Context

In September 2015, we initiated a collaborative, school-wide, year-long process aimed at articulating elements of a renewed ACS International Schools philosophy and a set of expected school-wide learning results. To launch this process, CIM commissioned two literature reviews, aimed at enhancing our shared understanding of trends and challenges in the international school education sector.

The first literature review, “International School Education for a Changing World,” was published in September 2015. It provided the research foundation for BIG Think I, a participatory event held on 30 September 2015 at ACS Hillingdon International School, involving 38 members of our school community.

In BIG Think I’s summative activity, participants were challenged to synthesise and express the day’s discussions in a series of headlines. Among the headlines were the following:

- ‘Creating global citizens and redefining key skills for jobs of the future’
- ‘Embracing and developing the culture and talents of all our students’
- ‘Teacher professional development key to international school education’
- ‘Educators seek to be proactive shapers of international school education’

These and other outputs from the day suggest that participants are looking forward to a second opportunity to come together, this time to focus attention on teaching and learning in international schools.

In preparation for BIG Think II, planned for 11 November 2015, this second literature review, ‘Teaching and Learning for a Changing World,’ has been prepared. It focuses on the published, peer-reviewed academic literature related to the qualities of teaching and learning that are valued and needed in international schools. It has been written by Mallory Perry Ed.M. and edited by Christina Hinton Ed.D., with contributions by Research Schools International researchers, Soojin Eun, Myra LalDin, Siwen Wang and Marcus Waldman.

- Mallory Perry graduated from the Human Development and Psychology program at Harvard Graduate School of Education in 2014. Perry studied Psychology at Brigham Young University with a focus on learning and cognition before spending two years on the administrative team at a private Montessori school in Boston, Massachusetts.
- Christina Hinton is a faculty member at the Harvard Graduate School of Education (HGSE) and the Founder of Research Schools International. Hinton is a neuroscientist and educator committed to bridging the gap between interdisciplinary research on learning and education policy and practice. Hinton holds a B.A. in neuroscience and education from Swarthmore College, and an M.Ed. and Ed.D. in Mind, Brain, and Education from Harvard Graduate School of Education.

We invite all members of our school community to read this literature review and let us know what you think. A formal consultation will run from 14 October to 4 November 2015. Consultation response forms are available on the CIM website. We look forward to your involvement and participation.

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Centre for Inspiring Minds, Head of Centre
Introduction

As Gardner (2008) eloquently expresses, “Educators must recognize what is called for in this new world. If we want to embrace the future on its own terms, we need to start nurturing the required capabilities now.” Educators need to think critically about what knowledge, skills, and dispositions will help students thrive in the 21st Century, and thoughtfully nurture those capabilities through their teaching.

In this literature review, we explore academic literature that can shed light on the following questions:

- What kinds of knowledge, skills, and dispositions are students likely to need to flourish in all spheres of their lives in the 21st Century?
- What does it mean to teach those capabilities responsively?

To address these questions, we have reviewed scholarly works on academic, socio-emotional, and global knowledge, skills, and dispositions for the 21st Century.

Academic Knowledge, Skills, and Dispositions for the 21st Century

Kereluik and colleagues (2013) identified prominent areas of learning that are supported by research as essential for 21st Century learning. Six of these areas relate to academic learning:

- Core content knowledge
- Cross-disciplinary knowledge
- Digital literacy
- Problem solving and critical thinking
- Communication and collaboration
- Creativity and innovation.

These areas are interrelated with one another, as well as with other areas. Below, we discuss these six areas of key knowledge and skills that are essential for success in further and higher education, as well as in the work force.

Kereluik and colleagues (2013) described core content knowledge as:

highly complex and deeply ingrained mental processes specific to traditional domains, such as applying mathematical ways of thinking to solve everyday problems or applying scientific ways of thinking to understanding the natural world. (p. 130)
To gain such competency, Kereluik and colleagues (2013) argue that students must be instructed in the traditional content areas that have remained relatively unchanged over decades of education, including math, science, and language. Many other thought leaders have cited these core areas as key areas of knowledge for the 21st Century as well (Kereluik et al., 2013; Gardner, 2008; Metiri Group, 2003; Partnership for 21st century Skills, 2007; Jerald, 2009).

Beyond these basic content areas, researchers also note the importance of cross-disciplinary knowledge. This is both a form of knowledge as well as a skill, which allows students to access, combine and synthesize information from a variety of sources and subjects (Kereluik et al., 2013). This might include the synthesis of ideas through narrative storytelling, or multi-disciplinary research to make meaning of significant, even transcendent or spiritual questions (Pink, 2005). This is a complex skill that closely relates to what Pink (2005) refers to as conceptual thinking, and requires the essential 21st Century skills of creativity and synthesis (Kereluik et al., 2013).

Additionally, students must gain knowledge in digital and information literacy (Kereluik et al., 2013). While the quick growth of digital resources makes it likely that today’s students will grow up to use digital tools currently unimagined, digital literacy will prepare students to be successful in such a future (Kereluik et al., 2013) A student with digital and information literacy has “the ability to effectively and thoughtfully evaluate, navigate, and construct information using a range of digital technologies and thus to function fluently in a digital world” (Kereluik et al., 2013, p. 130). A significant part of such digital literacy is the ability to interact with, collect, and evaluate the reliability of digital resources (Jenkins, Clinton, Purushotma, Robinson, & Weigel, 2006).

To be post-secondary ready, students must be comfortable using digital tools and resources, and students who have significant knowledge in digital systems will be qualified for a wide variety of 21st Century jobs (Wilson & Pinckney, 2015). This knowledge will prepare students for digital age professionalism, an important 21st Century workplace skill that involves an “understanding of the norms of safe, appropriate, respectful, and responsible technology use” (Kereluik et al., 2013, p.139; International Society for Technology in Education, 2007).

Building on the foundation of core content knowledge, scholarship on post-secondary readiness identifies several key academic skills necessary for college and work-ready students. Kereluik and colleagues’ (2013) summary of the research literature in this area suggests that problem
Critical thinking frequently involves the ability to interpret information and make informed decisions based on such information. Problem solving is often conceptualized as the use of critical thinking skills toward the effective resolution of a specific problem or toward a specific end goal. (p. 130)

These skills are invaluable as tools of inquiry and information analysis (American Association of Colleges and Universities, 2007; The National Academy of Engineering, 2004). These are also key skills for assessing risks and making complex decisions, which occurs in a variety of post-secondary situations (Kereluik et al., 2013; International Society for Technology in Education, 2007).

The skill of communication, including through written, oral or other means, is another key skill for success in higher education, further learning, and the workforce. In addition to sharing information clearly, communication also involves listening to and understanding others (Kereluik et al., 2013). While communication has always been important, technology has expanded 21st Century communication, requiring skills of digital and online communication, and allowing for communication through other now easily created mediums such as video and music (Kereluik et al., 2013; International Society for Technology in Education, 2007; Partnership for 21st century Skills, 2007; Metiri Group, 2003; Assessment and Teaching, 2012; The National Academy of Engineering, 2004).

Communication is an important foundation for the skill of collaboration, which incorporates other skills “such as flexibility, willingness to participate, and recognition of group and individual efforts and success” (Kereluik et al., 2013, p.130). As with communication, technology has changed how students collaborate, enabling them to collaborate over long distances with fellow learners from diverse backgrounds (Kereluik et al., 2013). Particularly in the workplace, collaboration is an essential skill in our globalized world (Jerald, 2009).

In the research literature, creativity is consistently reported as one of the most prominent skills students will need to be successful after secondary school (Kereluik et al., 2013). Creativity and its twin skill of innovation are described as:
applying a wide range of knowledge and skills to the generation of novel and worthwhile products (tangible or intangible) as well as the ability to evaluate, elaborate, and refine ideas and products. (Kereluik et al., 2013, p. 131)

Current research focuses significantly on the role of tangible designing as a key skill in learning (IDEO, 2012; Pink, 2005). Play and performance can also be skills of creativity and innovation (Pink, 2005; Jenkins et al., 2006). Creativity can be manifest as a culmination of cross-disciplinary knowledge, critical thinking, communication and other skills to develop useful, often tangible, and new material (Metiri Group, 2003; International Society for Technology in Education, 2007; Gardner, 2008; Assessment and Teaching, 2012; The National Academy of Engineering, 2004). Research suggests that the ability to create new ideas and solutions will be one of the most essential skills to solving problems, both large and small, in the 21st Century (Kereluik et al., 2013).

Along with academic knowledge and skills, 21st Century students must develop the qualities and skills of lifelong learners to participate in this “knowledge age” (Trilling, 2007). The 21st Century knowledge and skills identified above provide a foundation on which to build further learning (Trilling, 2007). Additionally, students must learn other skills of independent learning including, taking responsibility for their own learning, setting goals, asking questions, reflecting critically on their own thinking, and identifying authentic, purposeful learning opportunities (Knowles, 1980; Knowles, 1984).

**Academically Responsive Teaching**

To help students develop the knowledge and skills required to be successful in further education and beyond, teachers need to ensure that content is provided in a responsive way (Gilroy, 2012). Responsive teaching involves flexible teaching that uses differentiated instruction to meet the needs and interests of all students. Responsive teaching involves identifying students’ individual differences and providing differentiated curriculum that will challenge, stretch, and engage many different learners.

Differentiated instruction is a method of teaching that addresses a variety of students’ learning needs and interests (Dixon, Yssel, McConnell, & Hardin, 2014). Tomlinson and Jarvis (2009) describe it as:
an approach to curriculum and instruction that systematically takes
student differences into account in designing opportunities for
each student to engage with information and ideas and to develop
essential skills. (p. 599)

Teachers that are responsive to the uniqueness of their students,
including their learning needs, background, language and culture, will
differentiate the ways materials are presented and the ways students
interact with the materials and demonstrate learning (Dixon et al., 2014).\(^1\)
Recent studies suggest that differentiated instruction is not a common
practice, and researchers acknowledge that this framework requires
significant flexibility and skill from teachers (VanYassel-Baska, 2012; Reis,
McCoach, Little, Muller, & Kaniskan, 2010; Dixon et al., 2014).

Universal Design for Learning (UDL) is one framework that helps teachers
leverage technology to meet individual learning differences in the
classroom (Rose and Rose, 2009; Rose & Strangman, 2007). Research has
shown that UDL can help effectively meet the needs of students from a
variety of backgrounds while enriching the learning of all students in the
class (Chita-Tegmark et al., 2012).\(^2\)

Another way to meet the needs of all students is through materials that
challenge and stretch students by “adding breadth, depth, or pace” to
the course work (Department for Children, Schools and Family, 2008).
Challenge and stretch materials can help provide all students with tasks
that are appropriately challenging (Gershon, 2013). Vygotsky describes a
zone of proximal development, or the next step of learning just beyond
what a student can comfortably do on his/her own (Gershon, 2013; Crain,
2010) Challenge and stretch curricula provide a range of materials so that
many different students can work in their zone of proximal development
(Gershon, 2013; Daly, Baird, Chamberlain, & Meadows, 2012).

Education specialist Mike Gershon (2013) specifies three directives for
effective challenge and stretch teaching:
- Planning. A wide range of challenging material should be prepared
to meet many students’ needs in their zone of proximal
development.

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1 For more information on differentiated learning, see Tomlinson, C. (2014). The
differentiated classroom: Responding to the needs of all learners (2nd ed.).
2 For more information on UDL, see Meyer, A., Rose, David H., & Gordon, David. (2014).
Publishing
• Lesson Structure and Pace. The lesson should have clear objectives with appropriate time and resources for students to grapple with the challenging material at an engaging pace.

• High expectations. Be sure there are clear expectations for students; help them to expand their thinking and engage with the challenging materials.

### 21st Century Social-Emotional Knowledge, Skills, and Dispositions

Along with academic knowledge and skills, a holistic approach to education should include social-emotional knowledge and skills including: “self-awareness, self-management, social awareness, relationship skills, and responsible decision making” (Durlak et al., 2011). These skills are important for students to lead fulfilling lives. Moreover, research shows that socio-emotional knowledge and skills are associated with success in school and the workplace (Durlak, Weissberg, Dymnicki, Taylor, & Schellinger, 2011; Gutman & Schoon, 2013).

An important socio-emotional skill for students to develop is the ability to persevere through challenges and difficulties. A student with resilience will continue to work hard through difficulties (DeBaca, 2010). While resilience is a complex trait to understand, some of its characteristics are “confidence, a sense of well-being, motivation, an ability to set goals, relationships/connections, and stress management” (DeBaca, 2010, p. 1). Research has shown that academic performance is significantly related to measures of student resilience, and students who demonstrate resilience perform better than their non-resilient peers even over years of challenging circumstances (DeBaca, 2010; Scales, Roehlkepartain, Neal, Kielsmeier, & Benson, 2006; Hanson & Austin, 2003).

Research on developing resilience in students describes a wide variety of protective factors that provide children the internal and external support required for resilience (Henderson & Milstein, 2003). These protective factors can range from a student’s belief in their own abilities to a student’s sense of humor to a supportive adult’s confidence in and high expectations for a student (Henderson & Milstein, 2003).

A powerful socio-emotional disposition that supports not only resilience, but also student post-secondary success, is having a growth mindset. A

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student with a growth mindset understands that intelligence and abilities are flexible and can grow and develop with time and effort. By contrast, a student with a fixed mindset believes that abilities are innate and unchangeable (Dweck, 2012). Recent research shows that a student’s mindset significantly impacts their willingness to engage with challenging work, persistence in the face of obstacles, and academic achievement (Blackwell, Trzesniewski, & Dweck, 2007; Dweck, 2012).

Research shows that a student’s mindset is influenced by the feedback they receive from adults in their lives; simply put, students consistently praised for their intelligence tend to develop a fixed mindset, while those praised for working hard tend to develop a growth mindset (Dweck, 2013; Mueller, Dweck, & Kruglanski, 1998). A variety of programs and courses are available to help students and teachers support growth mindset.\(^4\)

To further support students’ socio-emotional skills, teachers and school communities must support student wellbeing, which includes students’ physical, mental, and emotional health. Research suggests that student wellbeing plays an important part in learning, and learning plays an important part in wellbeing (Bonell et al., 2014). Notably, schools in Finland, Sweden, and Australia, which all demonstrate great academic success, all have programs focusing on the social and emotional wellbeing of their students (Bonell et al., 2014).

Students’ wellbeing is strengthened in an environment where students feel supported, valued, and safe, and where students have the ability to create caring relationships and participate in their own emotional growth and development (Hall, 2010). A variety of frameworks exist for creating a school community that promotes physical, mental, and emotional health and wellbeing (Hall, 2010; Saab & Klinger, 2009).\(^5\) Supporting student health and wellbeing is best approached as a community effort, and can have significant consequences not only for students, but also for their families and communities (Stoner, Perry, Wadsworth, Stoner, & Tarrant, 2014).

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\(^4\) For example, Kahn Academy has developed a growth mindset course that can be accessed online here: https://s3.amazonaws.com/KA-share/Toolkit-photos/FINAL%20Growth%20Mindset%20Lesson%20Plan%20(April%202015).pdf

Socio-emotionally Responsive Teaching

Socio-emotionally responsive teaching uses a holistic approach that addresses students’ academic needs as well as their social and emotional needs. Below are summaries of two socio-emotionally responsive programs: Responsive Classroom, and Positive Education.

Responsive Classroom is a program implemented in classrooms and schools to help create a learning environment supportive to the academic as well as the social needs of students (Rimm-Kaufman et al., 2014). This program focuses specifically on the “how” of teaching responsively, and it provides training, support, and tools for teachers, rather than just a curriculum (Rimm-Kaufman et al., 2014). The program includes over 35 hours of teacher training on programs such as Morning Meeting to build community, Academic Choice to allow students to direct their own learning through various learning activities in the classroom, and Interactive Modeling in which teachers and students collectively evaluate and model good behaviors in a process of cooperative teaching and learning (Rimm-Kaufman et al., 2014; Ottmar, Rimm-Kaufman, Berry, & Larsen, 2013). Researchers studying the program found that, on average, in schools in which Responsive Classroom was implemented with fidelity, students showed improvements in pro-social skills, as well as in math and reading scores (Rimm-Kaufman et al., 2014; Ottmar et al., 2013).

Another method for supporting the holistic education of students is Positive Education. Positive Education is based on concepts of positive psychology in education, and its purpose is to “nurture wellbeing and promote good mental health” (Norrish et al., 2013, p. 148) in students, and in the whole school community. Through seminar courses on personal strengths and tailored instruction in a variety of classes, students are taught to recognize their own strengths and to develop skills to help them “feel good” and “do good” (Seligman, Ernst, Gillham, Reivich, & Linkins, 2009; Norrish et al., 2013; Walker & Crogan, 1998). Recent research on positive education programs in high school reported improvement in students’ reported engagement and enjoyment at school, as well as their “strengths related to learning and engagement in school (e.g., curiosity, love of learning, creativity)... [and] social skills (e.g., empathy, cooperation, assertiveness, self-control)” (Seligman et al., 2009, p. 301-302).
The globalization of our society over the past few generations has lead to a new category of knowledge, skills, and dispositions required of today’s students. The rising generation will have to address challenges on a global scale in cooperation with associates from around the world, such as climate change, poverty, disease, and conflict (Farahani, 2014; Mansilla, Jackson, Asia Society, & Council of Chief State School Officers, 2011). It is essential for students to develop global learning, which includes:

the knowledge, skills and attitudes... that enable [students] to understand world cultures and events, and appreciate their lives and analyze global systems; appreciate cultural differences; and apply this knowledge and appreciation to their lives as citizens and workers. (American Council on Education in Xing, 2015, p. 136)

Global learning is growing to become a central feature of education in many countries, preparing students to be knowledgeable and professional members of the increasingly globalized workplace and society (Mundy & Manion, 2008; Xing, 2015; Mansilla et al., 2011).

Global citizenship education empowers learners to actively engage in local and global issues, to help resolve global challenges, and to contribute to a more just, peaceful, inclusive and sustainable world (UNESCO, 2013). Mansilla and Gardner (2007) highlight three dimensions of global citizenship skills:

- global understanding
- global self
- global sensitivity

Mansilla and Gardner (2007) define global understanding as the ability “to think critically and creatively about complex international issues. Students can learn about the global dimensions of topics such as health, climate, and economics, as well as globalization itself” (p. 60). The global self includes our “perception of ourselves as global actors, a sense of planetary belonging and membership in humanity that guides our actions and prompts our civic commitments” (Mansilla & Gardner, 2007, p. 59). Global sensitivity is an awareness of how local experiences can have an impact on people across the world. Students with global sensitivity understand that their lives are part of a larger environment; they can perceive the ways in which their daily actions affect others.
Perspective taking is another key aspect of global learning, which involves understanding the perspectives of others, as well as recognizing one’s own cultural biases. As students learn about other cultures, they can come to value the richness of understanding that comes from a diversity of different cultural perspectives (Suárez-Orozco, 2007). Global learning also encompasses knowledge, skills, and values relating to issues of global social justice, environmental responsibility, empathy, dignity, respect, and tradition (Xing, 2015; Hartman, 2015).

Students must learn not only to participate in the larger, global community, but also to participate in their local community through civic engagement (Lenzi et al., 2014). This includes developing the knowledge, skills, and desire to reach out and help others in their local communities (Lenzi et al., 2014). Civic engagement looks different in the digital age of participatory culture in which it is easier to reach out, share, connect, and take part in a digital community (Jenkins et al., 2006).

More research is needed on civic engagement as researchers have only recently begun to develop reliable measures of it (Zaff, Boyd, Li, Lerner, & Lerner, 2010; Lenzi et al., 2014; Geboers, Geijsel, Admiraal, & Dam, 2013).

A recent study on civic engagement showed a relationship between student civic engagement and having an equitable, open, and democratic school community. As the researcher explained, to teach civic engagement, a school “must represent a microcosm of society where democratic principles are in action and can be learned by students” (Lenzi et al., 2014, p. 258). When a school supports students’ civic engagement, it can bring benefits to the wider community (Lenzi et al., 2014).

Research suggests that global learning is interrelated with the development of other 21st Century skills. As Stoner and colleagues (2014) note, “international experiences provide powerful… experiences, leading to deep reflection, critical analysis, and synthesis.” Additionally, global learning supports the development of empathy and respect for others. Research on technology in education suggests that the digital skills that connect children around the world are an important part of developing global citizenship, and they can be a key resource for teachers who want to provide their students with opportunities to learn about other languages, traditions, and cultures (International Society for Technology in Education, 2007).

For a deeper discussion on the knowledge, skills and values of global learning see Farahani, M.F. (2014). The role of global citizenship education in world peace and security. Procedia: Social and Behavioral Sciences, 116, 934-938.
Globally and Culturally Responsive Teaching

_Culturally responsive teaching_ is respectful, mindful, and considerate of the cultural backgrounds of students (Tatum, 2000). Culturally responsive teaching requires the teacher to understand, respect and capitalize on students’ cultures, ethnicities and races (Hanley & Noblit, 2009; Perry, Steele, and Hilliard, 2003). Research has shown that culturally responsive teaching improves academic outcomes, particularly for children of racial minorities, by helping students recognize the role of their traditions, heritage and culture(s) in learning (Hanley & Noblit, 2009).

Focusing on cultural, ethnic, and racial identities can help students develop _international mindedness_, which is “an attitude of openness to, and curiosity about, the world and different cultures” (International Baccalaureate in Singh & Jing, 2013, p. 13). International mindedness supports cooperation and shared understandings among people of different perspectives, and prepares students to participate in the globally connected world (Singh & Jing, 2013; Kereluik et al., 2013). To help teachers be culturally responsive and develop international mindedness in their students, the following concepts can be used to identify, understand, and celebrate students’ various cultures.

_Cultural, Ethnic and Racial Identity_ can be defined as feeling a connection to a group because of a common background or heritage (Helms, 1990). _Culture_ can be defined as “a set of tools, perspectives, and capabilities” (Hanley & Noblit, 2009, p. 5) that are built on the history, traditions, and characteristics of one’s biological or social background. Culture can also include skills and dispositions such as “empathy, human warmth, charisma, and the ability to manage anxiety and uncertainty” (Özturgut, 2011, p.5). Identifying one’s own cultural, ethnic, or racial identity or identities is an important first step for teachers to help them support their students’ global learning, and an important first step for students to further develop global citizenship competencies (Özturgut, 2011; Martins, 2008).

Another learning tool for culturally responsive teaching is _multicultural awareness_. A teacher can teach with multicultural awareness as well as use learning materials that reflect multicultural awareness. This involves using pedagogies that draw on the histories, texts, values, beliefs, and dispositions of people from different cultural backgrounds (Chisholm, 1994). Learning materials that are culturally relevant to students, such as stories and literature, can help students value their culture and see it as a strength that supports their learning (Feger, 2006). Studies suggest that using relevant cultural and racial knowledge and experiences supports
students’ learning by helping to moderate their cognitive overload and support a sense of ownership over their learning (Feger, 2006).

Such responsive teaching requires teachers and staff who are culturally competent and who have developed a level of awareness and respect for multiple cultures along with a desire to embrace other beliefs, experiences, and perspectives (Gudykunst, 1998). Such awareness must start with an understanding of one’s own culture and perceptions (Özturgut, 2011).

The awareness of one’s own assumptions, prejudices and stereotypes is a first step to be able to positively interact and learn from others. In this process lies the essence of intercultural learning. (Martins, 2008, p. 203)

Developing this awareness of other cultures can lead to the development of intercultural empathy, which is the ability to put oneself “into the cultural background of [another] and...to effectively communicate [one’s] understanding of that world” (Zhu, 2011, p. 116). Central to this empathy is the ability to consider others’ perspectives without judging one as better or worse, but simply with the intent to understand (Calloway-Thomas, 2010).

The following steps can help teachers and students develop intercultural empathy (Zhu, 2011):

- Engage with other people of other cultures in open dialogue
- Take time to evaluate your own perspective, biases, and beliefs and relate them to others perspectives
- Be curious about other cultures and open to learning from them (Zhu, 2011).

Tools such as role-playing and digital tools that connect people from various cultures can also help teachers and students to develop intercultural empathy (Lim et al., 2011).

As teachers help students to develop these skills of awareness and empathy in a multicultural world, they will be supporting students’ development of global citizenship, or sense of membership and responsibility in the global community. To develop global citizenship, students need authentic opportunities to engage in and reflect on global issues (Riley, 2006). Oxfam (n.d.) suggests using a “Learn, Think, Act” model to help students develop a sense of responsibility to the global community:
• Learn. Engage with a global issue, consider various perspectives and seek for understanding.
• Think. Critically evaluate solutions in the context of the cultures involved.
• Act. Participate in individual and cooperative action on the issue

The EdSteps Global Competence Task Force developed another useful framework to help educators organize the teaching of global competence. Teachers can structure their instruction of global competence using these four principles:
• Identify engaging topics of local and global significance
• Focus on global competence outcomes
• Design performance criteria for global competence
• Employ ongoing global competence–centered assessments. (Mansilla et al., 2011, p. 53)

Lessons should be driven by a generative question that engages students and helps them consider connections between their local and global communities, identify the importance of issues, and approach questions with an interdisciplinary lens. As teachers focus on outcomes directly related to global competence, they should ensure that students understand the expected outcomes and that their learning is grounded in the skills of global competence. Teachers should provide authentic, or real-world, opportunities for students to demonstrate their growing global competencies using a variety of academic and non-academic skills and to demonstrate their own creation of understanding. Finally, teachers should use ongoing opportunities for student assessment to collect feedback from students. This feedback will help teachers adjust their instruction to better meet the student’s needs (Mansilla et al., 2011).

In the increasingly globalized world, it is ever more important for teachers and schools to engage in globally and culturally responsive teaching (Gardner, 2008; Trilling and Fadel, 2009; della Chiesa, 2010; Noddings, 2005; Suárez-Orozco, 2007).

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Conclusion

Schools today are tasked with supporting the complex capabilities that students will need to thrive in the 21st Century. The academic literature presented here represents the work of research teams and education thought leaders on the knowledge, skills, and dispositions that are likely to be important for students. But no one knows for sure what will be required of our students in the future.

As educators, we have to work together to anticipate the capabilities that students will likely need and work out how we can teach them in responsive ways.

• What knowledge, skills, and dispositions do you think will be essential in the 21st Century?
• How can we be sure we are teaching them in academically, socioemotionally, and culturally responsive ways?
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