



National Action Plan for  
***Educating for Sustainability***



# Attributions

## PUBLISHED BY:

**Houghton Mifflin Harcourt™**  
222 Berkeley Street  
Boston, Massachusetts 02116

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The National Action Plan for Educating for Sustainability has been made possible through the efforts of many dedicated volunteers, staff members, and others in the Houghton Mifflin Harcourt and Center for Green Schools communities. Additional thanks to the many individuals who contributed comments, suggestions and ideas in a volunteer capacity to the development of each chapter, highlighted as “industry leaders” and “exemplars” for their vision and leadership. Thanks also to Debra Rowe and the U.S. Partnership for Education for Sustainable Development; to Rachel Gutter, Emily Neagle, Anisa Baldwin Metzger and David Tanner at the U.S. Green Building Council; and to Mary Cullinane, Jessica Hubbard, Emma Doherty, Annalisa Amicangelo, Linda Bruce, Jesse Campbell, Karen Temmel, and Martha Pfeiffer at Houghton Mifflin Harcourt.

Finally, thanks to Houghton Mifflin Harcourt for their generous support, without which this National Action Plan would not be possible.

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# Introduction

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**Education for Sustainability. It's a tall order in our ever-changing world. Global interdependencies are greater than ever, sea levels are rising, the gap between rich and poor is getting wider, and population growth is causing a scarcity of food and water. It would be tempting to stick our heads in the sand and hope that someone else will take care of these problems. Instead, school principals, superintendents, teachers, and students are stepping up to the plate and taking responsibility for shaping a sustainable future. Listen to Principal Alison Suffet Diaz describe the changes at her school:**

Today, Environmental Charter High School is a thriving green oasis in the concrete jungle of south Los Angeles County. When someone steps onto the campus, they know that this school is different. Students compost, make bio diesel, repair bicycles, harvest rain water, do field research, and teach local community members how to do all of this. While they start out as ninth graders more than two years below their grade level, by 11th grade, they have caught up to or surpassed their grade level. Last year, 92 percent of graduates were accepted to four-year colleges. Nearly all of our students come from households below the poverty line and from families who have never attended college (Suffet Diaz and Ruffalo, 2010).

Isn't it striking that schools with a social purpose also become schools where students are more academically successful? Making learning compelling and creating strong democracy go hand in hand in schools that are educating for sustainability. Let's be clear about what we mean by the term Education for Sustainability (Efs). Internationally, this movement is referred to as Education for Sustainable Development. The UN document [Report of the World Commission on Environment and Development: Our Common Future](#) offers this definition: "Sustainable development is development that meets the needs of the present generation without

compromising the ability of future generations to meet their own needs" (World Commission on Environment and Development, 1987).

In North America, we've woven together the best intentions of environmental education, place-based learning, community-based education, and other progressive education reform initiatives to create **Education for Sustainability**, defined by the [Cloud Institute](#) as "a transformative learning process that equips students, teachers, and school systems with the new knowledge and ways of thinking we need to achieve economic prosperity and responsible citizenship while restoring the health of the living systems upon which our lives depend" (Cloud Institute website, n.d.).

What holds all these approaches together is the idea of intergenerational thinking, a commitment to thinking about the needs of seven generations down the line, not

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just the here and now. And it has been widely agreed that by needs, we mean the 3 Es—environment, economy, and equity. Therefore, Education for Sustainability aspires to educate students who have the ability, ambition, and knowhow to make decisions that balance the need to preserve healthy ecosystems with the need to maintain vibrant economies and equitable social systems in this generation and in all generations to come.

Mind you, Efs isn't just a new course at a few schools. It's a pedagogy that should undergird the curriculum and

facilities management systems of all our schools. When implemented comprehensively, EfS increases student achievement and delivers social, health, economic, and ecological benefits to the broader school community. In schools that practice EfS, teachers engage students in understanding issues and solving real problems that face citizens and community leaders. They address questions such as, how can we reduce the ecological footprint of our schools and communities? Can we connect local farms with our school lunch programs? How can the school serve as a place to celebrate the many diverse cultural traditions that exist within the school's neighborhood and communities? Is there anything we can do locally to help hurricane victims in Haiti? How do we harness the school curriculum to help local government officials improve the local river's water quality? And will community internships prepare students for careers more effectively than sitting behind the desk and copying sentences off the board?

John Dewey, American education reformer in the early 20th century, articulated the isolation of life from school and school from life, which wastes the learning opportunities rife in the community and wastes children's energy in not addressing community challenges and needs (Dewey, 1959). Following in Dewey's footsteps, in the midst of the Great Depression, another American educator, George Counts, asked the provocative question, *Dare the School Build a New Social Order?* (Counts, 1932). In other words, should schools play a role in making people's lives better, addressing social inequities, and building a new future? In the early 20th century, Dewey and Counts were united in their sense that the classroom and the school should be a laboratory for democracy. Classroom postal systems, student governments, and student-run school stores helped children understand the systems and responsibilities of participating in a democratic society.

This approach is even more relevant today, and the authors of this action plan articulate the steps we need to take in order for schools to play a leadership role in changing the social order. In the 21st century, the school should operate as a healthy ecosystem, serving as a model of American culture and global interdependence. Envision the school as a lighthouse and an exemplar, pointing the way toward community and global sustainability and setting a model for students to carry forth beyond the classroom and graduation. As one Environmental Charter High School student says, "We will not only be prepared

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for college but also lifelong learners and activists that know how to make a difference in this world."

In this role, the school building will model energy conservation, toxins reduction, and healthy food production. The school lives of students and teachers will represent a balance of physical exercise and creative thinking. The quality of relationships between administration, teachers, and parents will illustrate respect and collaborative decision making. The school, especially at the middle and high school levels, will be an incubator for business innovation. The school grounds will be managed for energy production, play and recreation, wildlife habitat, and community interaction. In sum, the school aspires to be a model healthy community and a thriving ecology.

EfS was officially "born" as a new field of inquiry in 1992, and thought leaders have been asking what students need to know, to be able to do, and to be like if we are to increase the possibility that humans and other life can flourish on Earth indefinitely. The rich collection of answers and subsequent field work has propelled the movement to a place where, today, elements of EfS exist to some degree in schools across the country and around the world. We don't yet know the total number of schools that have engaged in any of the EfS approaches such as environmental education, place-based learning, or expeditionary learning; nor do we have a firm grasp on how many have placed a sustainability lens on instructional attributes such as systems thinking, lateral thinking, metacognition, or creativity. We do have a sense of the EfS support community, based on the activities of this action plan's contributing authors alone:

- 80 NGOs contributed to the creation of the [U.S. Department of Education's Green Ribbon Schools](#) program.
- Dozens of existing federal programs, grants, and initiatives related to healthy, high-performing schools are connected through the U.S. Department of Education's Green Ribbon Schools program.

(continued)

- 2,080 organizational members have joined the [No Child Left Inside Coalition](#).
- 25 organizational members participate in the [Coalition for Green Schools](#), representing over 14 million school support professionals, including both national teachers' unions, the National PTA, and school administrator associations.
- 12 states and dozens of school districts with policies that promote and support EfS are cited as models in this action plan.
- 10s of millions of students have been reached by EfS resources produced by organizations referenced in this publication.

The educators, students, and supporters who constitute

## Denver Green School

While on paper the [Denver Green School](#) appears to be a typical neighborhood Denver public school, it has above-average aspirations for its students and community. The school partners with Denver Urban Gardens to create thriving vegetable and flower gardens on its school grounds. In the Denver Green School gardens, teachers implement literacy, math, and science curricula lessons—lessons that fulfill Colorado state standards. Students collaborate with community members to grow corn, beans, squash, and dozens of other food products and to develop a deeper understanding of the environmental, economic, and equity elements (and the interplay between them)—making this so much more than just a school project. Consider the ways in which the school lives out the “3 Es:”

### CREATING A HEALTHY ENVIRONMENT

Converting abandoned lots into plant production means that some of the carbon dioxide from car exhaust is captured in green leaves, thereby lowering the amount of greenhouse gases in the air.

### SUSTAINING A VIBRANT ECONOMY

The food grown in the garden gets used in school lunch programs, reducing school expenses and therefore conserving taxpayer dollars.

### IMPROVING ACCESS TO HEALTHY LIVING ACROSS THE SOCIOECONOMIC SPECTRUM

Some of the garden production goes into the Denver Youth Farmers' Markets and so makes healthy, inexpensive food available to low-income families, who are statistically inclined to be malnourished and overweight.

the EfS community in the United States are dedicated, and their numbers are growing. Research tells us that EfS improves student learning and standards achievement; produces better behavior and attendance; develops in students a greater awareness of community and a greater appreciation of the democratic process; and has meaningful effects on teacher attitudes, health, resource efficiency, and taxpayer dollars (Becker-Klein et al., 2008; Duffin, 2006; AED, 2007; Sobel, 2008; Department for Children, Schools and Families, 2010; Ofsted, 2009; Gayford, 2009; Barratt-Hacking et al., 2010; PEER Associates, 2010). There is emergent agreement about the best instructional and assessment methodologies and about the urgency of learning and practicing sustainable mindset behaviors. The burgeoning EfS movement is rich with opportunities to develop, approve, and implement standards, policies, and best practices.

Exemplary models of EfS exist in schools across the country. As we learn more about how to further understand and disseminate tools in support of widespread adoption of EfS practices, we look to exemplary models of EfS that exist in schools across the country. The [Denver Green School](#) is an example of a school community that is helping to create the sustainable future its students want.

Schools with similar initiatives are being recognized by the [U.S. Department of Education's Green Ribbon Schools](#) program, established in 2011. This program honors schools and districts that have demonstrated exemplary progress toward three aspirational goals: zero environmental footprint (including energy, water, waste and carbon); a positive impact on occupant health and performance; and all graduates demonstrating environmental literacy. The three pillars—environmental impact, human health and ecoliteracy—act as a simple, elegant organizing principle for schools journeying toward whole-school sustainability.

Any number of the 142 schools and 14 districts across the country that have received the Green Ribbon award can attest to the virtues of creating mutually beneficial interactions amongst the three pillars in their school community. When done right, learning outcome improvements can be directly correlated to improvements in the health, safety, and efficiency of the school, and vice versa.

So, why is now the time to release a National Action Plan for Educating for Sustainability? Depending on the values you most cherish, the answer varies. For those who are concerned that our rate of resource consumption is outpacing the capacity of our planet to sustain life, the answer is that we need to begin our course correction today in order to meet a deadline in the future at which our planet can sustain us. For those concerned with our country's ability to compete in the global economy, the answer is that our education system should prepare graduates with the skills, competencies, and behaviors to access any career or education opportunity. For those who worry that our local, state, and federal agencies lack the fiscal ability to provide an equal education across class, race, gender, and religious and ethnic communities, the answer lies in the prospect of EfS as a strategy that improves budgets, learning, and attitudes. Perhaps most timely is the advent of the Common Core State Standards and the Next Generation Science Standards, which both emphasize problem solving, systems thinking, and deep understanding, just as EfS does.

This National Action Plan for EfS intends to translate a million wishes into a shared vision. As was witnessed during a convening of 32 K–12 school and education leaders in June 2013 who were asked to envision an ideal future state of education in our country, learning from history in order to invent our future is a key attribute of education for a sustainable future. Representing millions through the networks they reach, attendees agreed on a shared vision that *all students graduate educated for a sustainable future through the integration of the environment, economy, and equity, with the ability to apply systems thinking to problem solving and decision making by 2040.*

Based on this shared vision, the Center for Green Schools asked 15 experts in their respective fields to flesh out specific pathways and action items that will align and propel our efforts to realize our desired future state. The 15 authors of this action plan bring a collective 341 years of experience in the education sector as their credentials for asserting these key recommendations.

This EfS agenda requires new approaches to preservice and in-service teacher professional development, a targeted research agenda, revised conceptions of student assessment, updated school policies, and inspired leadership. The authors in this collection are in it for

the long haul, and together we've created a vision of bringing EfS into the fold of American schools by 2040. To introduce best practices from various sectors, each author has collaborated with an industry leader in framing their recommendations. Case studies illustrate lighthouse examples of schools and districts already taking the lead in implementation. This collaborative process in itself is illustrative of the ethos of partnership and systems thinking that will be required to bring constructive change to our schools and communities.

It is our hope that, upon reading the recommendations we set forth through this National Action Plan, you are compelled to take action to invent the future you wish to be a part of.

