

GREAT LAKES CLIMATE CHANGE SCIENCE AND EDUCATION SYSTEMIC NETWORK

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Phase 1 Goals

- Create and implement a regional strategic planning process using formal needs assessments for multiple stakeholders and populations;
- Build a regional networked community, using tested, virtual communications techniques, comprised of historically under-involved individuals;
- Lay the groundwork for science-based and scientist-driven product creation for regional use in STEM education communities.

Phase 1 Accomplishments

- ▣ Implemented regional surveys to capture baseline understanding of climate change science content among scientists, journalists, formal educators, informal educators, community NGO educators, university faculty and teacher education faculty;
- ▣ Created and tested a virtual platform to directly link research scientists to the above social communities;
- ▣ Using learning science techniques, tested the statistical strength and functionality of the virtual social platform;

Accomplishments Continued

- ▣ Using an online data tool, captured and analyzed (cluster analysis) concepts for climate change content among key stakeholder groups to develop baseline knowledge of scientific understanding, the path of movement of science content from laboratories to classrooms, and vectors for the movement of science content knowledge into cognitive structures and social use systems.
- ▣ Implemented 1 large scale focus group and community feedback technique to capture needs assessments (2 additional focus groups planned for late summer).

Findings and Next Steps

- ▣ There is strong evidence for the need to build links between scientists and the education community to enhance the level of accurate science knowledge among educators and subsequently the lay public;
- ▣ There is strong evidence that a virtual social community, using emergent communication technologies, can be a cost-effective vehicle to both realize this goal, and to implement learning science research on STEM content migration from laboratories to society.