CDI Book Blog - Reinventing Discovery - Ch. 1 -
Introduction

Okay, this is an attempt at a blog, but this just isn't a blog site. "Add comment" doesn't work if you have Internet Explorer. You could add your own blog entry. Here are some directions for that:
Go to the CDI home page and select the Add menu and choose Blog Post.
Add a title and your blurb to the Blog Post editing window that displays.
Add the labels "news" and "cdi-bookclub" in the Labels field.
When you are finished, click the Save button.
Meanwhile, I'll see if one of the real blog sites in USGS can accommodate us.
Fran


Chapter 1 is an introduction. I'm fascinated by the Polymath project that Nielsen uses as his first example of the sort of online tools he's writing about. Polymath is an online collaboration among mathematicians to solve important and difficult unsolved mathematical problems, using a blog format. The internet is used to gather interested and qualified people for a creative conversation in which important connections are made.

Another type of tool is illustrated by the Galaxy Zoo, a large scale citizen-science project in which volunteers sort through galaxy images, a task for which human eyes are much better than automated pattern recognition. The Galaxy Zoo volunteers are making important discoveries that lead to scientific papers.

A third tool is GenBank, the online repository of human genetic data that was produced by requiring that scientists contribute their data in order to get funding. But the GenBank model has not been adopted for genetic data on other organisms. Nielsen points out that scientists are rewarded for publishing papers before their competitors, and generally they don't have time for the new online tools unless the tools will help meet this goal.

The chapter ends with a summary of the major questions that will be addressed in the book. In particular, how does current technology allow better ways of making scientific progress outside the traditional compete-to-publish model? What needs are met by the compete-to-publish system, and how can these needs be met in other ways? How can we change the culture of science to get the benefit of the new tools?

The themes Nielsen expresses have been running through our Community for Data Integration meetings for years. I wonder if a success like Polymath or Galaxy Zoo would be possible at USGS. Or, since our government scientists are potentially working in a different reward system from the compete-to-publish model, would it be possible for USGS to host new repositories or institutions that will make the culture change rewarding for our sisters and brothers in academia?

Next up: Chapter 2, "Online Tools Make Us Smarter."