Education in the Food-Energy-Water-Nexus: A Collaborative National Network

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NCDC 231 - National Collaborative for Food, Energy, and Water Education (NC-FEW)

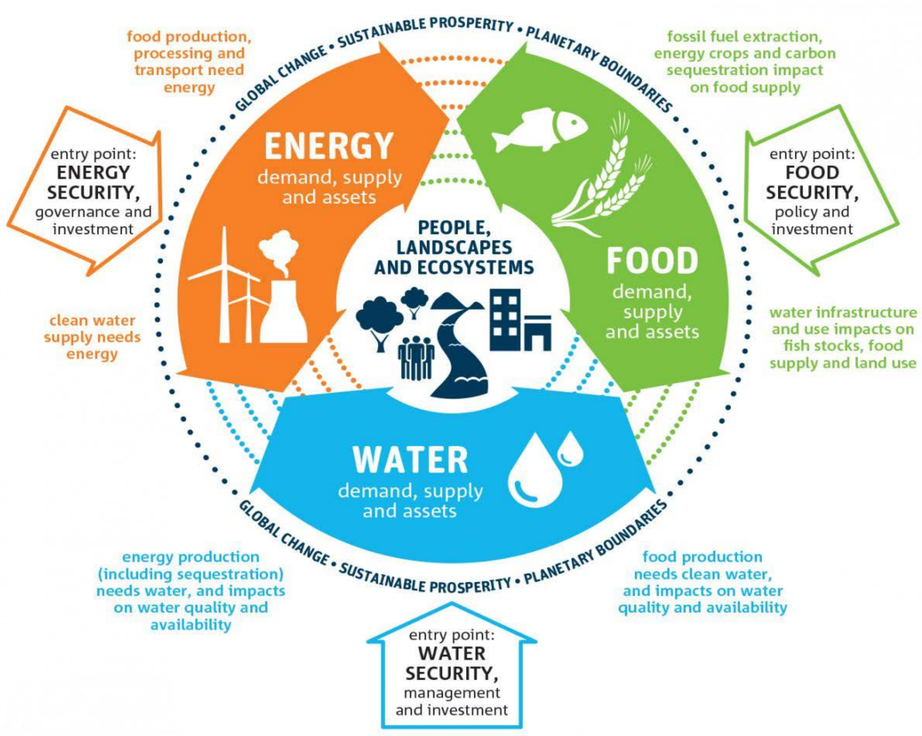
Mission: A sustained, systemic, and interdisciplinary education initiative, including program evaluation and discipline-based education research (DBER), focused on Food-Energy-Water-Nexus (FEW-Nexus) spanning a wide array of contexts. Education program and empirical research are unified by core models, strategies and commitments, but implemented in diverse ways reflecting unique elements of localized FEW-Nexus issues. This approach uses novel theoretical and analytical perspectives emphasizing coupled human-natural systems as the core element of postsecondary teaching and learning within the FEW-Nexus.

Assumption: The FEW-Nexus affords a novel theoretical and analytical lens through which to both foster and understand science literacy from 'cradle to grave'.

Goals:

1. Advance effective, research-based FEW education efforts
2. Foster FEW education research to evaluate the effectiveness of FEW education programs
3. Enhance collaboration around FEW education that aids in educational responsiveness to emergent FEW issues and catalyzes robust DBER

- Interdependence and inter-linkages between water, energy, and food means that changes in one system can have far-reaching impacts in other systems, resulting in significant ecological, economic, social, and political consequences.
- The Food-Energy-Water Nexus concept has emerged as a unique opportunity to pursue a sustained, systemic, and interdisciplinary education initiative.
- Preparation for the food, agriculture, natural resources, and human sciences (FANH) workforce
- Teaching and learning in science, technology, engineering, and mathematics (STEM)
- Science-informed decision-making and systems thinking
- Curriculum development, professional development for instructors, assessment design,
- Postsecondary and K-12 classrooms, informal and non-formal learning environments, and in public spaces.
- NSF and USDA-NIFA's *Innovations at the Nexus of Food, Energy, & Water* (INFEWS) initiative



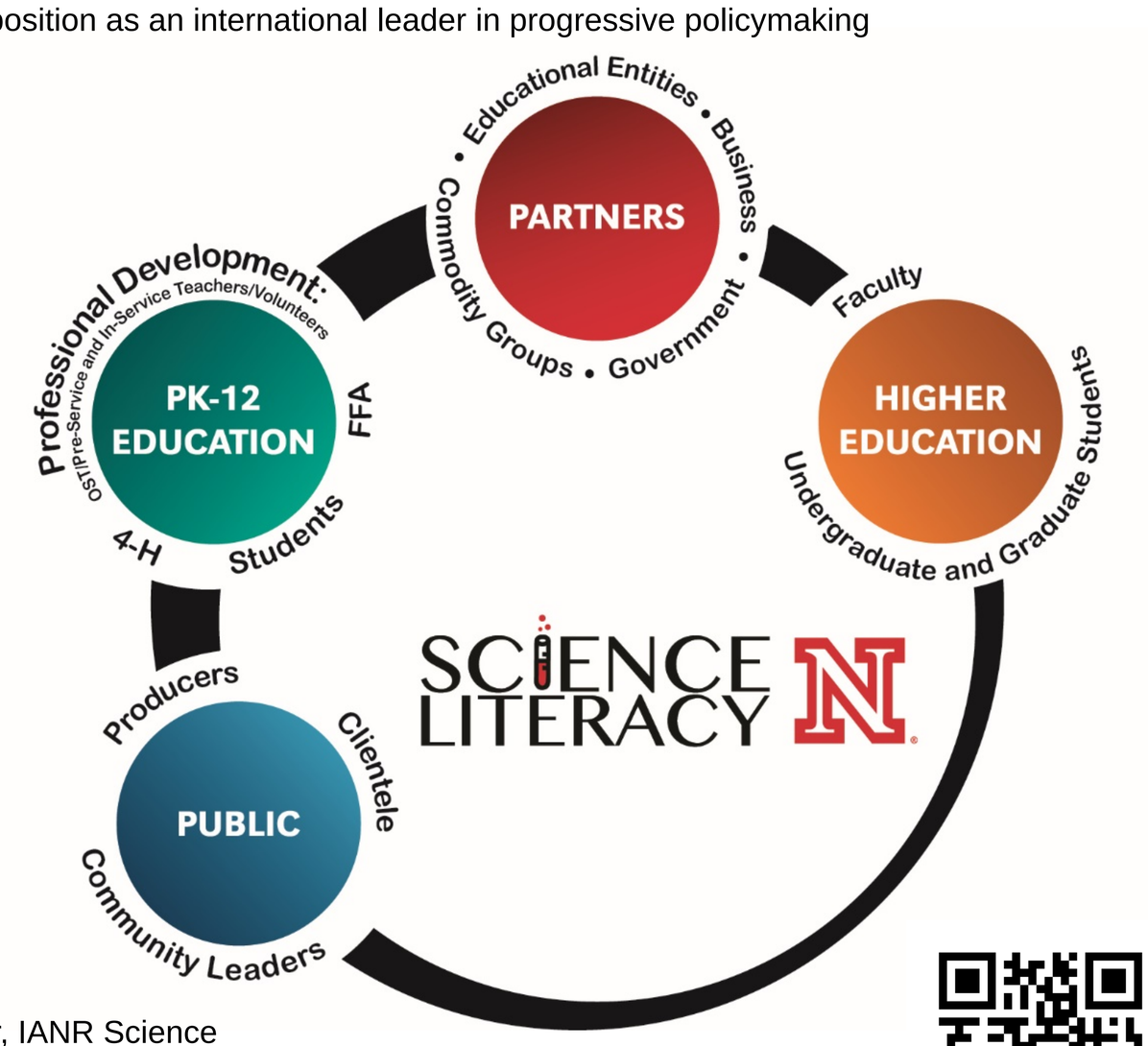
Partner Institutions

University of Nebraska, Virginia Tech, Purdue University, Michigan State University, Ohio State University, Penn State, Iowa State University, University of Oregon, UConn University of Connecticut, University of Minnesota, University of Missouri, Nebraska Collaborative for Food, Energy, & Water Education

IANR Science Literacy Initiative

Mission: to foster a scientifically literate society capable of making effective decisions grounded in STEM-informed analyses of complex, real-world challenges associated with food, energy, and water systems

Science literacy is a foundation for maintaining America's social and cultural institutions, food and energy security, global economic competitiveness, and position as an international leader in progressive policymaking



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http://www.unl.edu/nc-few/

This material is based upon work that is supported by the National Institute of Food and Agriculture, U.S. Department of Agriculture, Hatch/Multi State project under award #1006539.