Integrative STEM Education
A Catalyst for Transdisciplinary Collaboration at the University of North Dakota

The University of North Dakota College of Education has placed Integrative STEM Education as a high priority. In the past academic year (2014-15) UND hired a STEM Coordinator and formed an interdisciplinary Work Group with representation across Colleges and Departments. Broad goals identified by the Work Group include:

- Facilitate communication about professional development, collaborative funding and connections across UND as well as industry, community and state regarding STEM Education
- Develop a coherent entry point for K12 schools, industry, state and community to interact with STEM experts and programs at UND
- Identify existing STEM Education research at UND and encourage further studies, and identify national trends in STEM Education
- Complete a strategic planning document based on data, scientific frameworks, and UND context and culture that will result in a UND mission statement for STEM Education

UND looks forward to exchanging experiences and reflections with other institutions going through similar processes. It also seeks to partner with K12 schools, business, industry and government, primarily through involvement with the North Dakota STEM Network.

A Fall 2014 Faculty Staff Survey revealed: 91 STEM Experts working on 129 STEM related projects at UND. Many include outreach through connections with K12 classrooms, as well as a host of summer camp offerings.

System Dynamics graphic developed by Scott Johnson, UND Engineering’s Institute for Energy Studies and Bob Pawloski, UND College of Education STEM Coordinator.