do to learn the intended knowledge or skill?
- How will we know they are making progress?

The following examples outline ways the various disciplines can be used to further global competence.

Science

Many topics of global significance, such as global warming, ocean pollution, or the transmission of viruses, fit easily into the science curriculum.

When Kathy Bosiak, who chairs the science department at Lincolnton High School in the state of North Carolina in the United States, teaches a unit on the pros and cons of alternatives to fossil fuels, she has her students research where it would make the most sense to locate windmills or solar panels in the United States and around the globe.

She also uses a digital platform called iEARN to internationalize her lessons. iEARN is a nonprofit organization made up of more than 30,000 schools and youth organizations in more than 140 countries. iEARN empowers teachers and young people to work together online using the Internet and other new communications technologies. More than 2 million students each day are engaged in collaborative project work worldwide.

Bosiak designed an activity in which students compete to create the best solar oven, using everyday household materials, and then share their ideas with peers in other countries who have done the same. The students learn about cross-cultural communications, and about appreciating the perspectives of others, in the context of discussing the pros and cons of their designs.

“People are so under the gun with the pressures of tests that they sometimes don’t stop to think how really easy it is to embed globalization into their lessons,” Bosiak says. “New teachers often think they have to do everything at once, and you don’t.”

Mathematics

Mathematics is a global language, in the sense that mathematicians the world over share common understandings. But students can also learn mathematics by using real data concerning significant global issues such as population growth, economic development, health outcomes, and climate change.

Statistics can analyze global data on the distribution of wealth around the world, patterns of international trade, the relationship between women’s education levels and family incomes in different countries, or the correlation between tobacco consumption and life expectancy around the globe. In the early grades, data can be graphed or used to help students recognize patterns. Older students can analyze data using regression, correlation, and extrapolation.

Rachel Fruin, a high school math teacher in Naperville, Illinois, in the United States uses newspaper stories as the starting point for brief math-informed discussions of social justice issues in her algebra classes. An article about the sudden spike in the price of EpiPens that are used to reverse the effects of a severe allergic reaction inspired one such discussion. She showed her students a graph indicating that the price of EpiPens had changed little over several years in the early to mid-2000s and asked them to use that information to predict the price today. She next showed them a graph of the recent skyrocketing price of the devices. To start the discussion, she asked her students whether they thought the drug’s maker should be allowed to charge whatever price it wanted.

A graph that compared changes over time in the homicide rate: New York City, which has remained low, and in Chicago, which has risen rapidly, occasioned another discussion. Students were asked to choose an interval of the lines graphed for the two cities and discuss the story the different rates of change illustrated. In another example, Fruin had students study the statistics behind the water quality tests on the lead-tainted water in Flint, Michigan, and, in another, had her students discuss the mathematics of changes in life expectancy in Rwanda.

She says her students love the problems and frequently ask her to come up with more of them. She doesn’t go in search of a social justice problem to illustrate a math concept. Instead, she starts with an issue raised by a news story and then incorporates math into it. The math topics she has covered with this approach include linear and exponential functions, understanding domain, rate of change, comparing data sets, statistics, systems of linear equations, area, piecewise functions, and trigonometric functions. As a final step, she poses a question to her students for discussion. “If students don’t practice using math to understand the complicated

issues we experience around the world now,” she says, “how will they know how to do this in the future?”

Literature and Language Arts

Choosing works of literature written in other countries and translated from other languages is an obvious way for students to learn about life, traditions, tensions, history, and sources of happiness the world over. It helps students learn to appreciate others’ perspectives and circumstances. Teachers can choose literature that is about young people the same age as their students. Adolescents who are developing their own sense of identity can read coming-of-age novels from other cultures and see that what they are experiencing is universal.⁹

Linking literature to other curricular areas can deepen students’ understanding of culture and history. Students at Summit Middle Charter School in Boulder, Colorado in the United States, read Zen Buddhist monks’ poetry and, in world history, study the monks’ history.¹⁰

To be globally competent, students need to be able to express their ideas to a variety of audiences, making it important that they are able to write clearly and persuasively. Language arts students should learn to write in a variety of formats, such as essays, narratives, and arguments. Teachers often have latitude in choosing the topics for their students to write about. They could, for example, have students write an argument in favor of global trade, an essay on what it is like to be an immigrant, or a narrative describing the challenges families face just to get clean water.

Social Studies and History

Social studies and history provide many opportunities to learn about topics of global significance. Economics offers a way to analyze the growth of world trade. Geography does not have to be taught as maps, mountains, rivers, agriculture, and manufacturing. It can be a way to understand how terrain, rivers, and climate influence culture. Comparative history will help students see their own country’s history in the context of events unfolding at the same time in other parts of the world. Students learning about revolutions can compare the Russian Revolution of 1917 with the French Revolution of 1789 and the Arab Spring of 2011. World history can be taught thematically, for example, by tracing the interaction between humans and the environment; development and interaction of cultures; state building, expansion, and conflict; economic systems; and social structures. Themes such as these will help students better understand how the world works and make them better able to propose solutions.

Visual and Performing Arts

As with literature, traditional and contemporary art, music, dance, and theater can easily include examples from every culture and continent. Rhythm can be taught by studying the music of Beethoven, Youssou N’Dour, Duke Ellington, or many others. Visual art can be taught by examining perspective and color in Renaissance paintings or landscape paintings from China. Students will learn that esthetics are both cultural and universal and that regardless of their medium, artists from different parts of the world explore themes of kinship, loss, love, gender, and power.

As just one example, ninth-grade students at St. George School in Buenos Aires, Argentina, became concerned about how globalization is causing traditional pre-Columbian rhythms, cultures, and artifacts from the Andes region to disappear. That motivated them to study Andean music, art, and culture. After thinking about how they could keep these traditions alive, they decided to make Andean flutes out of recycled paper and decorate them with adaptations of Andean art motifs. They also taught migrant children how to produce, decorate, and play the flutes so that the traditional music would be passed on.

Interdisciplinary Explorations

Topics of global significance also lend themselves well to interdisciplinary approaches. The Atheneum Koekelberg school in Brussels, Belgium, which serves the nearby Molenbeek neighborhood, a mostly Muslim, working-class area that has been labeled a recruiting ground for terrorists and was the scene of a deadly bombing in 2016, is teaching the UN’s Sustainable Development Goals by having each grade focus on a single issue. All 12-year-olds study some aspect of human rights in every class throughout the year. At the end of the school year, they facilitate workshops and give presentations on what they’ve learned.

Thirteen-year-olds study ways to improve the environment; 14-year-olds look at the causes of poverty, such as divorce, and study economics; 15-year-olds study heritage and how to preserve it; and 16-year-olds learn about war, terrorism, and peace building.

“We want the teachers and youngsters to participate in all projects with an open mind, respectfully and critically, looking beyond the existing prejudices in our community,” says Monique Sevrin, the coordinator for global education at the school, which is a UNESCO ASPnet school that, like all schools in that network, is dedicated to promoting peace.

Teaching for Global Competence

To gain global competence, students need to be actively engaged in their learning and have the time and opportunity to reflect. They need to cultivate their curiosity and ability to think critically. They must be able to take what they learn and use it to conceptualize possible solutions to complex problems. They have to be confident in expressing their ideas, but also willing to consider the ideas of others. They need to learn to collaborate with peers from different backgrounds and different nations.

To gain these skills, students need to practice them in the classroom and apply them to real-world topics. Reading textbooks, listening to lectures, and memorizing correct answers to factual questions have their place in students' learning, but they must be paired with more active, engaging pedagogy to develop global competence.

Hye-Won Lee, the Korean educator who is studying how countries are implementing global competence education, says teaching must be “more interactive, more democratic, more problem based, more focused on research and inquiry, more student centered.” Of course, some didactic teaching is necessary. But, for students to become truly globally competent, they need to have a lot of say in their own learning.

Veronica Boix Mansilla of Harvard University says teachers must “weave opportunities to inquire about the world, take multiple perspectives, engage in respectful dialogue, and take responsible action as a routine and integral part of everyday life in the classroom.”¹¹

She says teachers should employ new pedagogies in order to make sure students really understand what they are learning, and not just be able to restate it on demand. “When you have understanding as an important part of your agenda, you design instruction in very deliberate ways,” she says.

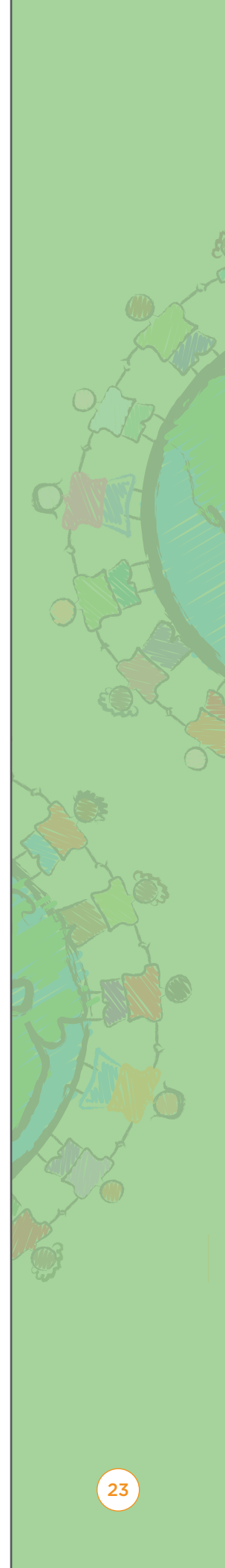
Classroom Culture

To foster global competence, teachers need to create classroom cultures in which students feel safe to express their opinions, safe to speculate, and safe to disagree with their fellow students or even their teacher, without being discourteous.

Mieke Van Ingelghem and Dima Bou Mosleh, teacher-educators at University College Leuven-Limburg in Belgium, seek to train teachers to empower learners, enabling them to question and critique what they see in the world. The teacher acts as a facilitator, challenging students to alter their world views. “Never stop when a student has given the ‘right’ answer,” Van Ingelghem says. “Always ask if there is another perspective, another point of view, another explanation, another way to solve a problem, to stimulate critical thinking.”

The Innovative Schools Network supported by OECD in Japan is also trying to encourage students to speak up more and to help teachers get comfortable with them doing so. Hideo Yamada, the director of global education at one of the network schools, the Kaetsu Ariake Junior & Senior High School, wants students to feel that they can “communicate their ideas directly to others, without hesitation, and without hurting anyone.” Instead of being the authority on every topic, the teachers are learning to be “learners just like their students,” he says.

Yamada says the Japanese government is encouraging the changes as part of a larger, national effort to help students become global citizens. Traditionally, he says, Japanese people have not felt a need to engage with people outside their country. Now, however, because of the globalization of the economy and other ways in which nations are becoming more connected, Japan wants its students to become critical thinkers and better able to interact with people from different cultures.



The classroom culture also should signal the values that are consistent with global competence. Teachers should help students establish norms and routines that stress the importance of respect for one another and also should model that in their interactions with students. Teachers can influence students' perceptions of one another by whom they call upon, whom they bestow with responsibility for classroom duties, how they create teams for projects, and how they design a seating plan. They can search out multiethnic and multicultural examples to illustrate concepts and principles in the curriculum, emphasizing the contributions of people from different countries and different heritages. Teachers can also tap the cultural heritage of parents, including immigrant parents, to bring a rich diversity to classrooms.

Another important way to cultivate a value such as equality is to foster discussions of human rights, human dignity, cultural diversity, and discrimination. This is as difficult for teachers as it is for most people. Consequently, teachers may find it easier to only give a nod to diversity by teaching about ethnic customs, cuisines, dress, or celebrations and neglect more challenging issues such as inequities, injustices, and oppression.

Many of the instructional approaches described here will be familiar to teachers and can be applied to developing their students' global competence. Regardless of the instructional approach, targeted professional learning opportunities that support educating for global competence are important for teachers throughout their careers.

Structured Debates

Structured debates are a specific format of class discussion often used in secondary and higher education as a way to raise students' awareness of global issues and provide multiple perspectives on those issues while helping them practice their communication and argumentation skills. Students form two teams, one supporting a statement and the other opposing it. They might debate, for example, the assertion that "global trade benefits everyone" or that "poverty is inevitable."

Organized Discussions

Darla Deardorff of Duke University has been researching a protocol for promoting cross-cultural understanding that could be easily adapted for use in any classroom. She has tried it in a number of settings including in Harare, Zimbabwe.

The teacher divides the class into circles of five or six students. The teacher or facilitator then asks each one in the circle to say his or her name and then a few biographical facts, by way of introduction. Then, each student takes three minutes or less to tell the story of when he or she first became aware

of differences among people based on skin color, dress, language, religion, or any other distinguishing characteristic. The other students do not interrupt or comment and then the next student takes a turn. After each student has told his or her story, each one, in turn, takes about 15 seconds to say what he or she found most memorable from the stories. Next, the teacher asks a series of probing questions: What themes did the stories have in common? What surprised us? What have we learned?

Afterward, the groups come together and the whole class debriefs. Finally, the students are asked to write a reflection on how their views of others have changed and how this will affect how they interact. Deardorff says that as she has used this process with students in various parts of the world, she has seen them undergo profound changes in their views of their fellow students after just a single story circle session.

Organized discussions allow students to voice their differences, biases, and cultural beliefs. Typically, a teacher will start such a discussion with a thought-provoking video clip or a controversial image or text to stimulate the discussion. Teachers can establish ahead of time that during the discussion, students need to cite evidence to support their point of view, and that students should listen to understand and avoid judging or making personal comments. By exchanging views in the classroom, students learn that there isn't always one right answer, and they can come to understand why others hold views different from their own, and also how to be open to changing their minds.

Although the students should be free to ask questions and state their views, the teacher can guide the discussion to ensure that learning objectives are being met. For example, if the point of the discussion is to strengthen students' capacity for intercultural competence, the teacher can ask leading questions such as what causes people to fail to communicate effectively, and encourage students to consider why cultural diversity may cause tensions and misunderstandings.

Learning from Current Events

Another common technique for globalizing learning is discussing news events occurring around the globe and connecting them to classroom subjects.

Tatiana Popa, an English teacher at the largest and oldest high school in Moldova in Eastern Europe, wants to create authentic situations for her students to practice speaking English by having them work on projects with English-speaking students in other countries. Often, the focus of these conversations is current news events.

For example, because the local dump had to be closed, Chisinau, the capital of Moldova and the city where Popa

teaches, has a garbage problem. As part of an international project she created on the issue, Popa has her students talk with students in other countries about possible solutions.

“I want my students to know that their classroom, their school, and their community are all connected with the world and that they are citizens of the world.”

“I want my students to know that their classroom, their school, and their community are all connected with the world and that they are citizens of the world,” she says, “and citizens of the world try to make it a better place to live in.”

Current events are also a topic of daily conversation at the Atheneum Koekelberg school in Brussels, Belgium. “We tell the teachers to start every day by discussing something in the news, trying to combine it with what they’re teaching that day,” Monique Sevrin, the global education coordinator there says. “We have to make school relevant to students by expressing these everyday realities.”

Learning from Play

Hanan al Hroub, a teacher at Samiha Khaleel school in Al-Bireh in the West Bank, helps her students deal with the day-to-day reality of religious and political tensions by having them play games that require them to follow rules. She teaches 7-year-old Palestinian children who live in refugee camps, which are often violent places; that violence used to frequently spill over into the school. “They are afraid and angry, and they don’t trust adults, and [so they] use violence to try to protect themselves,” al Hroub says of her pupils, through a translator.

Al Hroub, too, grew up in refugee camps in the West Bank, and she often witnessed violence and felt despair. She was fortunate, though, to attend a school that challenged her intellectually, and, through its well-stocked library, she learned about the world beyond the camp. Her experiences motivated her to become a teacher so she could help others.

She does that by teaching her children to play games. “These are collective games, and the students have to learn how to find solutions,” she says. “They learn about one another; they learn about themselves; they learn how to be a member of a team and how to trust one another. They love to play,

and they learn that they have to change their bad behavior if they want to be part of the group.”

Al Hroub continues: “There is joy in the games, and that is why the students come to school. They move, they participate, they take initiative, they fix things, and they express themselves without feeling afraid. The most important thing is that the students relieve their anger through these games so they can dance, draw, sing, and read and feel the freedom of the classroom and express their thoughts and feelings without fear.”

Her larger hope is that her students learn how to live productively in a world that, for them, is often unforgiving. “We influence the world, and the world influences us,” al Hroub tells her students. “We have to live in this world despite all the difficulties. It’s important that the students all have a role to play in their own futures.”

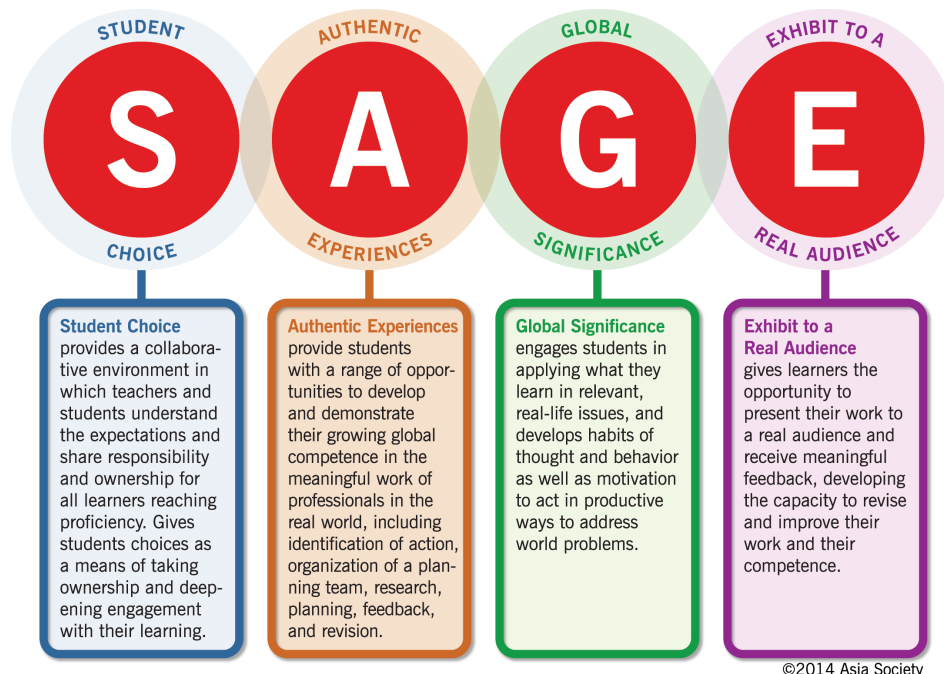
Fighting in her school is much less frequent now, and al Hroub attributes it to her work as well as to the efforts of other teachers who are changing how they teach and manage their classrooms. As the winner of the 2016 Global Teacher Prize from the Varkey Foundation, al Hroub has also influenced teachers in other schools. “I always say that I have to build hope inside my students, that tomorrow will be much better, and that, through education, they can bring about change,” she says.

Project-Based Learning

Project-based learning is an important pedagogical tool for developing global competence. It can be adapted for various grade levels, ages, topics, and themes. Generally done in groups, it requires students to work together on an authentic project. To get the work done, they need to communicate respectfully, manage conflict, consider the perspectives of others, and be adaptable. Students in different parts of the world can work together on projects, using one of several platforms, such as iEARN, that are built to host cross-cultural interactions.

The Center for Global Education uses the SAGE framework to facilitate project-based learning:

- **Student Choice:** Students should be able to make choices about how to carry out their projects, which requires teachers to be clear about their expectations and students to take responsibility for their learning. Giving students choices allows them to take ownership of the project and deepens their engagement.
- **Authentic Experiences:** The projects should provide a range of authentic experiences that are modeled after how



globally competent professionals would carry out such a project in the real world outside the classroom.

- **Global Significance:** The topics of projects should be globally significant, meaning that students are engaged in applying what they have learned through disciplinary studies to relevant, real-life issues. This will help them develop the habits as well as the motivation to act in productive ways to address world problems.
- **Exhibit to a Real Audience:** Students then should have the opportunity to exhibit their work and demonstrate what they have learned to a real audience that will give them meaningful feedback they can use to improve their work.

Seth Brady is a high school social studies teacher in Naperville, Illinois in the United States. As a final assignment in spring 2017, he had his students research a religious issue in a global context. As part of their research, they had to connect with someone who had direct experience with the issue they were investigating. Then, each student had to show what he or she learned by creating a piece of art, a movie, a written paper, an awareness campaign, a children's book, or some other artifact. Whatever they produced had to be critiqued by the person they had spoken with.

"It's a different thing to write a paper on religious intolerance and then have it critiqued by a Pakistani imam who has been a victim of that intolerance," Brady says. After completing the project, the students had to use what they produced with a real-world audience. One group, for example, wrote

a children's book on anti-Semitism, had it reviewed by two experts, and then read it to younger children.

"It was powerful for them to distill what they had learned into the book and then to have the authentic experience of reading it to the intended audience," Brady says.

Ken'ichi Kato, a teacher at the Hiroshima Prefectural Board of Education in Japan, has his students participate in an international program called Partnership for Youth that brings together students from different countries, both online and in person. His students recently worked with peers in Indonesia and Hawaii in the United States on the topic of community revitalization. The students from the three countries wrote about their concerns and shared opinions on a project website. Some Japanese students then visited their counterparts in Indonesia, and they were shocked by the poverty they saw and by the fact that clean water was a scarce commodity.

Before the visit, Kato says, his students did not think too much about issues outside Japan. Afterward, in addition to looking outward and learning about international issues, they also became more aware that Japan has problems of its own. "We have a lot of social issues – an aging population; too few children; and, surprisingly enough, the fact that one in six Japanese children is poor," Kato says. "Our students did not realize it, and now they see we may have some of the same conditions in Japan as in the places they studied and want to find ways to help."

Service Learning

Service learning involves students participating in an organized activity to benefit their communities, based on something they have studied in the classroom. After the activity, students reflect critically on their experience to deepen their understanding of their academic learning as well as how carrying out a civic responsibility made them feel or helped shape their values. Service learning can include volunteer activities, participation in an advocacy campaign, or providing services directly to members of the community, such as tutoring younger children or visiting the elderly.

Seth Brady emphasizes the importance of connecting service learning to what students are learning in the classroom. He notes that global education often involves students participating in service-learning projects designed to help them make the connection between what they are learning and acting to solve local problems. Students might, for example, help pick up trash despoiling a local river. But service learning is not only volunteerism. As part of the project, they also need to understand where the trash comes from and think about the root causes of global issues such as pollution.

“They need to know not only that the pollution and trash come from upstream,” Brady says, “but also that political

factors can contribute to a lack of regulation, that the local watershed is connected with other bodies of water, and that trash eventually ends up in the ocean,” Brady says. “If you don’t do the instructional piece, if students don’t know why they are cleaning up the river or what the issue is behind it, then there is a certain emptiness to it, and it won’t accomplish the broader civic purpose of changing their habits throughout their lives.”

At the Buru Buru Girls School in Nairobi, Kenya, the students in the Environmental Club have planted more than 3,000 trees, making the campus a lush, calm green space. They understand that reforestation helps keep soil in place and also helps absorb carbon from the air. They learn that, even as students, they can make a difference. In an effort to spread the word, the girls interact with schools across Kenya and in other countries that are working on environmental issues, encouraging them to plant trees. “They are really inspired by the activities, and they are interested in solving other environmental issues,” says Margaret Kiprono, the club’s coordinator.

Kiprono says the trees serve another purpose, helping students develop important values. The girls label the tree they plant with a character trait that they want to develop, such as perseverance, discipline, or benevolence; as the tree grows, it serves as a reminder of their goals.



Implementing Education for Global Competence at Scale

Teacher Leadership

Teachers are at the forefront of educating for global competence; as such, they are important advocates and ambassadors who are leading the way for others. Tatiana Popa in Moldova became one of the first teachers in her country to use the iEARN platform to make it possible for her classes to collaborate with students around the globe. She was also the first in her country to use eTwinning, which is a platform for educators working in one of 40 European countries to develop lessons in collaboration with teachers in other countries. She encouraged other teachers in her country to use the platform as well and to take the professional development classes in global education offered on the site.

Seth Brady, the high school teacher from Illinois, played a key role in getting the state to create a Certificate of Global Competency that students could earn. He first pitched the idea to his local school district and it was quickly embraced. He then networked with other educators around the state and drafted a plan of what students would have to do to earn the certificate.

They proposed that students take eight globally focused courses, to be determined by each local school district; engage in a sustained globally focused service-learning project; participate in a collaboration or dialogue with a community culturally different from their own; and complete a capstone project demonstrating their global competence.

The idea was drafted into legislation that was then signed by Illinois's governor and is now being implemented across the state.

“Teachers drove this as a priority,” Brady says. “The fact that it is now state policy is helping catalyze more emphasis on global education across the state.”

Engaging the Whole School

Schools that do not have global competence as a primary focus often think they must begin by making big changes, such as adding classes and activities to their offerings. Adding language classes; organizing international exchanges of students or teachers; or arranging videoconferences with students, teachers, or experts in other countries can introduce members of the school community to new perspectives and cultures, as well as create a hunger for more such opportunities. However, while these kinds of changes are certainly valuable, there are more strategic ways to get started.

The first step toward refocusing an entire school on global competence should be to put an individual or a team in charge of overseeing the process, says Harvard University's Fernando Reimers. These leaders must reach out beyond the core of enthusiasts who are championing the cause to establish a broader base of support.

The next step should be a conversation about “why are we doing this in the first place,” Reimers says. The leadership team, working with others, has to “create a long-term vision of the kind of world we hope students will create,” not just the type of school they will lead. The vision, he adds, should inspire teachers and remind them of what motivated them to become educators.

The long-term vision should drive decisions about the knowledge, skills, and dispositions that students need to have and be followed by an examination of the opportunities already provided for developing those capacities. The team should look for bright spots – such as project-based learning and capstone or service-learning projects that could be modified to add an international dimension, language instruction that also incorporates learning about other cultures, or

opportunities for teachers and students to travel abroad – as well as weaknesses that need more attention. Next comes faculty input to plan how “teaching for global competence can be systematically integrated across the curriculum.”

An implementation plan that accounts for needed resources and what teachers need to know to be able to teach that curriculum must be developed, and an aligned professional-development strategy must be organized, including opportunities for joint planning time and collaboration to leverage interdisciplinary connections and create a community of practice. Once all the elements are in place, they should be regularly evaluated and revised by repeating the process, striving toward continuous improvement.

A powerful way to start those conversations is to develop a profile of the ideal graduate. The profile serves as a reference point to guide thinking about the kinds of curriculum, instruction, and enrichment opportunities that can produce globally competent youth rooted in a local context. The Center for Global Education recommends a similar process, embodied in its Global School Design, which provides a comprehensive vision of a school grounded in a global mission and purposefully creating a school culture that embraces global competence. With more than 30 specific key indicators of school practice and organization that support teaching for global competence, the Global School Design provides a useful framework for considering strategic changes.



Katherine Korte, who teaches government and anthropology at Pattonville High School in Maryland Heights, Missouri in the United States, is pushing her school to make global competence part of every class. She became interested in global competence and began incorporating it into her lessons. She also began advocating for it with other teachers in her department and did some training, drawing on what she had learned on a fellowship in global education.

A breakthrough, of sorts, occurred at a professional-development workshop on expanding and strengthening project-based learning at the school. The attendees were discussing the outcomes they wanted to see, and she suggested turning the school's nickname – the Pirates – into an acronym, to encapsulate their hopes for their students.

“Global competence is not an add-on. It is implicit in every part of the curriculum.”

“P,” she told the group, would stand for “Prepared for the future,” meaning “students would be able to act in creative ways to address local, regional, and global problems and assess the impact of their actions.” “I” would stand for Individuals being able to “recognize and express their own perspective and others’ perspectives on events, issues, and phenomena and identify the influences that produced those perspectives.”

She then went through the rest of the letters, adapting language from outcomes suggested by the Center for Global Education: Resilient. Adaptable. Technologically innovative. Educationally enriched. And, finally, Socially responsible.

Korte has been working to make the importance of global competence better known not only at her school but also across her district. “Global education is the future of education, and it’s what students need now, and what they needed 20 years ago,” she says. “It’s the systemic scale-up that I’m looking for.”

As a participant in the International Baccalaureate program, Mulgrave School in Vancouver, British Columbia in Canada, was already paying attention to developing global citizens. But, as part of a new five-year strategic plan, the school wanted to do more. “We want our students to be able to lead active lives as international citizens who can move freely in different countries and different cultures,” Head of School John Wray says. We want students to “have the skills, values, attitudes, and qualities to survive, thrive, and be happy no matter where they are in the world.”

Jamie Caton, a third-grade teacher at the Mulgrave School, lived all over the world while growing up and was tapped to join a team seeking certification by the Council of International Schools. The team drew up objectives for developing global competence and for ensuring that everything the school did – including lesson plans, teaching methods, professional-development programs, extracurricular activities, capstone projects, assessments, and opportunities for international travel – were aligned with the objectives.

“Global competence is not an add-on,” Caton says. “It is implicit in every part of the curriculum” from kindergarten on.

For example, the school’s first graders learning about bees inspected hives at the school, studied the importance of bees in agriculture, and learned about the decline in bee populations around the world due to pesticides and pollutants – a way to examine a worldwide problem that was nonetheless developmentally appropriate. “Children from the earliest ages can be thinking critically about everything they are learning in a global context,” Caton says.

One readily available resource that schools should tap into is the diversity of the students in their classrooms. In many schools, students speak a variety of languages, bring different cultural assets, and have international experiences that can enrich discussions and provide alternative perspectives on issues. Another often-underutilized resource is the diversity of the community. Families, local businesses operated by immigrants, cultural organizations, and universities can all help broaden students’ understanding of the world.

Eltham High School, in Melbourne, Australia, has been working for eight years to create an academically rigorous, interdisciplinary curriculum for teaching global competence and twenty-first-century skills.

Educators at the school created a school-wide curriculum and an instructional approach aligned with it. Loren Clarke, the head of curriculum, works intensively with three or four teachers from different disciplines at a time to help design specific lessons. The curriculum addresses issues such as sustainability and livability as well as controversial issues such as nuclear power, stem-cell research, world hunger, spending on eradicating AIDS, and the relationship between military spending and poverty. Students are taught to examine both sides of issues and to use evidence to make informed judgments.

Although carefully designing a curriculum and planning how to implement it are important, Clarke says, it is also important to just get started. “You can spend all your time planning but ... you won’t fully comprehend how it’s going to work until you get in there and actually do it,” she says. “The more you do it, the more you can refine your plan.”

School Leadership

Essential for any of these changes to take root and last is supportive school leadership. “If the principal is not on board, it is pretty difficult,” says Rob Ford, the principal of Wyedean School in a rural area of Gloucestershire, England.

Ford should know. He has been a proponent of international education throughout his more than 20-year career, starting with his first post at a Quaker private school with a well-established reputation for international education. Later, he was teaching the history of World War II and noticed that his students were bored. To make the material more relevant, he used the school’s videoconferencing equipment to connect his students with peers in Russia, who did not know the British were their allies in the conflict.

Ford loved teaching. But he felt stifled by the British national curriculum. “The only way I thought I could drive global learning and influence the culture of a school the way I wanted to was as a principal,” he says.

“Educators want to have a sense of purpose, and global learning allows them to re-engage with why they became teachers and talk about the purpose of learning.”

Wyedean was a struggling school when he took over in 2015. But he had greater latitude to institute changes there than at other government schools because it is an academy, an official designation in England that gives a school more control over its curriculum. He and his colleagues decided to promote twenty-first-century learning and global education to challenge their students and to elevate their aspirations. Wyedean students now talk regularly with students in Canada, the United States, Russia, South Africa, India, Indonesia, and other European countries. The school has added Mandarin to its curriculum. And he authorized a field trip for his students to visit a mosque in East London to learn more about the Islamic religion and how some have interpreted it to advance radicalization. Ford believes the focus on global education is one factor that has helped accelerate student achievement across the curriculum, because students became more engaged in their classes and were inspired to learn more.

The focus on international education has also deepened the school’s relationship to the local community, which is

helping with several projects, including planting an eco-friendly garden and locally sourcing food for the school.

It has also inspired teachers. “Educators want to have a sense of purpose, and global learning allows them to re-engage with why they became teachers and talk about the purpose of learning,” Ford says.

One of Vanessa Acevedo’s first tasks as the principal of the Denver Center for International Studies (DCIS) at Fairmont, Colorado in the United States, a new school that serves a diverse group of children from preschool to grade 5, was to persuade her teachers that children could not only think critically about global issues but that they would do so enthusiastically.

“It was hard for some teachers to visualize the average second grader having the ability to discuss immigrant rights or famine,” Acevedo says. “They were shocked and pleasantly surprised at how engaged the students were and how much students knew about the issues.”

DCIS is one of Denver’s Innovation Schools, which means it has more autonomy than other schools in the district, and it is also part of the Center for Global Education’s International Studies Schools Network. But it still has to teach the Colorado state standards, and its students are required to take a statewide assessment aligned with the standards.

Students study current events and learn to appreciate different perspectives on their causes and meaning. Acevedo says those lessons helped some grades make double-digit gains on Colorado’s statewide standardized tests, which are based on the state standards.

Teachers help their students develop empathy for other students in the school as well as people they meet outside the school. “They learn how to seek and understand their perspective, how to be a good person, and how to convey their opinion in a way that is respectful but also fluid,” Acevedo says. “We want them to learn to have conversations with people they disagree with, without being disagreeable.”

In hiring teachers, Acevedo looks for candidates who have had experiences with other cultures, such as people who have served in the Peace Corps, or who have traveled extensively. “My hope is that, if you come to DCIS, you will have some passion about learning about the world, or are an avid traveler,” she says, adding that she also looks for people who understand how to teach in culturally responsive ways and who are committed to social justice and equity. In addition, she expects teachers to keep up with current affairs.

She says an important part of her job as a leader is to model for teachers what she expects of them – to that end, she visits

classrooms and asks students about current events and what they are learning about global issues. She also shares her own story as a Mexican American whose parents immigrated to California when they were in their teens. Acevedo says she would not be an educator were it not for the opportunities her working-class parents insisted she have to travel and learn about the world.

“I tell teachers that I want this school to be one I wish I could have attended as a child,” she says. “Our goal is to provide our students with opportunities that many teachers may take for granted. When they hear my story, and I tell them why I am so committed to what we’re doing, they see that this type of school can change lives.”

System Leadership

The fundamental changes required in education to develop students who are globally competent are more likely to become integral to everything that schools do if they are an explicit priority of entire systems of schools, across a community, a state, a region, or a nation and if this priority shapes the culture and the design of the curriculum, as well as the pedagogical approach. A few examples can help point the way.

Toronto, Ontario, Canada

The Toronto District School Board, under the leadership of Director of Education John Malloy, offers an example of what it takes to make this happen.

The Toronto district is one of the largest in North America, serving nearly 250,000 students at almost 600 schools. Soon after Malloy took over leadership of the district, he articulated a “Vision for Learning” that highlighted the importance of what he called global citizenship, which has many of the same elements as global competence.

Students are at the center of this vision, along with the foundational skills of literacy, numeracy, and digital fluency. To be globally competent citizens, students also need opportunities to engage in experiences that incorporate creativity, inquiry, entrepreneurship, collaboration, leadership, communication, character building, critical thinking, and problem solving.¹³

Kevin Bradbeer, who has the title of senior director of client relations in the district’s Information Technology Division, was asked to put together a team to make Malloy’s vision relevant and practical for teachers to implement in their classrooms. The way he did this was to trust teachers and their expertise and have them work in teams to make the vision a reality.

The first year, he sought 100 teachers to volunteer to create examples of what learning global competence could look like. Working in teams, the teachers created 25 examples of student learning that could be carried out in any grade or in any subject. The next year, that corps was expanded to 240 teachers, who were all called “digital lead learners.”

Those teachers began working on one of several projects to institutionalize the vision. Some organized summer institutes for school-based leaders, such as department heads or curriculum directors to design more samples of student learning. A second worked on taking those ideas and figuring out what they might look like, for example, in a third-grade math class. A third group began creating artifacts of what those lessons might be expected to produce. Another group of teachers began implementing the vision in exemplar classrooms.

“It’s a team approach,” Bradbeer says. “If you believe in global competency work, then your organization should reflect that.”

Although he works in technology, the initiative is not being driven by technology. Instead, the learning experiences and lessons are being created and then they figure out how technology can be used to carry them out.

“We want to work backward from the learning, using design thinking,” says Marlena Rivett, who began leading the effort in the second year of planning.

Rivett says it took her a little time to understand the vision. But when she immersed herself in the UN’s SDGs and documents from the OECD, she understood that it was both ambitious and important. “Teachers are used to being asked to do new things and to adjust to new directions,” she says. “But this is bigger than that. This is all of us moving in this important new direction. And when you start talking to people from that perspective, they see that it is important.”

One of the biggest challenges, Bradbeer says, is communication. “It’s hard to get people to understand what is this global citizenship thing they’ve heard about,” he says. “Is it the same as we’ve been doing or is it new?” He also says it takes time to bring about changes in a large district such as Toronto. Some schools are making more progress than others.

For his part, Bradbeer says the step-by-step learning and creating process they are using in Toronto “could be done in any other district in the world. It was last year and this year, coming up with a plan, and implementing the plan. The audience could be any size.”

Washington, District of Columbia, United States

Building global competence is a high priority in the District of Columbia Public Schools where Kate Ireland is director of global education. The district divided its approach into three areas: expanding world languages classes, providing global experiences through study abroad programs, and integrating global learning across the curriculum.

To provide more students with the opportunity to learn a global language, the district expanded global language instruction to 45 minutes each week starting in kindergarten through fifth grade; languages are taught at every middle school and students can earn up to two credits that count toward graduation. The district prepared a language curriculum that stresses conversation by embedding in every unit opportunities to discuss global issues. It also created several opportunities for teachers to develop their knowledge and awareness of the issues.

The district also created a study abroad program that gives eighth- and eleventh-grade students the opportunity to spend several weeks traveling to other countries at no cost to their families. The students who are chosen spend four months learning about the country they will visit and devising a question or issue they want to investigate.

Kate Ireland's office also oversees eight International Baccalaureate programs and three Global Studies schools. At those schools, teachers work with consultants from Harvard's Project Zero program and lead biweekly Professional Learning Communities for teachers to help them bring global voices and perspectives into their lessons. The goals are to determine what it takes to be a successful global studies school and to create a global studies curriculum. The district hopes to use that information to infuse global studies at all schools.

Ireland says the district has a long way to go but is making progress. "There is district-wide understanding of what we mean when we say global competency and global education," she says. "To me, that's big progress."

Some educators are wary, she says, because they think global competence is another topic to be covered in the curriculum instead of a perspective that applies to all content areas. "We have to make it explicit for folks that this is not just one more thing. It's something they've already been doing to some degree. And we want them to see that this can be a powerful tool for them to increase student engagement and learning."

At the three Global Studies schools, teachers are working together to incorporate global competence across the curriculum. Ireland says the teachers are creating assignments, gathering

examples of student work, and writing lesson plans. The teachers at those schools will then become ambassadors, sharing their work across the district. "If we can make global education part of every student's experience with the content, then we can really start shifting things and help all students begin developing as global citizens at an early age," she says. "Teacher leaders are really the key to our success."

"If we can make global education part of every student's experience with the content, then we can really start shifting things and help all students begin developing as global citizens at an early age."

Republic of Singapore

For the first 30 years of its existence, Singapore's schools were singularly focused on traditional versions of academic success. Although there had been several efforts to prioritize critical thinking, students were still expected to memorize vast amounts of material in all of their classes. In 1997, however, the nation's political and educational leaders recognized that the world was changing and that its education system had to adapt in order to prepare students for the future.

They created a program called "Thinking Schools, Learning Nation" that emphasized twenty-first-century skills and led to the "explicit teaching of creative and critical thinking skills, reduction in curriculum content, updated modes of assessment, and greater focus on the process instead of outcomes in learning and teaching."¹⁴

Since then, Singapore has revised its national curriculum several times, culminating in its framework for 21st Century Competencies and Student Outcomes, which was developed collectively by educators. The framework goes beyond knowledge to include values and social and emotional learning, as well as competencies such as communications, collaboration, and critical thinking.

Singapore wants its students to be "confident people with a strong sense of right and wrong, adaptable and resilient, self-aware, discerning in judgment, independent and critical thinkers, and effective communicators."¹⁵

The framework also stresses that students should be self-directed learners "who question, reflect, [and] persevere."

They should be innovative, take initiative and calculated risks, “strive for excellence,” and work well in teams. Finally, they should be “concerned citizens” who “see themselves as Singaporeans,” have a “strong sense of civic responsibility,” are informed about their nation as well as the world, and take “an active part in bettering the lives of others.” Many of these competencies are aligned with the definition of global competence that has been referred to throughout this publication.

What makes Singapore stand out as a leader in developing students’ global competence is the systemic effort the country has made over the course of decades to make these aspirations a reality. The country’s schools, educators, policymakers at the Ministry of Education, and researchers and educators at the National Institute of Education all subscribe to this vision of a student who is motivated to work for the betterment of the community and the nation, understands global issues and Singapore’s place in the world, and is prepared for an increasingly interconnected future.

To make it a reality, educators and policymakers have reviewed the national curriculum and updated it several times, explored new pedagogical approaches, revised teacher preparation, examined learning environments, updated approaches to assessment, and added new programs and activities designed to develop these skills.

Singapore’s policymakers have retained substantial control over strategic direction, curriculum, and distribution of resources to maintain quality. However, over the past 30 years, educators and schools have been given greater autonomy to respond to the diverse needs of students and greater freedom in how the national curriculum is implemented. There is also a unifying consensus that the emphasis on these competencies should reinforce, not undermine, mastery of the academic content and academic success.

Singapore’s progress in making its vision for education a reality has not always been along a straight line, and educators and policymakers do not think they have reached their goal. The small nation’s efforts, however, are both ambitious and instructive and other systems and nations will benefit by studying them.

Putting It All Together

As this publication has shown, educators and schools the world over are highly aware of the need for their students to become globally competent – for their sake as well as for the sake of human dignity, peace, and prosperity. They are also finding ways to do this important work, sometimes on their own, but often with the support of colleagues, school systems, school networks, non-governmental organizations, and governments.

In some ways, the goal of helping students develop the knowledge, skills, attitudes, and values that add up to global competence is not all that different from what it takes for a school to achieve any other set of goals. First, schools and educators need to be clear on their mission and on the kind of world they would like to see. Next, they need to identify the competencies that will help their students create that world; then, teachers, with the support of school and system leaders, need to prepare a curriculum and identify related instructional materials and pedagogical approaches. Educators also need to decide how students will demonstrate competence, how specific competencies will be measured, and what success looks like. Finally, educators need to be willing to continuously update what they are doing, and improve it, based on evidence.

To accomplish this, educators need professional learning opportunities to help them transform their teaching to integrate global competence. Through preparation programs and in-service professional development, teachers can learn about global issues and methods for teaching competencies such as collaboration, problem solving, and appreciating different perspectives. Teachers need to hone pedagogical approaches for teaching these competencies while imparting discipline-specific knowledge. Sample curricula, lesson plans, online collaborative platforms, and rapidly expanding networks of educators concerned with global competence all are available to help teachers meet these challenges. Organizations including the Center for Global Education are developing online professional development opportunities and collaborative platforms available worldwide. It’s a matter of providing access to these resources for all teachers and providing them with the support they need to transform their teaching methods, their classrooms, their schools – and, eventually, their students.

At the level of educational policy, results from OECD’s assessment of global competence in PISA 2018 will provide a rich source for understanding the strengths and challenges nations are facing in developing globally competent youth. The results can inform potential changes in policy to strengthen education for global competence, including building the capacity of the teaching force to do so.

Educating for global competence can be challenging and it takes time. But with intention and commitment, it is clearly possible to help students become globally competent. By making it a priority, and by being willing to engage in multiple cycles of continuous improvement, progress is within reach.

The consequences of failure to work toward global competence for all students will be epic: resources will be wasted; opportunities will be squandered; and, ultimately, lives will be lost. But the dividends of success will be incalculable, and, excitingly, they will multiply with each successive generation.

References

(Endnotes)

¹ Melati and Isabel Wijsen. “Our Campaign to Ban Plastic Bags in Bali,” TEDGlobal London, September 2015. https://www.ted.com/talks/melati_and_isabel_wijsen_our_campaign_to_ban_plastic_bags_in_bali

² *Maastricht Global Education Declaration: European Strategy Framework for Increasing and Improving Global Education to 2015*. Europe-wide Global Education Congress, November 17, 2002. http://lapas.lv/biedri/files/resources/13901692895614_gegs-app1.pdf

³ Veronica Boix Mansilla and Anthony Jackson. *Educating for Global Competence: Preparing Our Youth to Engage the World*. Asia Society and Council of Chief State School Officers, 2011. <https://asiasociety.org/files/book-globalcompetence.pdf>

⁴ *Preparing Our Youth for an Inclusive and Sustainable World: The OECD PISA Global Competence Framework*. OECD, 2018. <http://www.oecd.org/pisa/Handbook-PISA-2018-Global-Competence.pdf>

⁵ “Sustainable Development Goals.” Sustainable Development Knowledge Platform, Division for Sustainable Development, United Nations. <https://sustainabledevelopment.un.org/>

⁶ Ibid.

⁷ *Measuring Global Citizenship Education: A Collection of Practices and Tools*. Center for Universal Education at Brookings and the Youth Advocacy of the Global Education First Initiative of the United Nations, April 2017. http://www.brookings.edu/wp-content/uploads/2017/04/global_20170411_measuring-global-citizenship.pdf

⁸ Ibid.

⁹ *Going Global: Preparing Our Students for an Interconnected World*. Asia Society, 2008. <http://asiasociety.org/files/Going%20Global%20Educator%20Guide.pdf>

¹⁰ Ibid.

¹¹ Veronica Boix Mansilla, “How to Be a Global Thinker,” *Educational Leadership*. December 2016.

¹² *Going Global: Preparing Our Students for an Interconnected World*. Asia Society, 2008. <http://asiasociety.org/files/Going%20Global%20Educator%20Guide.pdf>

¹³ John Malloy, “Unleashing Learning: A Vision for Learning in TDSB.” April 19, 2016. http://www.tdsb.on.ca/Portals/0/AboutUs/Director/docs/UnleashingLearning_April19.pdf

¹⁴ Jennifer Pei-Ling Tan, Elizabeth Koh, Melvin Chan, Pamela Coates-Onishi, and David Hung. *Advancing 21st Century Competencies in Singapore*. Asia Society, February 2017. <http://asiasociety.org/sites/default/files/2017-10/advancing-21st-century-competencies-in-singapore.pdf>

¹⁵ “21st Century Competencies,” Ministry of Education Singapore, April 16, 2015. <https://www.moe.gov.sg/education/education-system/21st-century-competencies>



The opinions expressed and arguments employed herein do not necessarily reflect the official views of the member countries of the OECD or Asia Society.

This document, as well as any data and any 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.

© OECD/Asia Society, 2018 *Teaching for Global Competence in a Rapidly Changing World*
<http://dx.doi.org/10.1787/9789264289024-en>

