A TEACHING FRAMEWORK

Environmental and social problems are tightly linked. Preparing the next generation to solve coupled socio-environmental (S-E) problems requires development of specific skills and habits. This framework is inspired by Wei et al. 2020 and offers educators and learners alike a point of entry to the:

- Fundamental concepts and practices that underpin S-E science and are linked to essential skills and habits
- Elements of an S-E research process directed at solving S-E problems; the elements illustrated can occur consecutively, concurrently and recursively.

RELEVANT ARTICLES

"Social-ecological systems as complex adaptive systems"
"Complexity of Coupled Human and Natural Systems"
"Competencies and Pedagogies for Sustainability Education"
"Linking classroom learning and research to advance ideas about social-ecological resilience"

TEACHING RESOURCES

SESYNC’s S-E Case Study Collection
Case Studies in the Environment
InTeGrate Teaching Materials
Lessons Learned for Interdisciplinary Collaboration on S-E Problems

YOUR ADVENTURE STARTS HERE

BE PREPARED WITH THE SKILLS AND HABITS NEEDED TO SUMMIT YOUR SCIENTIFIC PROBLEM

- **Systems Thinking**
  - Ability to analyze a problem rooted in the systems’ dynamics and forces

- **Integrative Research**
  - Interdisciplinary methods, data sources, and frameworks

- **Boundary Crossing**
  - Collaboration across disciplines, paradigms, and sectors

- **Socio-Cultural Awareness**
  - Understanding of human societies, cultures, and beliefs

POTENTIAL S-E RESEARCH OUTCOMES:

- Policy Design
- Decision Making
- Knowledge Creation
- Policy Implementation

MOUNT S-E PROBLEM SOLVING

Chart your path to discover key insights to solve challenges unique to your S-E study system.

SNOWPACK LOSS & INDIGENOUS COMMUNITIES

WATER QUALITY, ACCESS, & EQUITY

SE RESEARCH PROCESS

Refine & focus scope
Revisit knowledge
Analyze & reflect
Acquire & integrate information