Overview of a Collaborative Project

This John D. and Catherine T. MacArthur Foundation Report is a redaction of the argument in our book-in-progress, currently titled *The Future of Thinking: Learning Institutions in a Digital Age.* That book, to be published in 2010, is merely the concrete (paper and online) manifestation and culmination of a long, complex process that brought together dozens of collaborators, face to face and virtually. The focus of all of this intense interchange was the shape and future of learning institutions. Our charge was to accept the challenge of an Information Age and acknowledge, at the conceptual as well as at the methodological level, the responsibilities of learning at an epistemic moment when *learning itself* is the most dramatic medium of that change. Technology, we insist, is not what constitutes the revolutionary nature of this exciting moment. It is, rather, the potential for shared and interactive learning that Tim Berners-Lee and other pioneers of the Internet built into its structure, its organization, its model of governance and sustainability.

This is an idealistic claim about the primacy of learning. We argue that the single most important characteristic of the Internet is its capacity to allow for a worldwide community and its endlessly myriad subsets to exchange ideas, to learn from one another in a way not previously available. We contend that the future of learning institutions *demands* a deep, epistemological appreciation of the profundity of what the Internet offers humanity as a model of a learning institution.

To initiate and exemplify this rethinking of virtually enabled and enhanced learning institutions, we used this project to examine potential new models of digital learning. This project, in short, is an experiment. We engaged multiple forms of participatory learning to test the power of "virtual institutions" and to model other ways that virtual, digital institutions can be used for learning. The process itself informed every step of our thinking about new forms of alliances, intellectual networks, and comparative modes of interaction (digital or face-to-face) in a range of learning environments.

We are at an early and fast-changing moment in the development of online collaborative forms. We consider this report to be both a guide to others who may wish to pursue such a course and a historical record of a form that, we suspect, will continue to evolve as dramatically in the next five years as it has in the previous. Wikipedia, the world's most ambitious collaborative learning site to date, was after all launched only in 2001. Ours is by no means the first project to be written using collaborative tools, but it is among the first to consider a participatory, digital site from an institutional perspective and to incorporate an analysis of the process as part of its own research agenda.

As a writing exercise, our project is analogous to experiments in such recent books as Chris Anderson's *The Long Tail* and MacKenzie Wark's *Gamer Theory*. Where our project differs in some respects from these and others is that it uses this experiment in participatory writing as a test case for virtual institutions, learning institutions, and a new form of virtual collaborative authorship. The names of all participants in this project are included in the appendix, and we consider their participation in this endeavor to be part of the content and method of the research itself.

The Future of Learning Institutions in a Digital Age began as a draft that we wrote together and then posted on a collaborative Web site developed by the Institute for the Future of the Book (http://www.futureofthebook.org) in January of 2007. The draft remained on the Institute's site for over a year (and still remains there) inviting comments by anyone registered to the site. An innovative digital tool, called Commentpress, allowed any reader to open a comment box for any paragraph of the text and to type in a response, and then allowed subsequent readers to add additional comments. Literally hundreds of viewers read the draft and dozens offered insights and also engaged in discussions with us or with other commentators.

We also held three public forums on the draft, including one at the first international conference convened by HASTAC ("haystack"), an acronym for Humanities, Arts, Science, and Technology Advanced Collaboratory.¹ HASTAC is a virtual network of academics and other interested educators in all fields who are committed to three principles fundamental to the future of learning institutions: first, the creative use and development of new technologies for learning and research; second, critical understanding of the role of new media in life, learning, and society; and third, pedagogical advancement of the goals of participatory learning. HASTAC is both the organizing collective body around which this monograph has developed and the centerpiece of our own commitment to virtual institutions.

This report points to only some of our conclusions about and principles for the future of learning institutions in a digital age. The full-length book goes much further. It offers pedagogical comparisons for teaching in new environments, detailing both the supports and inherent obstacles in collaborative teaching in virtual environments at this transitional moment. It theorizes what institutions are and how virtuality changes some institutional arrangements while requiring even stronger foundational support from traditional institutions in other ways. It re-theorizes the nature of learning and reconceives the concept of the institution as a mobilizing network resulting from the age of virtuality. It describes one such virtual institution-our own, HASTAC-in historical and institutional terms as a model of other such learning institutions. And it points to promises, problems, and even perils in the future of virtual learning institutions.

In addition, the longer book version includes extensive bibliographies to aid readers in their own endeavors to create learning institutions on new participatory models and offers a bibliography of models and examples of pioneering institutions that already are making the first steps at creating new learning networks.² In the online version of our book, URLs will point one directly to sites where one can find out more about a number of innovative participatory learning experiments and institutions. Although the scope of our main discussion is on university education and digital communities among adults, we have also included in our bibliography an annotated listing of K–12 and youth-oriented institutions that are taking the lead in exploring what virtual learning institutions might accomplish and how.

As authors, scholars, teachers, and administrators, we are part of many institutions. One conclusion we offer is that most virtual institutions are, in fact, supported by a host of real institutions and real individuals. We underscore this because it is part of the mythology of technology that its virtues, vitality, and value are "free." We seek to deflate that myth by underscoring how much the most inventive virtual and collaborative networks are supported by endless amounts of organization, leadership, and funding. Like a proverbial iceberg, sometimes the "free" and "open" tip of virtual institutions is what we see, but it is the unseen portion below the virtual waterline that provides the support. HASTAC, for example, could not exist without the tireless work of many individuals who contributed their time and energy. Those individuals are largely located at the two institutions that have provided the infrastructural support for HASTAC from its inception: Duke University and the University of California. It would not-could not-have gotten off the ground, survived, or thrived without that institutional support, as is the case, we insist, with any comparable virtual institution, at least at this moment in time.

There is a politics implicit in our emphasis on the infrastructural, leadership, organizational, and monetary costs beneath the tip of the information iceberg. The rhetoric of the "free" and "open" Internet is inspiring, and we heartily endorse open code and share-for-share not-for-profit licensing of the kind exemplified by Creative Commons. However, the digital divide still very much exists, across affluent countries such as the United States and throughout the wealthiest nations in Europe, and, with even greater disparity, across Third World countries. Bharat Mehra succinctly defines "digital divide" as "the troubling gap between those who use computers and the Internet and those who do not."³ It is troubling—and more so. It is tragic, given how much of our global knowledge and commercial economy depend on mobile access of one form or another. To fail to acknowledge the cost of human labor and the amount of support necessary to sustain virtual institutions (as with traditional ones) obscures the importance of the extreme and ever-

access age art associate available book california center challenges change collaborative college comments community computer contributions culture department digital director divide duke education environments forms foundation future hastac higher history http humanities increasingly information initiative institutions interactive internet issues john knowledge learning level library life media models modes museum networked offer online open org participatory possibilities practices process professor program project public research resources school science site social students studies support sustained technologies think today traditional university virtual ways web wikipedia work world www york increasing distribution of wealth worldwide. There is also an extreme and, many argue, increasing (not decreasing) distribution of participation in the digital age.

We thank the institutions that support our research and our virtual endeavors. They are listed in the acknowledgments section of this report. Without their vision and commitment to this larger project of envisioning the best modes of learning for a digital age, this research project would not exist. It is not our purpose to condemn traditional institutions but, we fervently hope, to be among those inspiring the kinds of change that will make our learning institutions better suited to the experiences, skills, goals, and ambitions of the young people they serve and who will be responsible for shaping the future.