Systems Thinking In Education for Sustainability (EfS)

**Grades** 5 - 12

**Subject Areas:** English/Language Arts, World (Foreign) Language, History/Social Studies, Science, Math, Arts, Technology

**Session Description:** Real life is complex. Both natural and human systems function within a network of complex relationships and are marked by interdependencies, dynamic equilibrium, limits and long-term effects. We see it on the playground, at home, in the forest, at the store, and in our local and national governments. Learning to view the critical issues of society and daily life through the lens of systems thinking and sustainability can be one of the most empowering skills we teach students today. During this workshop, you will participate in activities that will deepen your understanding of complex systems and prepare you to teach your students to think in systems.

**Outcomes:** After taking this workshop, participants will:

- be able to use EfS as a lens through which to view their curriculum
- connect the big ideas of sustainability to their practice and learning community
- define a system and its characteristics
- identify different 'real life' systems, their components
- identify feedback loops and what impacts them
- return to their classrooms with practices that use systems to engage students in interdisciplinary learning experiences

**Context and History:** CELF’s mission is to make sustainability education an integral part of every school’s curricula and culture, from kindergarten through high school. We believe that it is as important for students to recognize the interconnectedness of natural and human-built systems as to learn reading, writing and arithmetic. Once students grasp the connections between a stable economy, a healthy environment and equitable social systems, and their role as global citizens, they are successfully launched into an already more sustainable world – a world that they are empowered to protect and enjoy.

After I participated in the 2014 Systems Thinking and Dynamic Modeling Conference, the habits of systems thinking became an even more significant aspect of our EfS work with teachers who found it an effective approach in engaging their students in place, problem-project-based work. An important aspect of CELF’s work is integrating EfS standards into teachers’ existing curriculum. This recognizes the value of the current practice of teachers and helps reinforce their role as stakeholders in the learning community. It also makes them receptive to seeing their work through the lens of sustainability. During this workshop the facilitators will model the application of the habits of systems thinking to EfS related curriculum. It’s our goal that participants will leave with enduring strategies to apply with their ongoing and future practice.

**Audience Experience Level:** Beginner/Intermediate

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