Foreword

Howard Rheingold was asked to comment on a number of questions in relation to learning spaces. His insightful reflections serve as the foreword to the book and a recognition of the importance of spaces for learning and teaching in higher education.

**What are some important features of learning spaces?** Traditional learning spaces perpetuate the power hierarchy and the innate assumptions of pedagogy which are built into the architecture of the lecture hall. You have the authority standing at the front and everybody is focused toward them and if the student wants to hide out, you hide out in the back row. To me the most important part of the classroom is that you can fold up the tables and the chairs and move them out of the way... No matter what other fancy technology you’ve got in the classroom, if the chairs and tables are bolted down, you’re in trouble. In other words, I like re-configurability, whether you’re talking about the physical equipment or the online aspects of learning and teaching. For me, moving the students’ chairs in a circle has an explosive effect as there is no back row and you are all seeing each other. It is important to move away from the movie theatre effect, where all of the screens are in the front and everyone has to face the same direction...

**How have learning spaces changed?** The change that overshadows all other changes is the availability of broadband wireless internet access. In addition, the increased diversity and range of devices allows student and teacher access, which was unanticipated. This ubiquity of wireless access and the range of devices create both a challenge and an opportunity because it wasn’t planned from a pedagogical perspective. However, we can capitalize on this opportunity as the technology affords a much richer opportunity for peer-to-peer interaction, collaboration, and of course a connection with the world of other people and information that is available across the globe.

**Do you think universities understand collective intelligence?** Collective intelligence suggests that everybody finds a piece of the puzzle, and collaboratively, everyone pieces together the puzzle utilizing the contributions of the many. Collaborative inquiry is particularly called for in the 21st century as it optimizes collective intelligence to solve problems. However, because anyone can publish to the Web, the degree of authority, credibility, and accuracy that you can assign to a text needs to be determined individually as well as collaboratively and socially. Science, scholarship, business, and education are increasingly dependent on more collaborative work and less individually authored work. This is a trend that is a traumatic change for students who are used to being the sole author of a work and who perceive their role as performing for the instructor. For example, a Wiki collaboration is radically new in that you don’t have an author so much as you have a revision history, and I use it in my own teaching as a collective action problem. I’ve got a different team every week who co-teach with me and who stimulate active discussion. In terms of education, there are tools yet to be invented that will make more visible how these collaborations happen and make it visible for the students so that they can see collaboration in action.
How do you think university learning environments might change in the future? I don’t see learning institutions having an in-built incentive for changing anywhere near the pace at which technology is changing. When I first started teaching at Stanford I was surprised at how many students really didn’t know how to blog or use a Wiki. I assumed that they were all like my daughter and her friends, that is, digital natives. However, as I found, you can’t assume they know how to use a blog or wiki. From the teachers’ perspective there is no incentive for innovating in pedagogy, and this is a major issue.

Do you have a metaphor to describe learning spaces in higher education? What comes to mind immediately is the learning community, which of course can be virtual and/or physical. The agora is the gathering place, a marketplace of ideas and a place of exchange. The agora is not the auditorium with the podium. It’s not the passive audience and the active “sage on the stage.” The locus of authority and the lines of communication in the agora are very different from the auditorium.

Howard Rheingold

Howard Rheingold is a critic, writer, and teacher; who specialises in the cultural, social and political implications of modern communication media such as the Internet, mobile telephony and virtual communities (a term he is credited with inventing). Howard worked on and wrote about the earliest personal computers. In 1985 he published Tools for Thought and The Virtual Community and he co-authored Out of the Inner Circle: A Hacker’s Guide to Computer Security. In 1991, he published Virtual Reality: Exploring the Brave New Technologies of Artificial Experience and Interactive Worlds from Cyberspace to Teledildonics. He was the editor of The Whole Earth Review; Editor in Chief of The Millennium Whole Earth Catalog; and founding Executive Editor of HotWired. In 1996 he founded Electric Minds which was named one of the ten best web sites of 1996 by Time magazine. In 1998, he created Brainstorms, a private successful webconferencing community. He published Smart Mobs in 2002, and in 2008, he became the first research fellow at the Institute for the Future. He is a visiting lecturer at Stanford University and a lecturer at U.C. Berkeley.