Community Dialog, Experiential Learning, and the Scholarship of Engagement: A Roundtable on Technology in Urban and Metropolitan Universities

Moderated by Darren Cambridge

Abstract

Technology can support the interface between urban and metropolitan universities and the cities and regions of which they are a part. Through partnerships and the Web as a medium for communication and collaboration, technology can support community dialog around institutional goals. Through identifying opportunities and facilitating reflection in community, technology can support experiential learning. By opening up and connecting both global and local occasions for application, technology can support the scholarship of engagement. This article assembles a panel of four experts to discuss these connections.

Technology at the Interface Between University and Community

As technology reaches an ever broader slice of the population, its power depends more than ever before on interfaces. Interfaces connect human needs with mechanical and computational power. The best interfaces allow for differences between individuals, consider the larger social and cultural contexts in which technologies are used, and place those tools in relationship with a network of others. The challenge of the interface extends to institutions and communities. For urban and metropolitan universities, building an effective interface between the city or region and the university is imperative. This relationship is at once more direct and less straightforward than for others types of institutions of higher education. Urban and metropolitan universities have a special responsibility to their communities, but the proper form of these relationships must be locally defined through articulating their places within regional networks of institutions and individuals.

Technology can support this interface around at least three functions of the university: defining its mission, supporting teaching and learning, and enacting scholarship. Through technology partnerships and using the Web as a medium for communication and collaboration, technology can support community dialogue around institutional goals. Through identifying opportunities and facilitating reflection in community, technology

can support experiential learning. By opening up and connecting both global and local occasions for application, technology can support the scholarship of engagement.

This article assembles a panel of four experts serving in a variety of roles at urban and metropolitan universities from four different regions of the United States, each deeply involved in defining the role of technology at their institutions. It includes faculty, academic administrators, and institutional researchers from both urban and suburban campuses. As moderator, I asked the panelists one question focusing on each of the three interfaces: the role of technology in community dialogue, experiential learning, and the scholarship of engagement. Each section begins with a summary of their responses then provides the full text of our conversation.

The panelists:

- Vic Borden, associate vice president for University Planning, Institutional Research and Accountability, Indiana University.
- Mark Heckler, provost, University of Colorado at Denver and Health Sciences Center.
- Kathi A. Ketcheson, director, Institutional Research and Planning, Portland State University.
- John O'Connor, professor of Integrative Studies, and former dean of IT, George Mason University.

Technology in Dialogue with Community

One role of technology in the work of an urban or metropolitan university is to help establish itself and maintain its role within its city or region. Situated within a dense network of institutions, such as businesses, schools, nonprofits organizations, and government agencies, each university must articulate a clear mission and set of relationships that distinguish it from other institutions of higher education and contribute to the development of the region. This task is complicated by the multi-dimensional character of urban and metropolitan universities, whose role is less well-defined in public understanding than that of more traditional institutions. Universities take advantage of their regional networks through partnerships to develop infrastructure, deliver services, and support innovation. Technology can aid in the process of developing these connections through making the intellectual resources, educational services, records of performance of the universities available through the Web. Institutional electronic portfolios, which capture the complexity of each of these dimensions of a university's work in a form accessible to multiple audiences, can be an effective means of interfacing with the community network.

Darren Cambridge:
What are some ways you've seen technology help universities define their missions and goals in dialogue with the community and share how they are holding themselves accountable for the results?

John O'Connor:
George Mason has established its role within the Northern Virginia region through extensive partnerships. I'll share two examples from the mid-90s when so much energy was going into this issue on our campus and in our region, then a couple of recent examples:

- Following the example of Virginia Tech and Blacksburg, George Mason University worked with Fairfax City to install or upgrade its infrastructure when the Fairfax campus infrastructure was being installed and upgraded.
- Mason partnered with Apple Computer, Verizon, and SRA to develop the New Media Group, which was a for-profit venture in information and educational technology training. The venture eventually failed, but it taught all of us about our different setting and some of the issues about both the technology and the training, to the advantage of all the partners.
- The university has strengthened its ties with the Northern Virginia Technology Council (formerly called a Technology Roundtable, which Mason helped start) and the Business Alliance (a University-business partnership) both to support technological innovation in the region and to shape Mason's growth and future (Northern Virginia Technology Council, 2007; Business Alliance of George Mason University, 2006).

Mark Heckler:
The possibilities for using technology in urban and metropolitan universities have grown since the mid-90s as the Web has grown. Effective Web presence requires clarity of purpose and positioning, especially so for metropolitan universities where competition among public, private, and proprietary schools is often keen.

At the University of Colorado at Denver and Health Sciences Center (UCDHSC), we have chosen to move aggressively into Web-based instruction as a way to leverage technology to increase the educational participation of our students, many of whom are working adults and attend part-time (University of Colorado at Denver and Health Sciences Center 2007b). Presently, nearly 30 percent of our students are enrolled in one or more online classes alongside their traditional classroom experiences. This has permitted more students to engage with us and to make swifter progress toward graduation. In turn, we carefully evaluate the performance of students in our on-line courses to ensure that their experience is satisfactory and that learning outcomes are achieved—this addresses our need to be accountable to our online students for the quality of their learning experience. This is perhaps the clearest way in which we have used technology to align our mission and goals with our community's needs.

There are additional ways in which we use technology to engage with our community. When I share our work using technology to support experiential learning, I'll talk about some engagement strategies. We are also building large searchable databases of faculty research and clinical expertise (we have the only medical school in Colorado) to facilitate communities interested in engaging researchers or individuals seeking specialized clinical care. These are powerful tools for connecting our communities with the vast intellectual resources within the University, and we are hopeful that they

will result in the advancement of our research, engagement, and clinical care missions in our city across Colorado.

Finally, we have an extensive tele-medicine enterprise that delivers clinical services and continuing medical education to physicians and patients throughout Colorado and to an extensive network of reservations across the mid-West. Our tele-medicine activities, coupled with sophisticated video-conference facilities in our five Area Health Education Centers located in small communities across greater Colorado, provide critical health education and services for rural communities (University of Colorado at Denver and Health Sciences Center 2000).

Vic Borden:
Universities are inherently complex, multi-dimensional entities that struggle to present themselves to their various communities in a coherent and comprehensive fashion. Universities that pursue traditional missions (e.g., the small, liberal arts, undergraduate college and the large, public research university) find some solace in predominating cultural norms and expectations. Urban universities that serve less traditional populations and purposes find it especially difficult to demonstrate their effectiveness as they pursue missions that do not entirely fit the traditional mold.

As part of a project funded by the Pew Charitable Trusts, six urban universities—California State University, Sacramento; Georgia State University; University of Illinois, Chicago; Indiana University-Purdue University Indianapolis (IUPUI); the University of Massachusetts, Boston; and Portland State University—collaborated on efforts to develop institutional portfolios for their respective campuses (American Association for Higher Education 2002). Each university involved constituents from their local communities in varying ways. IUPUI, for example, invited several community colleagues to project meetings, used its community Board of Advisors to vet the portfolio during development, and now uses the institutional portfolio to deliver its annual performance report to local, regional, national, and international audiences (Indiana University-Purdue University Indianapolis 2007).

Kathi Ketcheson:
As Vic mentioned, the Urban Universities Portfolio Project launched a new approach to the communication of accountability information among the various constituencies in higher education. The electronic institutional portfolios developed by the six urban universities and published on the Internet allow internal and external stakeholders to engage in evidenced-based public review and conversation about the ways in which urban universities are addressing their missions and goals. At Portland State, we successfully used our portfolio as the self-study document for our recent ten-year re-accreditation review by the Northwest Commission on Colleges and Universities and are continuing to use it in our institutional planning and assessment processes (Portland State University 2006b). Departmental portfolios document unit-level activities in support of the overall mission. Our long-term plan is to link student, department, and institutional portfolios together to create an electronically accessible knowledge base about the university.

We think that the electronic portfolio helps us communicate our urban mission more effectively because it goes beyond traditional reporting to provide a multidimensional view of an institution's work. Through the use of Web technology, portfolios provide a level of transparency that has not been available in traditional accreditation self-studies or performance reports. Navigation tools allow an institution to provide accountability information in context, while allowing viewers to develop knowledge about the institution as they follow various pathways through the material. As the national discussion about accountability intensifies, the role of electronic institutional portfolios as a means for enhanced dialog between higher education and its various communities will become increasingly important.

Technology and Experiential Learning

Urban and metropolitan universities are often distinguished by their excellence in providing experiential learning experiences for their students, such as internships, professional placements, and service learning. Like the institutions as a whole, students also must find their places within the regional network. Technology can be an interface that helps connect them with opportunities that fit their diverse interests, talents, and schedules. The technology skills students bring to these experiences are valued by the community and may be put into action online as well as in the field. Through Web-based tools, students can reflect on their experiences, a key component of learning, in dialogue with their peers and faculty. Here too, creating and sharing portfolios can serve as a powerful genre for capturing these reflections in community, tying together occasions of experiential learning across time and across the institution.

Darren Cambridge:
What role does—or can—technology play in experiential learning?

Vic Borden:
Urban university students typically engage in their collegiate studies while maintaining significant work and family commitments. Many have difficulty finding experiential learning opportunities that work within their tight schedules and financial constraints. Technology can be used to enhance experiential learning opportunities in at least two significant ways: by helping to identify traditional "time- and place-based" opportunities that work within their schedules, and as a platform for asynchronous experiential opportunities.

Web-based experiential learning placement services, such as the Indiana INTERNnet, serve as internship brokerage services for students, employers and universities (Indiana INTERNnet 2007). Web sites of the Corporation for National & Community Service and the National Service-Learning Clearinghouse provide a range of resources and links related to help college faculty and administrators develop service learning opportunities for a broad range of institutional and student contexts (Corporation for National and Community Service 2007; National Service-Learning Clearinghouse 2004). College placement offices have long employed technology to help link students to prospective employers. The Internet has been particularly powerful in providing links to

international internships (e.g., Intern Abroad) and study abroad opportunities (e.g., Studyabroad.com; GoAbroad.com 2007; Educational Directories Unlimited 2007).

The now ubiquitous courseware platform provides students and faculty with an increasing array of asynchronous opportunities for experiential learning. For example, in a 2004 *EDUCAUSE Quarterly* article, Jean Strait and Tim Sauer explore some examples of online experiential learning at Bemidji State University (Strait and Sauer 2004). More generally, the proliferation and expanded functionality of courseware platforms has enabled college faculty and staff to re-think and re-design their course delivery methods to include more active and experiential pedagogies.

John O'Connor:
Given our region, technology is both an instrument and a site for experiential learning. In addition to helping students find experiential learning experiences, technology, such as Web sites, blogs, and wikis, is also an important means for students to reflect upon their experience in more comprehensive ways. These technologies are also a way for students to share their insights and learning more effectively with peers and with people at their workplace site. The region has many corporate, governmental, or nonprofit agencies that use technology in many ways. Students with information technology skills are prized at these agencies, and they often are able to assume greater responsibilities and develop more collaborative relationships during their placement because of their knowledge and aptitude. What remains to be more fully integrated is workplace learning—the great majority of our students work while attending school—and academic study.

Kathi Ketcheson:
Another way for students to reflect on their experiential learning experiences is through the development and use of electronic student portfolios to document student learning in the classroom and the community. We use them to assess community and international learning in our general education program, University Studies. Student portfolios can use the dynamic features of the Web environment to develop rich descriptions and reflections on learning that occurs throughout the undergraduate years. Web-based student portfolios allow students to present work samples and reflections emerging from course-based and experiential learning in a common format that helps them draw connections among the various forms of learning in which they are engaged. These portfolios can illustrate a student's knowledge, skills, and abilities to potential employers or internship and professional placement sponsors by going beyond the resume to present examples of student work, along with faculty evaluation. Development of a portfolio allows students to engage in an ongoing process of tracking, evaluating, and reflecting on the variety of curricular, community, and co-curricular experiences that form their undergraduate education.

The University Studies Committee approved the development and use of student portfolios across the four years of general education. That means that students in our community-based Senior Capstone courses—in which groups of students either work with a community partner in the community or in the classroom on a community

topic—can reflect on their rich experiential learning within a portfolio begun in the freshman year (Portland State University 2007). Because engagement is the heart of Portland State, most of our students (both undergraduate and graduate) complete some kind of community-based learning or community-themed course before graduation. The ability to document this learning electronically over the course of the undergraduate career, and to link it to the other kinds of learning that go on in the disciplines and majors, will be beneficial to students and to the university as a whole.

Mark Heckler:
Technology can enhance service delivery for experiential learning opportunities like internships, career placement, and cooperative education. It can also facilitate student learning. UCDHSC uses technology to post jobs, facilitate internship applications, provide online internship orientations, log internship hours, and evaluate the experience. Internship sites use the Web to evaluate their interns, and this information is transmitted automatically to the faculty advisor to facilitate grading. It's simplified and standardized many of our processes in managing experiential learning.

Of course, there are tremendous opportunities to leverage technology to enhance student learning through experiences like internships, service learning, and cooperative education. I agree with John and Kathi that technology can facilitate reflection and build community among students engaged in experiential learning through tools like threaded discussions. We, too, have found that ePortfolios offer opportunities to demonstrate learning and capture work examples from their experiences that aid students in their transition to careers.

Finally, as at IUPUI, technology makes opportunities for experiential learning widely available for interested students and faculty. At the University of Colorado at Denver and Health Sciences Center, we are currently building a centralized repository of experiential learning options for students, including off-campus undergraduate research and fellowship opportunities, volunteer experiences, and service learning activities (University of Colorado Denver and Health Sciences Center 2007a).

Technology and the Scholarship of Engagement

Through much of his career, Bill Plater has been a champion of the scholarship of engagement, in which knowledge is both created and applied through collaborations between academic experts and community practitioners working together to solve problems of social importance. As with institutional partnerships and experiential learning, technology has opened up access to a wider variety of opportunities for and means of engagement than ever before. Because the forces that shape the life of a city or region often have their roots far beyond its borders, engagement must now be global as well as local. Technology helps to make these broader contexts more accessible, enabling faculty to be strategic about how they connect their scholarship to the needs and resources of the community. Crossing disciplinary boundaries, blurring the distinction between research and practice, this work is making a visible impact on both the health of our communities and the process of making knowledge.

Darren Cambridge:
How has technology shaped the practice of the Scholarship of Engagement in urban and metropolitan universities?

Mark Heckler:
While much we've already discussed is relevant to this question, overall I believe that the speed and ease with which we now communicate has transformed the practice of engagement in our universities. It is far easier to connect need with expertise. Engagement is now local and global. Opportunities for engagement are limitless and, at times, overwhelming for our faculty. Faculty, in response, have become more selective in the projects they do. We are also in a far better position to disseminate research and best practices in the scholarship of engagement which, I believe, improves the rigor and legitimacy of the scholarship of engagement overall.

Kathi Ketcheson:
I agree that the Internet has enhanced communication among scholars and practitioners, allowing for conversations at a distance, greater information sharing, and broader presentation of research through Web sites or electronic portfolios. Engagement now means that individuals can communicate in a real-time environment, moving more quickly to address issues and arrive at solutions through the wide access to information and the expertise of others that Internet and Web communication can provide. It is now possible for scholars and practitioners working on local problems to seek solutions from national or international contexts that may not have be available to them only a few years ago. Environmental, social, and economic issues affecting urban and metropolitan regions may have their origins in conditions far beyond their borders. Collaborations among diverse communities of scholars and practitioners working on particular problems that can be facilitated through electronic communications are essential to enhancing knowledge and developing solutions with a broad impact.

Portland State has developed a database of community partnerships on the Web that includes a mapping feature to show where in the region, the nation, and the world our faculty and researchers are practicing the scholarship of engagement (Portland State University 2006a). One can see from the database just how much impact Portland State is having in a variety of fields and across a broad range of important issues and read about it in faculty reflections on their work.

John O'Connor:
We're seeing that impact through the work of our faculty here at George Mason. Recently, Professor Abul Husssam, of Mason's Chemistry department, received a million dollar award from the National Academy of Engineering for developing an inexpensive, easily-produced water filtration system to be used in his Bangladesh homeland and in other impoverished parts of the world (George Mason University 2007). He has pledged three-quarters of this money toward further development and implementation of the system. The rest of the money will go into personal and departmental applied research. An example closer to home is the development of radon detection devices for homeowners, developed by another professor in the Chemistry

department and distributed in partnership with local business and county governments. These are high impact examples. Less visible are the many partnerships—most notably in education and nursing—where information technology is applied to serve needs identified by the community, ranging from computer labs in immigrant neighborhoods to adaptive technology projects with the local schools.

Vic Borden:
Technology has shaped the Scholarship of Engagement in the same way it has shaped all scholarship—by expanding access and breaking down traditional barriers. This has been especially important for urban and metropolitan universities which, by virtue of their more recent development, do not have the richness of scholarly resources (e.g., multi-million volume libraries) found at traditional national research universities. By equalizing access, technology has, in the words of Thomas Friedman, flattened the world of scholarship (Friedman 2006). Increased access by a more diverse array of scholars has, in turn, shifted the focus of scholarship away from disciplinary-based values to more applied, multi-disciplinary perspectives and purposes. The Scholarship of Engagement sits at the center of this new paradigm, where scholars and practitioners work together, blurring the lines between themselves and producing the engaged scholar/practitioner.

Toward a Humane Interface

Through speed and ease of access, situated within networks of growing complexity and reach, technology both flattens the worlds of scholarship and teaching and adds to the multi-dimensional character of the work of higher education. In such an environment, the university must change and is clearly changing, stretching to take on new roles, building on its traditional strengths and responsibilities, while being careful not to try to be everything to everyone. Embracing this change for the good is particularly challenging for urban and metropolitan universities as the city is changing simultaneously, similarly balancing traditional structures and emerging capabilities. According to William Mitchell, the "cities that emerge from the unfolding digital revolution will retain much of what is familiar to us today. But superimposed on the residues and remnants of the past, like the newer neural structures over that old lizard brain of ours, will be a global construction of high-speed telecommunications links, smart places, and increasingly indispensable software" (1999, 7). Those guiding both cities and universities toward their future must avoid the seductions of over-emphasizing the new parts of our metaphorical brains at the expense of those elements that guide how we feel and breathe. The two layers must serve and change together, at the interfaces of educational institution and community, tradition and innovation, technology and humanity.

The ideas of the four urban and metropolitan university leaders articulated in this article exemplify this interface in action. All are integrative, systemic thinkers, so it should be no surprise that electronic portfolios, with such thinking at their core, were a common refrain in our discussion. In composing portfolios, we find patterns of development within a diversity of practices and materials, articulating a whole from

which we make commitments for the future without erasing the complexity that exceeds what we can take explicitly into account or denying the provisionality of our perspectives. This kind of thinking is not new to urban and metropolitan universities. They have always had a commitment to embracing change within the rapidly changing environments into which they are interfaced. Because of this strength, such universities can lead the way toward making the technology-mediated relationship between University and city or region what Jef Raskin call a "humane" interface, one that is both "responsive to human needs and considerate of human frailties" (2000, 6).

References

American Association for Higher Education. 2002. *Urban universities portfolio project.* http://www.imir.iupui.edu/portfolio/, (accessed April 15, 2007).

Business Alliance of George Mason University. 2006. http://www.businessalliance.org/test/index.html, (accessed April 15, 2007).

Corporation for National & Community Service. 2007. Corporation for National & Community Service. http://www.nationalservice.gov/, (accessed April 15, 2007).

Educational Directories Unlimited. 2007. Studyabroad.com. http://www.studyabroad.com/, (accessed April 15, 2007).

Friedman, T. 2006. *The world is flat: A brief history of the twenty-first century.* (Expanded and updated edition. New York, NY: Farrar, Straus and Giroux.

GoAbroad.com. 2007. Intern Abroad. http://www.internabroad.com/, (accessed April 15, 2007).

George Mason University. 2007. Professor wins $1 million prize for providing clean water, one village at a time. *Mason Gazette.* http://gazette.gmu.edu/articles/9780/, (accessed April 15, 2007).

Indiana INTERNnet. 2007. INTERNnet. http://www.indianaintern.net/, (accessed April 15, 2007).

Indiana University-Purdue University Indianapolis. 2007. *IUPUI Institutional Portfolio.* http://iport.iupui.edu/, (accessed April 15, 2007).

Mitchell, W. J. 1999. *e-topia: Urban life, Jim—But not as we know it.* Cambridge, MA: MIT Press.

National Service-Learning Clearinghouse. 2004. http://www.servicelearning.org/, (accessed April 15, 2007).

Northern Virginia Technology Council. 2007. http://www.nvtc.org/, (accessed April 15, 2007).

Portland State University. 2002. *Departmental Profile.* http://www.programreview.pdx.edu/ (accessed April 15, 2007).

Portland State University. 2006a. *Portland state partnership map: Engaging with communities locally and worldwide.* http://partner.pdx.edu/, (accessed April 15, 2007).

Portland State University. 2006b. *Portland State University Portfolio.* http://portfolio.pdx.edu/ (accessed April 15, 2007).

Portland State University. 2007. *University Studies Capstone.* http://www.pdx.edu/unst/capstone.html/, (accessed April 15, 2007).

Raskin, J. 2000. *The humane interface: New directions for designing interactive systems.* Boston, MA: ACM Press.

Strait, J., and T. Sauer. 2004. Constructing experiential learning for online courses: The birth of e-service. *EDUCAUSE Quarterly*, 27 (3): 62-65. http://www.educause.edu/apps/eq/eqm04/eqm04110.asp, (accessed April 15, 2007).

University of Colorado at Denver and Health Sciences Center. 2000. *Colorado Area Health Education Centers.* http://www2.uchsc.edu/ahec/, (accessed April 15, 2007).

University of Colorado at Denver and Health Sciences Center. 2007a. *Career Center.* http://www.cudenver.edu/Student+Life/Career+Center/default.htm, (accessed April 15, 2007).

University of Colorado at Denver and Health Sciences Center. 2007b. *CU Online.* http://www.cuonline.edu/index.shtml/, (accessed April 15, 2007).

Author Information

Darren Cambridge is assistant professor of Internet Studies and Information Literacy at New Century College, which offers integrative studies, first-year experience, and experiential learning programs at George Mason University. He is Associate Director of the Inter/National Coalition for Electronic Portfolio Research and develops standards and software with the IMS Global Learning Consortium and the Open Source Portfolio.

Darren Cambridge
New Century College
George Mason University
436 Enterprise Hall
Fairfax, VA 22030-4444
E-mail: dcambrid@gmu.edu
Telephone: 202-270-5224