



# Social and Emotional Learning for a Challenging Century

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*Pamela Barker and Amy McConnell Franklin*

What does it take to ensure that students are present to learn? What does it take for them to care enough about the world and each other to commit to collective efforts to address one of the major challenges of our time: climate change? It is no longer enough to simply teach reading, writing, and arithmetic in a one-size-fits-all approach that is useful for finding jobs in industrial societies. In addition to these cognitive skills, our children must learn the necessary social and emotional skills to thrive in an information-rich and climate-shifting society where knowledge, innovation, collaboration, and adaptation are key. Considering the looming threat of climate change, there is no time to waste.

Daniel, a young resident of the city of New Orleans, faced immense social and emotional burdens in coping with the devastating impacts of Hurricane Katrina, which struck the U.S. Gulf Coast in late August 2005. For the next five years, he and his family experienced twelve post-disaster moves around Louisiana and other U.S. states. Each move required a change of schools, leaving friends and supportive relationships, forging new relationships with classmates and teachers, and navigating new environments. Daniel faced all of this with limited social and financial resources. At new schools, he was bullied. At home, he took care of his baby sister and helped his mother manage the post-disaster bureaucracy so that the family could obtain “adequate” food and shelter.<sup>1</sup>

Hurricane Katrina and its fallout placed extraordinary demands on Daniel’s awareness, in particular the skills that are required to rapidly read emotional

**Pamela Barker** is an educational consultant in social and emotional learning and restorative practices in Fort Collins, Colorado. **Amy McConnell Franklin** is the director of social and emotional learning and mindfulness at United World College Thailand.

data (his own and that of others) to stay safe. It demanded his quick response to cultural norms, as well as having to read cues from others and to regulate his own behaviors in order to stay focused while navigating the chaos of life at school and at home. It demanded his clear intention: to have goals for himself and his family as well as seemingly endless patience and empathy. It demanded that Daniel make a choice: to stay optimistic in the face of constant and complex challenges, and to remain motivated even in the face of uncertainty and hopelessness.<sup>2</sup>

Like Daniel, today's youth will face acute and chronic pressures due to climate change: from extreme weather events and public health crises to generalized increased stress, anxiety, depression, trauma, social network disruption, and growing conflict over limited resources. As a changing climate places immense social and emotional demands on youth, educators must rally to support them. Yet most educational systems are not preparing either students or teachers with the necessary aptitudes that they will need to act on behalf of themselves and others and to engage effectively with the circumstances. It is not surprising that many react to climate change with apathy, pessimism, or paralysis.

Social and emotional learning strategies can play a significant role in transforming these maladaptive reactions into adaptive skills. It is essential that efforts to prepare youth for the political, social, economic, and emotional turbulence of a warming planet be systematically woven into all aspects of their education (from pre-kindergarten to university), at home, and in their everyday experiences. Incorporating systematic social and emotional learning programming can help to prepare students for an uncertain future.

## What Is Social and Emotional Learning?

Emotional intelligence, a building block of social and emotional competence, allows a person to use emotion to enhance reasoning and decision making. Social and emotional learning is a process that promotes cognitive, affective, and behavioral education. As people learn to connect with one another and with the natural world in respectful ways, they more often choose to align their thoughts, feelings, and actions in caring and compassionate ways. This increases their ability to take perspective and motivates them to navigate complexity while accounting for the internal experiences of self and others and for the innate legitimacy of the natural world.

According to the Collaborative for Academic, Social, and Emotional Learning (CASEL)—an international leader in research, practice, and policy in this

field—social and emotional learning is “the process through which children and adults acquire and effectively apply the knowledge, attitudes, and skills necessary to understand and manage emotions, set and achieve positive goals, feel and show empathy for others, establish and maintain positive relationships, and make responsible decisions.” CASEL’s model includes the social and emotional competencies of self-awareness, social awareness, relationship skills, decision-making skills, and self-management. Many U.S.-based and international programs that teach these competencies employ other, related, terms such as global citizenship; ethics, peace, and civic education; and emotional intelligence.<sup>3</sup>

A robust and growing body of research indicates that social and emotional learning is a set of skills that is teachable and learnable through explicit instruction and that become more permanent with practice. A 2011 meta-analysis of two hundred and thirteen school-based studies involving more than two hundred and seventy thousand students found that participants in social and emotional learning showed improvements in social and emotional skills, attitudes, and behavior; academic performance; and student-teacher relationships. They also exhibited fewer conduct problems. Long-term outcomes included increased high school graduation rates, college and career readiness, better relationships, engaged citizenship, and reduced criminality, substance abuse, and mental illness. Effective implementation of social and emotional learning also enhances school readiness, school climate and learning, empathy, compassion, civic responsibility, mental and physical well-being, and resilience.<sup>4</sup>

Research indicates that training in social and emotional skills generally has a greater impact than training in cognitive skills on improving social behavior and labor market outcomes. The economic case is strong: a 2015 review of six prominent social and emotional learning programs (five in the United States and one in Sweden) found that the economic gains realized through savings related to social and emotional learning outcomes—such as increased high school completion and career readiness and decreased substance abuse and criminality—can outweigh the costs substantially. The interaction of both cognitive and social/emotional skills can further improve children’s life outcomes. These outcomes represent what is most critical for youth to engage proactively with a climate-shifted future and a rapidly changing world. (See Box 8–1.)<sup>5</sup>

## Integrating Social and Emotional Learning in Education

Students who feel safe and included remain engaged, are comfortable taking risks and putting forth effort when challenged, are able to navigate their

### Box 8–1. Social and Emotional Learning and Climate Change

Research on climate change indicates that the two key strategies to address the effects of climate change—mitigation and adaptation—require strong social and emotional skills. Thomas Doherty and Susan Clayton found that adaptive behavior is optimal when people have high emotional literacy and engagement and can solve problems creatively and collaboratively. Janet Swim and colleagues found that individual factors of behavior, belief, and emotional responses influence whether or not humans cope well with climate change and if they will behave in ways that mitigate it. Tom Crompton and Tim Kasser note that three social and emotional skills—empathy, intrinsic motivation, and awareness of interconnectedness with others and with nature—are key attributes that are correlated with pro-environmental choices, which is particularly relevant to mitigating climate change.

Schools, with their broad reach, offer ideal environments in which to build these capacities, and teacher training can provide access to effective content and teaching practices. Developments in the fields of emotional intelligence and social and emotional learning can aid educators in integrating social and emotional skills into schools, helping children to navigate the emotional challenges that come with climate change.

*Source: See endnote 5.*

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emotions to stay focused and motivated, and recognize when they are on or off task. They know when they are contributing to the group and when they are distracting, are able to recognize the causes and consequences of their feelings and moods, and are able to govern their own emotions appropriately. They are ready and able to learn and to work ethically and effectively.

Katie Parsanko-Malone, a high school science teacher in Fort Collins, Colorado, was frustrated with her students' low engagement. She knew it was not so much rooted in what or how she taught, but in the disruptions of their insecure home lives and in their lack of skills and support to cope adequately. Many of her students experienced ongoing trauma and unusual responsibilities, were poor, and faced housing, employment, and food insecurity—similar characteristics to populations around the world that are most vulnerable to climate change. Understandably, these students were not available to learn.<sup>6</sup>

To restore her passion for teaching and her students' passion for learning, Parsanko-Malone intentionally integrated social and emotional learning with the instructional content that she taught in the classroom. This provided the tipping point in her class, pushing her students toward both engagement and real learning. She explained in an interview:

Once I began to see their trauma as the primary barrier to their academic success, I saw models of resilience throughout the environmental systems curriculum that I teach. From succession and evolution to symbiotic relationships, parallels quickly began to emerge. Ecology was a natural link to bridge their internal, emotional interactions with those of small and large communities. As we examined factors that influenced and changed climate on a global scale, students were asked to examine the factors that influence our classroom climate. As we recognized the consequences of a change to our classroom climate on individuals and communities, we were building the awareness and empathy that allows us to think critically as members of a global community.<sup>7</sup>

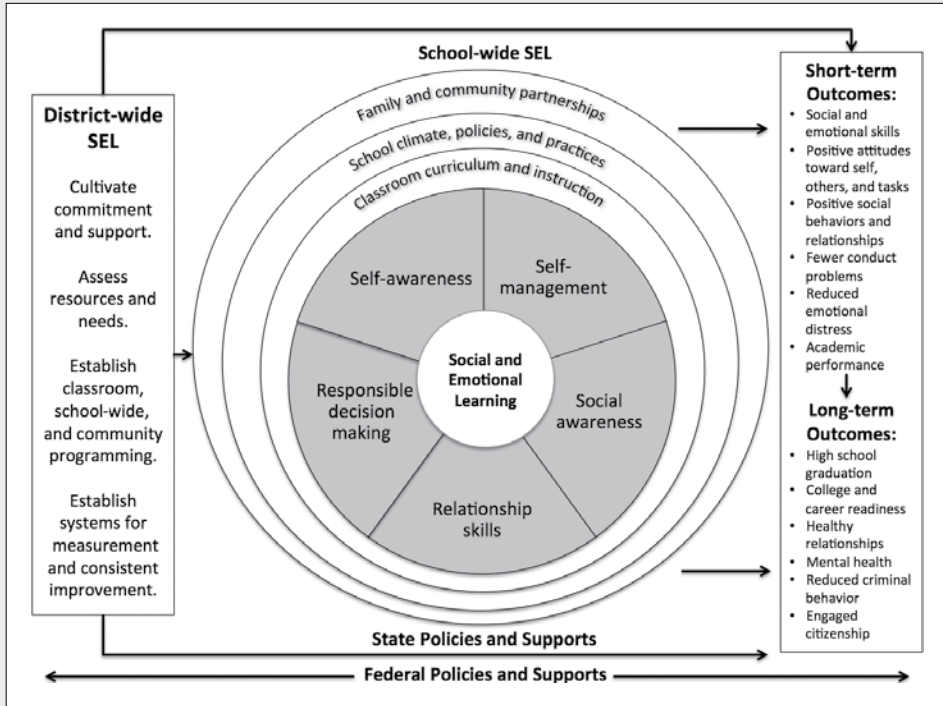
Parsanko-Malone's approach helps her students engage with learning and develop skills to generate solutions, rather than flounder in fear and anxiety or ignorance and denial. They are learning the science of their own emotions, as well as the social science of their communities. She says they are able to see relationships that they had not recognized before and are building skills that may increase their willingness and ability to engage in activities and habits that positively affect both society and the planet. This combination allows them to see themselves not as separate from the natural world, which leads to apathy and disregard, but as connected, with an enhanced sense of interdependence.<sup>8</sup>

## Taking Social and Emotional Learning to Scale

Increased efforts to systematically integrate social and emotional learning are needed. However, the challenges of making this learning mainstream across the global educational landscape are significant. Insufficiently trained teachers often receive inadequate systemic and strategic support in this area from administrators, and both may struggle because they have not yet developed social and emotional competence themselves. Similar to other mandated or recommended initiatives, social and emotional learning is often implemented with good will yet poor understanding and commitment on the part of the educational community. Furthermore, and despite evidence to the contrary, such learning is perceived to be cost prohibitive and to take precious time away from teaching academic content and preparing for high-stakes testing.

Overcoming these challenges requires attention to essential stages of scaling programs through proper dissemination, adoption, implementation, evaluation, and support for sustainability. Figure 8–1 provides a framework

Figure 8–1. Components of Systematic Programming in Social and Emotional Learning



highlighting the components of effective implementation of social and emotional learning in the United States, as well as summarizing student outcomes. Collaboration by the architects of program implementation at each stage builds relationships and trust, thereby creating engagement and influencing adoption with accuracy in other communities.<sup>9</sup>

CASEL has established the “SElect” designation to rate evidence-based social and emotional programs and shares best practice guidelines for district and school teams on how to select and implement programs. To be designated as SElect, a program must promote students’ social and emotional competence by providing opportunities for practice, as well as multiyear programming; deliver high-quality training and support throughout implementation to ensure success; and be supported by at least one well-designed study documenting positive impacts on student behavior and/or academic performance.

CASEL helps organizations choose SElect programs based on three key principles: 1) the school and district teams—not individuals—lead the selection of the program, engaging diverse stakeholders; 2) ongoing school and district planning, programming, and evaluation leads to more effective implementation; and 3) consideration of local contextual factors, including student characteristics and existing programs, is essential. These criteria align with best practices in implementation science for human service programs.<sup>10</sup>

RULER, a SElect program developed by researchers at the Yale Center for Emotional Intelligence, meets these criteria. It is grounded in emotional intelligence and ecological systems theories. RULER is an acronym for the underlying framework for the knowledge and skills of Recognizing, Understanding, Labeling, Expressing, and Regulating emotions—skills of social and emotional learning. The implementation goal for RULER is to foster emotional intelligence in children and adults by forming a learning community that values safe emotional expression and that infuses academic learning with social and emotional learning, while creating multiple vectors for spreading social and emotional competence. RULER has been adopted in eight large U.S. school districts, including Bridgeport Public Schools in Connecticut, Colorado Springs Academy District 20 in Colorado, and Seattle Public Schools District in Washington.<sup>11</sup>

In the first year of program implementation, RULER's four sequential “anchors”—the *Charter*, *Mood Meter*, *Meta-Moment*, and *Blueprint*—are taught, practiced, and integrated by all stakeholders, including classroom teachers, school staff (custodial, administrative, transportation), students, and families. The *Charter* is an agreement among stakeholders describing how they want to feel when working together, specific behaviors required to create and sustain those feelings, and strategies for handling conflict and undesired feelings. The *Mood Meter* is a self-awareness tool for students to develop emotional literacy—including a nuanced emotional vocabulary and a way of navigating through feelings—and for setting goals and strategizing around emotions. Educators also can use it to guide, maintain, or modify best mood states for learning tasks. The *Meta-Moment* is a self-regulation tool that students, parents, and educators can use to recognize common patterns, to choose to act consciously versus react, and to strategize a “best self.” Finally, the *Blueprint* is a problem-solving and empathy-building tool for emotionally laden past, present, and future challenges. It asks a student, “What happened,” “How did I (other person) feel,” “What caused me (other person) to feel this way,” and “What could I do differently next time?” In the second year of RULER



program implementation, the *Feeling Words Curriculum* is introduced and provides integration of emotional vocabulary into existing lessons.<sup>12</sup>

Another avenue to foster social and emotional learning is mindfulness, an ancient practice for cultivating attention skills and emotional balance. Educational research reveals that mindfulness awareness practices promote social and emotional competence and also can reduce stress. Mindfulness is relatively easy to implement in the classroom and is widely accepted by students, administrators, and teachers. A study of mindfulness in thirty Chicago public schools is following two thousand kindergarten through second grade students—primarily minority students from low-income families—over four years to determine if mindfulness training will help reduce the achievement gap of children living in poverty. The students participate in ten to twelve minutes of daily activity focused on breathing, physical sensations, or emotions, which has been shown to help control hyperarousal so that students can be more available to learn and to choose adaptive responses. Teachers in the study report increased instruction time gained through fewer behavioral issues, greater focus, and quicker refocus and recovery after transitions and upsets. Mindfulness also has proven to be a useful teaching tool at United World College Thailand. (See Box 8–2.)<sup>13</sup>

Regardless of efforts to prevent it, conflict in schools happens. An increasingly popular social and emotional learning approach to addressing conflict in educational environments is “restorative practices,” a model that brings together victims and offenders to explore the conflict: what harm was caused, who is responsible, and how it can be repaired. Notably, restorative practices are strength, not deficit, focused. They facilitate the development of social and emotional skills of empathy, inclusivity, relationship building, and problem solving. Many schools in Australia, Canada, the United Kingdom, and the United States have successfully incorporated restorative practices to reduce suspension and expulsion. These schools have reduced bullying, violence, and teacher stress sharply and have increased academic learning and parental involvement.<sup>14</sup>

Restorative practices turn conflict into a generative experience that keeps kids in school who otherwise may drop out. Restorative practices also are used simply to build connection through “connection circles.” Eric Rasmussen, a science teacher at Silver Creek High School in Longmont, Colorado, uses connection circles to build empathy and respect among his students and to facilitate discussion of academic content. For example, in his Earth science class, before starting a unit on climate change, he asks: “If someone had a different viewpoint than you, what is a strategy you could use to work with them?”<sup>15</sup>

### Box 8–2. Well-being Studies in Thailand

The taproot of United World College Thailand lies deep in the practice of mindfulness and social and emotional learning. Founded in 2006 as the Phuket International Academy, the school community joined the United World College (UWC) movement in 2016. It is a kindergarten through grade twelve (K–12) school with students representing more than eighty-six countries. The mission of the UWC movement is “to make education a force to unite people, nations, and cultures for peace and a sustainable future.”

Recognizing that how we treat one another is as important as how well we read or do math, all teachers, administrators, and many parents are trained and mentored in social and emotional concepts and skills and mindful meditation practices. All K–12 students attend “Wellbeing,” a curriculum that allocates three hours and twenty minutes per week to cultivate intrinsic motivation, empathy, and a sense of interdependence and interconnectedness. Wellbeing includes:

- 20 minutes per day for Time In: mindful movement, a stillness practice, and reflection
- 50 minutes per week for Council Meetings: a community-building practice of authentic expression and empathic, non-judgmental listening and receptivity
- 50 minutes per week for direct instruction on developmentally appropriate components of personal and social well-being, including personal and cultural identity, academic honesty, emotional and social intelligence skills, responsible engagement with social media, sex education, cultural competency, and health and substance use.

The educational goal of UWC Thailand is “to realize our highest human potential, cultivate genuine happiness, and take mindful and compassionate action.” This develops more self-aware and socially aware citizens who have a well-developed sense of self-efficacy and are able to more often choose to align their actions with a conscious and compassionate intention for the greater good. Developing these social and emotional capacities in the school’s stakeholders nourishes the UWC mission.

*Source: See endnote 13.*

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Barrowford Primary School in the United Kingdom uses restorative practices to build relationships and increase learning among its students. With this approach, the school’s educators strive to promote respect, responsibility, repair, and reintegration. They address conflict by encouraging students to constructively engage: listening to each other’s perspectives, being accountable to one’s actions, and offering amends for harm done. Through this, they have developed a vital learning community.<sup>16</sup>

Ideally, school-based efforts disseminate social and emotional learning skills and understanding community-wide through extracurricular programming, parent education, and collaboration with community partners. In Loveland, Colorado, instructors with the Changing Leads program at Hearts and Horses Therapeutic Riding Center help struggling students in the community achieve greater balance in their lives through carefully designed activities aimed at developing their social and emotional skills in the experiential setting of the riding arena. (See Box 8–3).<sup>17</sup>

## Prioritizing Social and Emotional Learning

To prioritize the development of those qualities that are needed to navigate turbulence—such as resilience, emotional regulation, collaborative capacity, civic-mindedness, empathy, and mental well-being—CASEL recommends freestanding educational standards for social and emotional learning in the United States. All fifty U.S. states have social and emotional learning standards for preschool, and four states have developed comprehensive standards for K–12. The large-scale Collaborative Districts Initiative aims to expand and improve programming in social and emotional learning by providing school districts with ongoing support that is critical to overcoming challenges. This support includes funding for planning, implementation, and monitoring to establish coordinated and sustainable, evidence-based programming and to achieve district outcome targets for social and emotional learning. To date, the Initiative supports eight of the two hundred largest school districts in the United States and is a model for best practices in social and emotional learning. External evaluations of participating districts have shown consistent improvements in school culture and climate, as well as student outcomes.<sup>18</sup>

Many international governments are leading efforts toward large-scale programming in social and emotional learning. In 2015, the Organisation for Economic Co-operation and Development noted that twenty-six of its thirty-four member countries at the time had stated social and emotional skill objectives. Many international programs align with the CASEL framework and are focused on individual as well as global citizenship to address twenty-first century challenges. Others are informed by cultural ideals or regional philosophy through stories of reciprocity and kinship, humility, morality, generosity, altruism, and interdependence, indicating essential ways of acting to promote living peacefully and supporting others in community. International collaboration among researchers, policy makers, and educators is critical in

### Box 8–3. Changing Leads: Social and Emotional Growth Through Equine-Facilitated Learning

Tamara Merritt, special programs director at Hearts and Horses Therapeutic Riding Center in Loveland, Colorado, and educational psychologist Pamela Barker teach middle-school students who struggle socially and academically in school and in life. Their program, aptly named Changing Leads, draws from the idea that a horse is in balance when it is on the correct lead. Often, humans need to “change their lead” in order to balance the weight of stressors in their lives. Horses and humans both strive for balance, and Changing Leads can help students achieve this balance through systematic development of social and emotional skills in an experiential setting.

As innately social creatures, horses mirror what humans are feeling and can facilitate powerful personal exploration and transformation of behavior. When students enter the natural, mostly silent world of the horse, their verbal and non-verbal behavior is reflected back to them. They experience a “felt sense” of connection, trust, empathy, confidence, accountability, safety, and peace. This creates the ideal environment for social and emotional skill building.

Each day begins with an hour participating in the “horse hook,” a classroom curriculum designed to enhance students’ subsequent interactions with the horses by front-loading the social and emotional skills that they will practice in the arena. Students interact with each other and with their adult equine-learning volunteers, sharing stories and activities to build social and emotional skills. Students then participate in ground and mounted work in the arena for two hours, doing activities that call on and strengthen those skills through interaction with their equine partners. For example, students learn to ride “boot to boot” (side-by-side, keeping their horses’ bodies and their own in perfect parallel) and learn to regulate their horses’ movement and their own bodies. Students also learn to calm their horses and themselves through centered posture, focused intention, and presence, and to trust their classmates to lead them blindfolded through an obstacle course representing a chosen challenge (for example, graduating from high school or avoiding school drama) while leading their horses.

Teachers who accompany the students to the ranch learn alongside the students, so that they, too, gain the skills and can incorporate the lessons and language learned into the school and classroom environment. This adult participation adds power to the transference of students’ skills to school.

Changing Leads’s outcomes include increased school attendance, school engagement, increased self-confidence, self-awareness, improved trust, greater emotional vocabulary, and heightened empathy among students. Participants also show significant increases in the life-outcomes measurements of self-efficacy, personal achievement, and relationship quality.

*Source: See endnote 17.*

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developing a shared framework (including terminology and concepts) to promote global mainstreaming of social and emotional learning.<sup>19</sup>

## Universal Social and Emotional Learning

A century ago, the idea that all children around the globe had the right and ability to learn to read and write was deemed naive. The average literacy rate globally is now nearly 90 percent. While social and emotional skills historically were fostered through a variety of venues, modernity requires that this responsibility fall on formal school systems. Due to the diligence of educators, legislators, and academics, the necessity of all children developing social and emotional skills through social and emotional learning is an attainable goal. No time should be wasted in making it happen. There is strong evidence that social and emotional learning will contribute to the capacity for creative and compassionate problem solving and to the development of the mutually responsible relationships that are required for mitigating and adapting to the effects of climate change and other sustainability challenges. As resources become scarce, shelter more insecure, inequality more widespread, and our global community more at risk, these skills and our empathy for each other will be tested.

Recalling Daniel in the wake of Hurricane Katrina, as an eighteen-year-old high school sophomore with aspirations for college but insufficient grades and limited resources to get him there, he did his best to adapt yet still faced inordinate social and emotional burdens from the storm. If the schools that he moved in and out of had been prepared with social and emotional skills training and had operated within a culture of social and emotional competence, perhaps they could have better supported Daniel and others facing similar upheaval. As it stood, far too many youth like Daniel faced these challenges without the support of school-based social and emotional training, with many suffering enduring wounds in the wake of the storm.<sup>20</sup>

There are thousands of children like Daniel who must now, or in the future, adapt to devastating changes that a warming planet has created. Simply leaving the development of social and emotional skills to chance versus deliberately teaching them to all children—particularly those living in communities on the front lines who are most vulnerable and those who may emerge as leaders and policy makers—puts all of our futures at risk. The ripple effect of teaching social and emotional learning universally can create a surge of compassionate, inclusive action that will build the individual and collective resilience to thrive in turbulent times.

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**THE WORLDWATCH INSTITUTE**, in its flagship publication, analyzes how we can equip students with the skills to navigate the turbulent century ahead. With global environmental changes locked into our future, what we teach must evolve. All education will need to be environmental education, teaching students to be ecoliterate, deep-thinking, and deeply moral leaders, ready to face unprecedented challenges. *EarthEd* explores traditional areas of environmental education such as nature-based learning and systems thinking, as well as new essential topics including social-emotional learning and the importance of play. This latest edition of *State of the World* examines how, by rethinking education, people worldwide can better adapt to a rapidly changing planet.

“In our shared time on Earth, we must create a new Earth Education. We must help future generations learn the skills necessary to survive the rapid changes ahead—including moral leadership and conflict resolution—and engender a deep connection with other species, as well as our own. This book, and the Earth Education it defines and illuminates, points us toward that new path.”

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