THE CENTER FOR GREEN SCHOOLS

Houghton Mifflin Harcourt

National Action Plan for

Educating for Sustainability

Attributions

PUBLISHED BY:
Houghton Mifflin Harcourt™
222 Berkeley Street
Boston, Massachusetts 02116

The Center for Green Schools at the U.S. Green Building Council
2101 L Street, NW Suite 500
Washington, D.C. 20037

LEAD AUTHORS
David Sobel, Antioch University New England
Susan Jane Gentile, Antioch University
Paul Bocko, Antioch University New England

LEAD REVIEWER
Jaimie P. Cloud, The Cloud Institute

CONTRIBUTING AUTHORS
Jennifer Cirillo, Shelburne Farms
Todd Cohen, The SEED Center, an initiative of the American Association of Community Colleges
Allen Cooper, National Wildlife Federation
Kimberly Corrigan, Facing the Future
James Elder, Campaign for Environmental Literacy
Lisa A. W. Kensler, EdD, LEED Green Associate, Auburn University
Victor Nolet, PhD, Western Washington University
Jennifer Seydel, PhD, Green Schools National Network
Craig Shealy, PhD, James Madison University and International Beliefs and Values Institute
Cynthia Thomashow, IslandWood
Cynthia Uline, PhD, San Diego State University
Jenny Wiedower, LEED Green Associate, U.S. Green Building Council

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.

Professional Development

Jennifer Cirillo, Director of Professional Development, Shelburne Farms

***Industry Leader: Stephanie Hirsh**, Executive Director, Learning Forward*

As we work to change the status quo in schools, we must engage all stakeholders in transformative learning and realign the purpose of education toward a sustainable future. Educators are at the heart of this work, and professional learning in Education for Sustainability (EfS) is necessary in order to educate for a healthier and more just future. What does that learning look like, and how is it different from what most educators experience? Research suggests that while most teachers engage in professional learning, it is neither effective nor sufficient (Darling-Hammond et al. 2009). If we wish to graduate students with the skills, knowledge, and attitudes necessary to meet the challenges and opportunities of the future, professional learning must be designed toward this outcome. The goals of professional learning in EfS include holding high standards for all students, increasing student achievement and teacher effectiveness, and building competence in the habits of mind (i.e., characteristics displayed when an individual engages in developing understanding) of resilient and sustainability-focused thinkers. Learning Forward, a national leader in professional learning, has developed standards that define elements of professional learning, which could be aligned with EfS professional development strategies (Learning Forward, 2014). EfS professional development providers should utilize the Learning Forward standards to pursue the following recommendations for professional learning with a lens of sustainability.

1 LEARNING DESIGNS AND IMPLEMENTATION.

By 2017 Leaders in the field of professional development should create guidance for creating integrative, holistic professional learning methodologies and materials grounded in EfS. Transformative professional learning is necessary to help educators understand and implement the practices that are required for a sustainable future. Professional development providers, K–12 associations, and state education departments should take a whole-system approach, engaging stakeholders and linking multiple educational initiatives under the umbrella of sustainability. This might include campus ecology and culture, curriculum development, cafeteria practices, and community relationships. Knowing where we want to go—a sustainable future—will help us better design professional learning experiences. These opportunities should model pedagogical approaches of EfS such as place-, project-, and problem-based learning and service learning. We want teachers to create relevant, focused, challenging, sustained, significant learning experiences for students; therefore, professional development providers should provide the same experiences for teachers. Research suggests that for professional learning to be effective, teachers need an average of 49 hours per year to ensure substantial impact on teaching practices (Wei, Darling-Hammond, and Adamson, 2010). More often than not, teachers engage in one-day workshops which have little to no effect on student learning (Pianta, 2011). Follow-up or embedded support and assessment of short- and long-term impact helps teachers move beyond what is often referred to as the "implementation dip" where they struggle with a new practice and don't necessarily see immediate changes in student achievement (Center for Public Education, 2013).

2 PROFESSIONAL LEARNING COMMUNITIES (PLC).

By 2016 Teachers, principals, and district leaders should extend current PLCs that model reflective practice, support collaborative learning, and develop authentic communities of learning, inquiry, and practice in schools to include a sustainability-related lens. Such an orientation can expose teachers to pedagogical approaches and related research and support them as they begin to implement EfS strategies in their classrooms (Center for Public Education, 2013). Professional development associations and technical assistance providers should link their tools and resources to sustainability efforts and provide case studies of how sustainability-oriented PLCs function.

3 LEADERSHIP AND RESOURCES.

By 2020 The EfS community should work with school districts to provide educators with access to professional learning coaches fluent in EfS. EfS professional learning must be designed to allow for teacher voice, leadership, agency, and wellness. States and districts have a responsibility to create the conditions for teachers to inquire, take initiative, implement change, and reflect. Like most professional learning, the greatest and most needed resources are time and support. Well-prepared and supported professional learning coaches who possess deep understanding of EfS can help educators at all levels integrate EfS throughout the learning agenda.

4 OUTCOMES AND DATA.

By 2016 Define performance indicators for measuring the effectiveness of EfS-aligned professional learning. The effectiveness of professional learning is measured according to its impact on educator practice and student results. Potential EfS impact measures may include

- Educator practice profiles that indicate use of EfS pedagogies (for example, project based, service learning), integrative teaching, self-assessment strategies, and use of sustainability and community resources (for example, social, historical, environmental, places or organizations outside the classroom);
- Formative and summative assessments of students' understanding of "big ideas" of sustainability cross-cutting concepts in the Next Generation Science Standards that can provide a clear connection to sustainability habits of mind;
- School systems data such as campus sustainability and school culture practices, such as composting, energy use, student behavior, attendance, and student agency measures.

As we rethink the purposes of education, we can also think critically about the outcomes. Outcomes of an EfS approach are a healthier and more just world. How we achieve those outcomes is not always obvious, and understandings of appropriate methods are not always shared. In general, professional learning in EfS is oriented toward educator competencies in creating a sustainable future—the knowledge, skills, and attitudes required to produce the same competencies with students. Learning opportunities should build educators' conceptual understanding of sustainability and associated "big ideas," help educators master pedagogical approaches that are central to EfS, and build collegial inquiry, evaluation, and reflection.

EXEMPLAR

Children's Environmental Literacy Foundation

The Children's Environmental Literacy Foundation (CELF) is a 501c3 founded in 2003 to make EfS an integral part of every school's curricula and culture to prepare current and future students to be active and responsible citizens of a sustainable world. Based in New York, CELF has worked with 2,800 schools and 7,500 teachers to help integrate sustainability into the curriculum, practices, and culture. They exemplify the promising practices and standards in professional learning by building strategic relationships and providing ongoing coaching to transform schools. As a Clinton Global Initiative Commitment to Action, they are working with New York City public schools to realign schools' goals and initiatives with a lens of sustainability. CELF provides professional learning opportunities, mentoring from experts in the field of education and EfS, and close collaboration with teacher-leaders and principals. Founder and Director Katie Ginsberg says, "K–12 education is our single greatest opportunity to make the large-scale change necessary to address the complex issues of the future. We believe collaborative partnerships and learning with teachers at the center are essential to this work" (Ginsberg, 2013).

Take Action

1. Understand the purpose of professional learning and what makes it effective. Know that change takes time and support your schools through initial assessment efforts that may not reflect the learning that is truly happening.

2. Vote and support school budgets or school schedules that provide additional time for teacher collaboration and professional learning. In addition, support sustainability coaching and coordinator positions at the district or school level.

3. Advocate for EfS as a core competency for professionals in the school. Ensure that educators get the support they need to develop requisite skills and knowledge.

4. Consider offering your expertise in sustainability to schools. Do you keep bees, write grants, or facilitate meetings? Think about what skills you might contribute to your school to support sustainability efforts.