

Networked Learning as Experiential Learning

What kind of educational experiences change lives? As an answer to that question, George Kuh's monograph on high-impact practices has been enormously influential throughout higher education.¹ When Kuh published his monograph in 2008, an emphasis on the global economic competitiveness of the United States was framing the value of a college/university degree increasingly in terms of an individual's potential for lifetime earnings as well as the nation's human capital available for research, development, and production. Education was becoming more about careers and "competencies" (a word Kuh himself used, although in a larger sense than others have) and less about inquiry, meaning-making, and a broadly humane view of human capacity. Kuh's essay implicitly recognized that one of the great costs of abandoning these more expansive views of the purpose of higher education was that students might become alienated from their own learning experiences. He was right. Even as "student-centered learning" became the mantra, the increased attention to outcomes and objectives served (and still serves) to enable a narrowing, behaviorist focus on easily measured, easily described outcomes linked to detailed prescriptions, policies, and penalties, all contained within the *course contracts* (i.e., course syllabi).

By contrast, Kuh's "high-impact practices" sought to bolster and, in some cases, restore the idea of learning primarily as an adventure in discernment and self-actualization within a deeply relational social context, an adventure in synthesis and integration. Kuh's conceptual framework assumed a progressive culture of education, one that would emphasize individual learning within a growing network of connections ranging from the personal to the highly conceptual. Such a network is what Jerome Bruner called, fifty years ago, "the web of social reciprocity."² In Kuh's framework, support for the networked discovery of connections would be at the center of both the learning environment as designed by faculty and the learning environment as experienced by students.

Kuh listed ten high-impact practices, arranged in a cornerstone-to-capstone design that explicitly merged curricular and cocurricular (i.e., not course- or classroom-defined) learning. His design addressed the need for a comprehensive approach to student learning at the undergraduate level; as he noted: "On almost all campuses, utilization of active learning practices is unsystematic, to the detriment of student learning." Within Kuh's design are practices, mostly but not entirely in the cocurricular area, that have come to be called *experiential learning*: study abroad, internships, service learning, and community engagement. Depending

on the institution, undergraduate research may also be included in the category of experiential learning. The common denominator is a real-world context that provides deeply integrative opportunities for classroom-based learning to be applied to complex and complexly situated problems or opportunities.

Yet one crucial item does not appear on Kuh's list: networked learning by means of the Internet, particularly the World Wide Web. In *Turing's Cathedral: The Origins of the Digital Universe*, George Dyson observed: "The stored-program computer, as conceived by Alan Turing and delivered by John von Neumann, broke the distinction between numbers that *mean* things and numbers that *do* things. Our universe would never be the same."³ Unfortunately, most of higher education has overlooked, ignored, or flatly denied this crucial turning point, even as we rightly valorize and seek to preserve earlier forms of networked learning implicit within the very word *university*.

Although the management structures of course schedules, credit hours, online registration (so akin to online banking), "learning management," and all the mechanics of "student success" may make the experience of learning more compartmentalized and fragmented, there is still a core set of pre-digital networked learning experiences at the heart of higher education. Go into your nearest college or university library. Ignore the computer stations and the digital affordances. Enter the stacks, and run your fingers along the spines of the books on the shelves. You're tracing nodes and connections. You're touching networked learning—slow-motion and erratic, to be sure, but solid and present and, truth to tell, thrilling. The founders of the age of digital networked computing—dreamers and builders such as Vannevar Bush, J.C.R. Licklider, Douglas Engelbart, Ted Nelson, Alan Kay, and Adele Goldberg—sought to amplify the reach and impact of networked learning and the collective intelligence of the species. They quickly realized the intoxicatingly experiential nature of the cyberspace they helped to invent—a thrill like that of learning what a library truly represents. Why not offer students an experience of the sense of exhilarating possibility within the cyberspace they take for granted, the cyberspace that LMSs and apps have begun to remove from our view?

As we consider high-impact practices in light of contemporary culture, we must add digitally mediated networked learning to Kuh's list, because the experience of building and participating within a digitally mediated network of discovery and collaboration is an increasingly necessary foundation for all other forms of experiential learning in a digital age. Moreover, the experience of building and participating within a digitally mediated network of discovery is itself a form of experiential learning,



indeed a kind of metaexperiential learning that vividly and concretely teaches the experience of networks themselves. With networks replacing ladders and trees as a primary metaphor to describe the structures of knowledge, digitally networked learning becomes marvelously recursive as a site of integration: the very experience deepens learners' understanding of the condition of learning itself within a strongly social context that can mobilize communities of practice quickly and effectively.⁴ If there is anything that the Internet and the web should have taught us, it is that what Engelbart called a "dynamic knowledge repository" is a computer-mediated manifestation of the collective work of civilization, a manifestation as real as any other form of mediated experience and, in light of Dyson's observation, one that has properties as powerful, and malleable, as language itself.

No one believes that knowing the alphabet and sounding out words mean that a person possesses the deep literacy needed for college-level learning. Yet our ideas about digital literacy are steadily becoming more impoverished, to the point that many of my current students, immersed in a "walled garden" world of apps and social media, know almost nothing about the web or the Internet. For the first time since the emergence of the web, this past year I discovered that the majority of my sophomore-level students did not understand the concept of a URL and thus struggled with the effective use and formation of hyperlinks in the networked writing class that VCU's University College affectionately calls "Thought Vectors in Concept Space" (<http://thoughtvectors.net>)—a phrase attributed by Kay to Engelbart and one that describes the fundamentally experiential aspect of networked learning.⁵ My students appeared not to be able to parse the domains in which they published their work, which meant that they could not consistently imagine how to locate or link to each other's work by simply examining the structure of the URLs involved. If one cannot understand the organizing principles of a built environment, one cannot contribute to the building. And if one cannot contribute to the building, certain vital modes of knowing will be forever out of reach.

Yet educators seeking to provide what Carl Rogers called the "freedom to learn" continue to work on those digital high-impact practices.⁶ It is a paradoxical task, to be sure, but it is one worth attempting—particularly now, when "for the first time in the still-short span of human history, the experience of creating media for a potentially large public is available to a multitude."⁷ Students' experience of what Henry Jenkins has articulated as the networked mediation of "participatory culture" must extend their experience to school as well.⁸ School as a site of the high-impact practice of learner-built, instructor-facilitated, digitally networked learning can transform the experience of education even as it preserves, and scales, our commitment to the education of the whole person.

The web was designed for just this kind of collaboration. One does not need permission to make a hyperlink. Yet one does need "the confident insight, the *authority* of media-making" to create meaning out of those links. Such confidence and author-

ity should be among the highest learning outcomes available to our students within what Mimi Ito and others have described as "connected learning."⁹ Learner-initiated connections that identify both the nodes and the lines between them, instead of merely connecting the dots that teachers have already established (valuable as that might be), co-create what Lawrence Stenhouse argues is "the nature of knowledge . . . as distinct from information"—"a structure to sustain creative thought and provide frameworks for judgment." Such structures can encourage an enormously beneficial flowering of human diversity, one that lies beyond the reach of prefabricated outcomes: "Education as induction into knowledge is successful to the extent that it makes the behavioural outcomes of the students unpredictable."¹⁰

Offering students the possibility of experiential learning in personal, interactive, networked computing—in all its gloriously messy varieties—provides the richest opportunity yet for integrative thinking within and beyond "schooling." If higher education can embrace the complexity of networked learning and can value the condition of emergence that networked learning empowers, there may still be time to encourage networked learning as a structure and a disposition, a design and a habit of being. ■

Notes

1. George D. Kuh, *High-Impact Educational Practices: What They Are, Who Has Access to Them, and Why They Matter* (Washington, DC: Association of American Colleges and Universities, 2008).
2. Jerome S. Bruner, *Toward A Theory of Instruction* (Cambridge, MA: Belknap Press of Harvard University, 1966).
3. George Dyson, *Turing's Cathedral: The Origins of the Digital Universe* (New York: Pantheon Books, 2012), ix.
4. For an elegant exposition of the paradigm shift to networks, see the TED Talk by Manuel Lima, "A Visual History of Human Knowledge," TED2015, March 2015, http://www.ted.com/talks/manuel_lima_a_visual_history_of_human_knowledge.
5. See Doug Engelbart, Alan Kay, Ted Nelson, and Tim Berners-Lee, panel discussion, MIT/Brown Vannevar Bush Symposium, Cambridge, Massachusetts, October 13, 1995, http://cs.brown.edu/memex/Bush_Symposium_Panels.html#Day%202%20Panel.
6. Carl R. Rogers, *Freedom to Learn: A View of What Education Might Become* (Columbus, OH: C. E. Merrill, 1969). George Siemens's work on connectivist learning is vital in this regard.
7. Scott Rosenberg, "Doing Is Knowing: 'Sweet Jane' and the Web," *Wordyard Project*, August 10, 2014, <http://www.wordyard.com/2014/08/10/doing-is-knowing-sweet-jane-and-the-web>.
8. Henry Jenkins et al., *Confronting the Challenges of Participatory Culture: Media Education for the 21st Century* (Cambridge: MIT Press, 2009), https://mitpress.mit.edu/sites/default/files/titles/free_download/9780262513623_Confronting_the_Challenges.pdf.
9. For Ito's most recently published thoughts on this topic, see Henry Jenkins, Mizuko Ito, and danah boyd, *Participatory Culture in a Networked Era: A Conversation on Youth, Learning, Commerce, and Politics* (Malden, MA.: Polity Press, 2015).
10. Lawrence Stenhouse, *An Introduction to Curriculum Research and Development* (London: Heinemann, 1975), 82.

Gardner Campbell (gardner.campbell@gmail.com) is Vice Provost for Learning Innovation and Student Success and Dean, University College, at Virginia Commonwealth University (VCU).

© 2016 Gardner Campbell. The text of this article is licensed under the Creative Commons Attribution-NonCommercial-ShareAlike 4.0 International License (<http://creativecommons.org/licenses/by-nc-sa/4.0>).