

Education for Sustainability

Professional Learning for K-12 Educators



Understand



Connect



Extend



Apply

Why Education for Sustainability?

Education for Sustainability (EfS) prepares today's students for challenges of tomorrow.

EfS students make real-life decisions that balance personal well being with needs of local and global communities.

EfS teachers engage their students in an interactive learning process that applies the habits of systems thinking needed to meet the challenges of the 21st Century.

EfS Schools promote a collaborative and cooperative learning community in which learning extends beyond the classroom connecting to real world social, economic, and environmental problems.

Our Approach

CELf's professional learning model engages educators in interactive learning experiences that help them view their work with students through the lens of sustainability. CELf's facilitators work side-by-side with teachers as they design programs that connect the Big Ideas of Sustainability into their existing curricula and create new EfS classroom and school-wide learning opportunities.

CELf applies the community-building principles of EfS in every aspect of our work, creating a learning community among workshop members, CELf facilitators, and with related outside agencies when appropriate. We believe that when teachers belong to an effective culture of collaboration and cooperation, they are inspired to create this culture with their students. CELf facilitators deepen the learning experience with interactive hands-on activities that can be taken back to the classroom for immediate implementation.

"CELf was extremely attentive to our individual school's needs, realizing that we all have different backgrounds. I was so glad that I was able to attend with my staff and was given sufficient time to coordinate with them."

- PS 110 Principal Anna Cano Amato, participant at CELf's Greenpoint Summer Institute



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One Day Workshops

EFS 101: Foundations of Education for Sustainability

“What is Educating for Sustainability? What practical ideas, principles, and activities can I share with my school community?” Participants will be immersed in the essential concepts behind designing any Educating for Sustainability learning experience, while becoming a member of CELF’s Professional Learning Community. Participants will engage in EfS activities and best teaching practices that demonstrate how sustainability provides an integrating context for the content they are already teaching. CELF will help participants apply the habits of systems thinkers to support efforts to build and sustain a collaborative school learning community.

Applying EfS: The Big Ideas of Sustainability in your Curriculum

What do the key practices and principles of Education for Sustainability look like in action? Participants will build conceptual understanding of the 12 Big Ideas of Sustainability through interactive games, discussion and small group work. Concepts like *interdependence, cycles, equilibrium and long-term effects can be readily connected to existing curriculum. CELF will share real world models that put the Big Ideas of Sustainability into practice across content areas and grade levels. CELF will support participants as they learn to identify and emphasize the Big Ideas at play in their classroom, school and community.*

Applying the Habits of Systems Thinking In EfS 1 *(Prerequisite: Wkshp 1)*

The complexity of life is on display on the playground, at home, in the forest, at the store, and in our local and national governments. Both natural and human systems function within a network of complex relationships and are marked by interdependencies, dynamic equilibrium, limits and long-term effects. Viewing the critical issues of society and daily life through the lens of sustainability while applying the habits of systems-thinking can be one of the most empowering skills to teach students today. During this workshop, participants will engage in activities that will deepen their understanding of complex systems and prepare them to teach their students to think in systems.

Applying the Habits of Systems Thinking In EfS 2 *(Prerequisite: Wkshps 1,2)*

This workshop builds on the foundation established in *Applying the Habits of Systems Thinking In EfS1*. During this workshop CELF will build on the established foundation and dig deeper into the dynamics of complex systems, investigating feedback loops, leverage points, long-term effects and change over time. An additional focus will be the applications of Systems Thinking in the classroom and in curriculum design.

Ability to Make a Difference 1: Place, Problem, and Project-Based Learning in your Classroom

(Prerequisite: Wkshp 1)

To be future leaders, advocates and engaged citizens, students must first connect to the world outside of the classroom. Developing a meaningful and joyful connection to place is fundamental to creating a life-long sense of responsibility to one's community, environment and the world. Workshop attendees will participate in activities that engage students in their immediate surroundings and explore models of interdisciplinary Place, Problem and Project-Based Learning (P3) that also balance the 3 Es of Educating for Sustainability: ecology, economy and equity.

Ability to Make a Difference 2: Place, Problem, and Project-Based Learning in your Classroom *(Prerequisite: Wkshps 1,4)*

“Be the change you wish to see in the world!” By building on the foundations of the Ability to Make a Difference 1 workshop, participants will activate this quote in their classroom practice and curriculum. This experiential and interactive workshop will include scaffolded and collaborative work time to refine or develop a P3 unit that empowers students to create change in their community.



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Mini Workshops (all 1.5h or 3h)

1.5 hours: Understand & Connect: Participants will build an introductory understanding of the principles and practices in an interactive environment.

3 hours: Understand, Connect, Extend & Apply: In addition to building an introductory understanding of the principles and practices of the Understand & Connect Presentation, participants will begin applying them to their curriculum and practice.

The Big Ideas of Sustainability 1: What are the Big Ideas of EfS?

- Foundations of EfS and Defining Sustainability
- Core Concepts in Real World Contexts
- Applying the Big Ideas to the classroom and the school community

The Big Ideas of Sustainability 2: Connecting to Place and Community (Prerequisite BIS1)

- Your Community as Curricular Context
- Students in the Field
- Student Advocacy and Community Partnerships

Students as Changemakers: Taking Recycling to the Next Level

- Do You Know Your Stuff? Recycling as Curriculum
- Complex Systems, Cycles and Change Over Time, Long-Term Effects
- Social Responsibility and Student Advocacy

Cycles, Interdependence and Complex Systems

- The Big Ideas of Sustainability
- Dynamic Relationships in Social and Natural Systems: Flows and Feedback Loops
- Leveraging Change in a System: Responsibility and Advocacy

Your Campus, Your Classroom

- Facilities and Grounds as a Learning Resource
- Building a Teaching Team
- The 3Es (Environment; Economy; Equity) of Sustainability

Your Community, Your Classroom

- Community as a School Resource
- Community Experts who can enhance Your Curriculum
- Local Culture, Current Events and Issues

Bringing the Outdoors In, Bringing the Indoors Out: Connecting to Nature

- Pedagogy, Place & Play: Nature in the Classroom
- Accessible Field Learning
- School Gardening in your Curriculum

Teaching the LifeStraw®: Water Science and Service

- Water in our Daily Lives
- Cycles: Where does water come from; where does it go?
- Real Water Issues: Environmental Health, Equity and Economics



ENVIRONMENTAL LITERACY

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Leadership Training In Sustainability

Taking EfS to the Next Level: School-Year Consultant Model

Commit to a school-wide approach embracing Education for Sustainability as an integrated context for learning across grade levels and subject areas, and in your learning community at large. This customized dynamic process begins with professional development workshop(s) and continues with on-site strategic visits, implementation support, and further professional development workshops as requested. CELF facilitators regularly engage in co-teaching EfS lessons in the classroom, partnering in school-wide professional development workshops, and aligning EfS standards to the school's existing curriculum standards and priorities.

Inquiry-Based Approaches Applied:

Integrating EfS into Current Curriculum
Designing Interdisciplinary Thematic Units
Building Community
Connecting to Community
Service Learning

Implementing School-wide Sustainability Initiatives
Project-Based Learning
Place-Based Education
Field Learning
Youth Activism Projects