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## Key Concepts in Geomorphology - NSF supports community-based creation of a new style of textbook

### Details

**Meeting** [2013 Fall Meeting](#)

**Section** [Education and Human Resources](#)

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**Terms** [Geomorphology: general \[1824\]](#)

### Abstract

Using support from the National Science Foundation, we have created an all new textbook that differs from existing books and serves as a model for extensive community involvement and vetting at all stages from initial outlining through chapter development and revision to final review. The new textbook is designed to serve undergraduate students in first year courses about Earth Surface Processes, Physical Geography, and Quaternary Geology. The approach we employed to create this book could easily be adapted to creating books in other disciplines. The new textbook differs from existing books because it is shorter and focuses on the key concepts of the discipline rather than on specific derivations or place-based examples. A series of >200 electronic resources developed by community members as part of this project (<http://serc.carleton.edu/vignettes>) provide more detail and geographically specific case-studies that faculty and students need for place-or content-based teaching and learning. NSF support provided for extensive review to ensure accuracy and completeness. Each chapter was reviewed at least twice by two experts in the chapter's content area. Every chapter was also vetted by 8 to 10 generalist reviewers before extensive copyediting. The entire textbook was edited by two senior geomorphologists and a technical editor with expertise in geomorphology. The textbook has 14 chapters organized into four sections. Each chapter includes between 10 and 14 newly drafted, full-color figures designed specifically for novice learners. Between 20 and 30 annotated color photographs illustrate each of the chapters. At the end of each chapter, the Digging Deeper section presents an in depth look at the development of scientific thought on a problem relevant to the chapter along with a worked problem and a series of questions that allow students to test their mastery of the material.

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