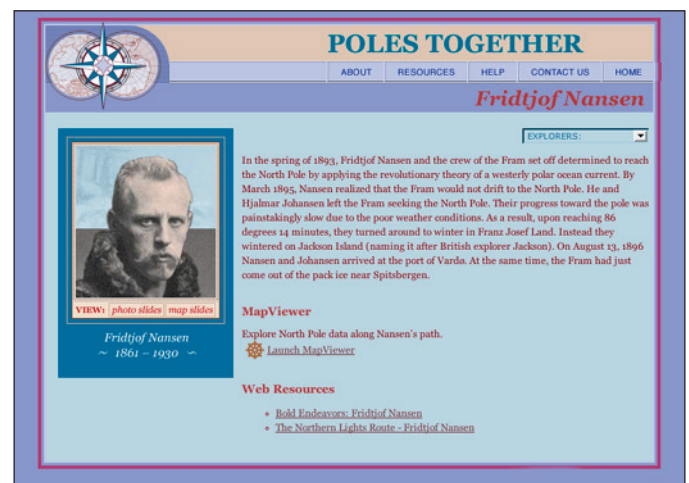


FEATURED PROJECT: POLES TOGETHER

Poles Together is a collaboration of Professor Stephanie Pfirman, Dr. Robin Bell, the Columbia Center for New Media Teaching and Learning (CCNMTL), and the Columbia Center for International Earth Science Information Network (CIESIN). The project focuses on the development of a new Barnard core course entitled "Exploring the Poles," a writing course that provides an attractive and accessible introduction to environmental science. First-year undergraduate students at Barnard College experience the Arctic and Antarctic from the perspective of the early polar explorers Nansen, Shackleton, Scott, and Amundsen. Students study the effect of extreme environmental conditions on expedition planning and implementation and consider the relative importance of leadership, luck, and skill, among other topics. Readings include classic works and journal accounts, including Nansen's *Farthest North* and Lansing's *Endurance*.

The Poles Together project includes tools that represent information in ways that help students understand issues in environmental science and use the language of this field in critical writing and thinking. Geographic Information System (GIS) mapping tools designed by CIESIN staff allow students to explore interactive maps and view data along the paths of the early explorers, as well as their own simulated journeys. Slideshows and maps are available on the Poles Together Web site for use in writing assignments. Students conduct simulated expeditions, consider real environmental data for decision making, and visualize the consequences of their progress. Students also complete essay assignments related to the readings and scientific concepts taught in the course. These tools enable students to relive the journeys of an arctic explorer such as Fridtjof Nansen, who in the spring of 1893 set-off determined to reach the North Pole by applying the then revolutionary theory of a westerly polar ocean current that was eventually proven correct. Students are equipped with maps, photos, and GIS data on Nansen's journey to write their own account of an aspect of his exploration.

The course also makes extensive use of CourseWorks, Columbia University's course management system. A modification of CourseWorks' discussion-board function provides each student with a private individual thread for writing journals to reflect on previous writings and get frequent feedback from instructors. Poles Together's contextualized journal-writing activities allow students to refer to data and historical information within the same environment. Students can go back and refer to Nansen's experience, reviewing their observations over time, and compare Nansen's expedition with that of other explorers. The journals work efficiently as a feedback tool for both learners



and professors, who adapt the curriculum of the course based on the content and character of the students' comments and questions. This first experience also provided information for improving the tools, especially Courseworks, to better serve the evolving purposes of this and other courses. Professors Pfirman and Bell are enthusiastic about continuing development on Poles Together and expanding its uses for other courses.