Understanding Knowledge as a Commons: From Theory to Practice

*Edited by Charlotte Hess
and Elinor Ostrom
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Reviewed by Fred Rowland

Digital technology, like the printing press before it, has had a powerful influence on knowledge creation and distribution. The Internet challenges traditional ways of viewing authorship and its social and legal implications. Today we are in a somewhat paradoxical state: at the same time that information is more abundant than ever, new technical and legal strictures are fencing off important areas of information from the public, a serious issue in democracies that depend on a vigorous public sphere. The real benefits of a networked world—for invention, creativity, scholarship, and communication—come when the widest public has access to the building blocks of knowledge.

Understanding Knowledge as a Commons: From Theory to Practice, the result of a 2004 workshop hosted by editors Charlotte Hess and Elinor Ostrom, provides an initial roadmap for a more positive information future by looking at knowledge from the perspective of "the commons." Though the workshop was initially intended to address scholarly communication, participants found that this was too limiting and broadened its scope, a decision indicative of our rapidly changing information environment. The commons model is borrowed from the environmental movement and in its most general sense simply "refers to a resource shared by a group of people." Its theoretical and practical effects, however, pose a strong challenge to the widely accepted free-market and rugged-individualist narrative in which there is little room for cooperatively built, managed, and preserved resources.

Twelve authors contributed chapters organized into three parts: Studying the Knowledge Commons, Protecting the Knowledge Commons, and Building New Knowledge Commons. The book's first part gives a clear overview of the commons paradigm, how it developed out of environmentalists' desire to build a common conceptual vocabulary, and the use of the Institutional and Development (IAD) framework for analyzing it. David Bollier notes in Chapter 2 that to a great extent, "the rise of environmentalism as a political and cultural movement was made possible by a new language." Though there are major differences between the management of physical resources ("subtractive" resources) and the management of data, information, and knowledge ("nonsubtractive" resources), problems and patterns of use on the Internet—"congestion, free riding, conflict, overuse, and 'pollution'" among them—mirror those of many environmental commons.

In an attempt to build a conceptual apparatus for the knowledge commons, one big hurdle to overcome is the influence of an oft-cited 1968 article by biologist Garrett Hardin on "The Tragedy of the Commons," which opponents of the commons perspective use to question its viability. In the first chapter, Hess and Ostrom explain that subsequent studies have shown that Hardin exaggerated the problems involved in managing a commons.

In Part II, Nancy Kronich describes in detail how the shift from print to digital information is affecting the former knowledge commons that libraries provided. She then chronicles some of the initiatives to counter this 21st-century "enclosure" movement. Digital access has provided both a means of universal access and the means to limit access based on licenses and legislation (like the Digital Millennium Copyright Act). In times past, as long as you could make it into a library, you had access to everything within its walls because the information was held in print collections. Now, online scholarly information can be accessed from anywhere with a network connection but only if you have the necessary access rights, such as an affiliation with an academic institution or a library. Kronich focuses on the ways research libraries and academic institutions can work to counter enclosure.

Moving away from a focus on academia, James Boyle in his chapter asks "what impact more open access to cultural and scientific materials, both scholarly and nonscholarly, by individuals and groups *outside* the academy might have on scholarship, culture, and even...on science." Boyle reminds us that we are at the very start of the digital age and that we must not let the conventions of the past limit the opportunities of the future. Can we enrich academia by expanding the commons to include more and varied individuals? Most likely, yes. Part II concludes with a review of the possibilities and challenges of preserving knowledge in the digital age, which differs quite a bit from the print past.

While much of the first two parts of this book detail theory, Part III addresses practical ways of building a knowledge commons. The variety offered by these six articles shows that rather than a vision of a single knowledge commons, there would likely be many overlapping and intersecting knowledge commons with both shared and unique institutional arrangements. Peter Suber writes about the different types of open access publishing, the ways of providing incentives to authors for choosing this option, and the problems that can arise in an intellectual open access commons and their possible solutions.

In one of the more interesting articles, Shubha Ghosh looks at "intellectual property as a tool to build a commons." He speculates on whether it is "constrictive, facilitating, or irrelevant" and offers a nuanced discussion of the role of intellectual property in this potentially new information environment. Peter Levine, in an article that mirrors the one by Boyle, looks at the positive effects of building the knowledge commons on collective action and civic engage-

ment. While Boyle wants to know how widening the input and influence of individuals outside the academy might invigorate scholarly communication, Levine wants to increase participation in creating the content for the knowledge commons because "such work builds social capital, strengthens communities, and gives people skills that they need for effective citizenship." The final chapters look at open source software, the newly developing roles of the research library, and an instance of a knowledge commons developed at the University of Arizona (EconPort), respectively.

Altogether, *Understanding Knowledge as a Commons* provides an overview of the growing movement to change the information landscape of the 21st century, providing theory and practice in relatively equal measure. Librarians, academicians, scholars, and anyone else interested in information will find it very useful. *e*

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A Fieldbook for Community College Online Instructors

Reviewed by Veronica Diaz

In *A Fieldbook for Community College Online Instructors*, written to specifically address the unique characteristics of community college students and faculty members, Farnsworth and Bevis, both long-time educators, present an introductory but comprehensive, practical guide to teaching online. Following a detailed review of distributed educa-

tion's evolution, the authors address the often-cited criticism that "no significant difference" exists in learning outcomes between online and traditional education models. The significant differences, they argue, include independence from time and space constraints (asynchronicity), inexpensive delivery, limitless resources, higher-quality and regular interactions and discussions, and—often overlooked—students' preparedness to navigate and function in an increasingly technological workforce. Unique to their analysis is the careful consideration given to community college student characteristics, which often differ from those of university students usually cited in the literature about online learning.

Farnsworth and Bevis include topics typically found in distance or online-learning instructor handbooks: the importance of developing pre-course orientations to online programs; online course instructional design considerations; assessment techniques to assist faculty and administrators in determining who should teach in an online learning environment; strategies for facilitating online discussions and collaborations; and course- (and time-) management strategies.

Customizing their analysis to the two-year community college setting, the authors review several important topics in the first half of the book:

- The first two chapters present an overview of distance education's evolution and a summary of pros and cons and typical issues relating to online learning in community colleges: quality, support, and students' technical ability. Some data are presented here, but community college student data are reviewed in more detail in Chapter 3.

- The third chapter focuses on the community college student as a millennial and online learner. This section also clearly summarizes national data on community college at-risk students, although most of it is about 10 years old and may be outdated.

- Chapters 4 and 6 focus on logistical considerations that may increase the likelihood of a successful online experience for both students and faculty. Several resources and tips are provided, including specific community college examples of these programs. Chapter 6 addresses fundamental online teaching considerations, such as course size and syllabi, that might only be useful for first-time online instructors.

- In the fifth chapter, the authors provide a self-assessment for faculty to determine whether they are ready to teach online, along with a summary of instructor qualities of those who have been successful in online learning environments, although these are not specific to community college faculty.

- Chapters 7 and 8 are also foundational chapters that address basic components of online course delivery: course information, course documents, calendar, grade book, and announcements. Useful, but very introductory.

- Absent from the discussion in Chapter 9 of course enhancements and tools is an overview of emerging technologies and commonly used Web sites that an instructor—even a beginner—could visit regularly to learn about and stay current on learning technologies on the horizon. Because teaching online is a rapidly changing and growing phenomenon in higher education, faculty will find that their knowledge in this area quickly becomes outdated. Having an awareness of and establishing connections with outside organizations and associations will assist in developing a network of support and resources to foster faculty member growth.

The second half of the book is where Farnsworth and Bevis make a more unique contribution, addressing relevant contemporary issues such as copyright and fair use in distributed learning environments, hybrid learning models, and academic integrity for online courses.

Preventing academic dishonesty and developing creative, reliable ways to assess students online is an area of great concern for faculty. In fact, this is often cited as the primary reason for not teaching in a solely online environment. This section is particularly useful in providing various strategies to assess students in a way that allows detection of and deters dishonesty. Several academic-dishonesty scenarios are provided along with solutions so that instructors are prepared for what students might do or say in those situations.

Chapter 13 provides a thorough, if introductory, review of legal issues involved in online teaching and learning, specifically copyright and fair use. The authors define copyright and fair use and provide practical examples of cases to illustrate how these issues can manifest themselves. Farnsworth and Bevis also include a short question-and-answer section. Although this section could have been longer, various Web sites are provided that are excellent resources in this area. The American with Disabilities Act and the Family Educational Rights and Privacy Act are also briefly reviewed.

A Fieldbook for Community College Online Instructors primarily focuses on online instruction, although most of the strategies in the book are applicable to a blended or hybrid model, in which some of the instruction takes place face-to-face and some online. Unfortunately, minimal attention is devoted to this growing area. After teaching in an online environment, many faculty members, especially those in community colleges, find that they can be more effective in a hybrid model, even if the majority of instructional delivery takes place online. The section on hybrid instruction, which is only a few pages long, addresses logistical issues such as e-mail, posting lectures, and discussions but does not address the instructional design of the model, a critical piece of successful hybrids.

Overall, this is an excellent basic resource for faculty members preparing to teach in a community college online environment for the first time.

Although this guide is particularly useful for newcomers in the online learning space, it might also be a useful review for the veterans among us. *e*

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