

Project Summary for Columbia Earthscape: A Model for a Sustainable Online Educational Resource in Earth Sciences

Columbia University Press, the campus computing center, and faculty have collaborated to find ways to use new developments in digital technology to disseminate effectively cutting-edge curricular materials, research, and analysis in Earth Sciences by embarking on a highly original project that has the potential to transform the way students learn about the Earth and interact with it on every possible level. This project will provide a model for others to follow in the years to come.

Discussions with scholars at Columbia University and nationally have revealed that internet-accessible, online publishing has the potential to solve a fairly specific problem in scholarly communication and education: timely access to cutting edge, interdisciplinary, carefully selected, and easily searchable research and teaching tools in the rapidly-emerging interdisciplinary field of Earth sciences. Scholars and teachers have reacted with enthusiasm to the prospect of having access to a moderated, interdisciplinary scholarly online publication that would provide access to a wide variety of material being produced in this field. As a result of this enthusiasm, a critical mass of high-quality Earth sciences scholarship and teaching material has been identified as available for electronic distribution with support from its producers. Based on the design and development work done at Columbia with scholarly online publishing, the goal of this project is to create a fully-integrated, highly selective, interactive online resource for educational materials in this field, and to evaluate the ongoing value and economic viability of providing these services on a subscription-based, cost-recovery model to educational institutions, libraries, and students.

The project will produce models in four critical areas: online content acquisition, review, and dissemination; development of a collaborative organization involving scholars, publishers, libraries, and technologists; creation of standardized online technology systems that can be used across projects and disciplines; and the development of a sustainable, widely distributed, and editorially selective publication in Earth sciences through use of the online environment. The findings in each of these areas can be applied effectively to the production and evaluation of digital resources in other fields and at other scales, and will address with real data the large questions concerning the usefulness and viability of such projects in the short and long term.