



National Action Plan for
Educating for Sustainability



Attributions

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Student Assessment

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An assessment model for sustainability education requires us to think beyond the current models of high-stakes tests. We must consider how to assess problem solving, systems thinking, deep conceptual understanding, creativity, and innovation. Likewise, we must consider how attitudes and values related to diversity of life, conservation, and preservation help us to make decisions and set priorities that will affect our future. We need to rethink the notion that some students will succeed in school, while others will inevitably fail, and create an assessment system that empowers school leaders, teachers, and students to plan and prepare for a sustainable future.

LEADERS SHOULD CREATE AN ASSESSMENT MODEL FOR EFS THAT EVALUATES THE FOLLOWING:

1 ASSESSMENT OF HIGHER-ORDER THINKING SKILLS AND ALIGNMENT TO STANDARDS.

This dimension of achievement asks students to demonstrate understanding, proficiency, and application of a clearly defined body of knowledge and skills related to sustainability that can be synthesized from existing standards: [Common Core State Standards](#), the [Next Generation Science Standards](#), and emerging national social science standards. The new standards call for the development of more complex and transferable skills than what has been expected in the past. [PARCC](#) and [Smarter Balanced](#)—the two Department of Education-funded, state-led consortia developing assessments aligned to the Common Core—have attempted to respond with an increase in performance assessments, but much remains untouched in terms of documenting the deeper learning and skills that emerge when students undertake research, analysis, and problem solving to address real-world issues and concerns.

Assessments could include a combination of mixed-method approaches, open-ended response items, and in-depth performance tasks that require students to solve problems, think critically, apply their learning to authentic sustainability issues and topics, and communicate clearly about the interactions of social, political, economic, and biogeochemical systems. These performance tasks could include research, experimentation, and evaluation; or, they could focus on modeling, design, and problem solving.

2 GLOBAL AND ECOLOGICAL CITIZENSHIP SKILLS.

This dimension of student achievement relates to noncognitive skills that support global citizenship: working appropriately and productively with others, leveraging the collective knowledge of groups when appropriate, bridging cultural differences, and using differing perspectives to increase innovation and work quality. These skills also enable students to learn from and work collaboratively with individuals representing diverse cultures, religions, and lifestyles in a spirit of mutual respect and open dialogue in personal, work, and community contexts and encourage understanding of other nations and cultures, including the use of non-English languages. Skills that support global and ecological citizenship result in treating the natural world as an integral part of the community, as expressed through conservation and stewardship of natural resources and of other organisms.

Assessments could include collaborative, community-based projects that address social justice concerns in the community and are reported via an oral, written, graphic, and multimedia presentation and a graduation portfolio that demonstrates the student's ability to collaborate and engage in effective interpersonal, global, and ecological relationships.

3 CRITICAL SKILLS FOR INNOVATION.

This dimension of student achievement is assessed when students transfer their knowledge and skills to authentic projects that address issues and concerns of the 21st century. Students use knowledge and skills to solve complex problems and create a body of work that demonstrates innovation and creative application. Students learn to prioritize, plan, and organize themselves and others efficiently to achieve the goals of a specific project or problem. Students learn to handle multiple goals, tasks, and inputs, while understanding and adhering to constraints of time, resources, and systems.

Assessments would include extended performance tasks that use scenarios that relate to sustaining the balance of life on earth and that contribute to a real-world audience to replicate the ways in which these abilities will be used in college and career contexts. These projects may require students to work with local professionals and could include internships, partnerships, or workplace mentors.

2014–2018

Building on existing EfS thought leadership, continue to engage stakeholders in a rich conversation to clearly articulate what we expect students to know and be able to do. Monitor and learn from initiatives that are supporting deeper learning and rich performance assessments; for example, the [State of New Hampshire](#), [High Tech High](#), [Expeditionary Learning](#), [Hewlett Packard Deeper Learning Network](#), and the [New York Performance Standards Consortium](#).

2014–2030

Develop a national network of leaders and researchers who define and lead the transformation of the current assessment models to incorporate higher-order thinking skills, EfS Standards, Global and Ecological Citizenship skills, and Critical Skills for Innovation.

2030–2040

Define and implement a nationwide assessment model in middle and high schools that requires all high school graduates to demonstrate proficiency in higher-order thinking skills, EfS Standards, Global and Ecological Citizenship Skills, and Critical Skills for Innovation.

Take Action

When schools are designed with EfS at the core, they will successfully prepare students for the 21st century. To support curriculum and teaching focused on EfS, schools will require assessment systems grounded in sustainability that include performance assessments, and they will need portfolio systems that require students to undertake projects and create products that affect their community in positive ways.

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Expeditionary Learning

Expeditionary Learning (EL) (www.elschools.org) is a growing provider of curriculum and professional development services to teachers and school leaders across the country. The EL model combines an interdisciplinary instructional approach with ongoing training and coaching for teachers and school leaders. The EL curriculum uses an experiential project-based methodology in which students conduct research projects to share with outside audiences. Learning expeditions—case-studies of academic topics—often bring together teachers from different subjects to coordinate shared projects. EL's network includes a total of 161 schools in 29 states and Washington, DC, serving 46,000 students and 4,000 teachers and leaders.

Expeditionary Learning schools include an [expanded view of student achievement](#) that takes into account three distinct dimensions: Mastery of Knowledge and Skills, Character and Engagement, and High-Quality Student Work. Successful EL schools achieve exemplary results in each of these dimensions and build assessment systems and practices that treat the dimensions of achievement as an interconnected whole. These assessment practices require students to continually assess and improve the quality of their work through the use of models, reflection, critique, rubrics, and work with experts. Students maintain a portfolio of work and report regularly to their parents and mentors through Student-Led Conferences and Passage Presentations. During these formal presentations, students are required to talk directly about the development of knowledge, skills, habits of work and learning, and how the projects they have completed have helped them to grow as citizen-scholars. Staff and students also engage in ongoing data inquiry and analysis (examining everything from patterns in student work to results from formal assessments), disaggregating data with students to recognize and address gaps in achievement. Students in EL schools are also assessed using traditional summative assessments. In schools that implement the EL model with fidelity, achievement scores significantly exceed state and district averages.