

4 FLIDA 101: A Pedagogical Allegory

The University as Traditional and Transitional Learning Institution

It is often noted that, of all existing institutions in the West, higher education is one of the oldest, most enduring, and most stable. Oxford University, the longest continuously running university in the English-speaking world, was founded in the twelfth century (figure 4.1).¹ Only the Catholic Church has been around longer in the West and, like the Catholic Church, today's universities bear a striking structural resemblance to their medieval counterparts. The medieval university was a separate, designated, physical location where young adults (students) were taught by older and more experienced scholars, professors, and dons who imparted their special knowledge, chiefly by lecturing. Over the years, such features as dormitories, colleges, and, later, departments were added to this *universitas* (corporation). The tendency toward increasing specialization, isolation, departmentalization, and advanced training (i.e., graduate and professional schools) developed in the wake of the Enlightenment, gathering steam through the nineteenth century.



Figure 4.1

Main entrance of Balliol College, Oxford University (http://www.headington.org.uk/oxon/broad/buildings/north/balliol_college.htm).

Admission to the university indicated not just intellectual ability but explicit or implicit class affiliation as well. A physical space, a hierarchy of professor and student, limited access, and the conferral of a degree are among the persistent structuring forms of the traditional institutions of higher education in the West that have endured for hundreds of years.

That is a sobering thought for anyone who seeks innovation. In academe, the institutional obstacles to collective, collaborative, customized, participatory, and interdisciplinary teaching, research, and learning range from arduous (at the most flexible institutions) to insurmountable (at the most hidebound). It is not easy to traverse departments, fields, disciplines, divisions, and schools, the so-called silos of the modern research university.

And, yet, for all the solidity of the traditional university, there are also many features that have changed dramatically over the last several centuries. Were that not the case—were traditional learning institutions impervious to change from internal and external forces—there would be no point in thinking about the future of learning institutions and the ways that new modes of participatory, digital learning might be incorporated into existing structures, pushing those structures toward innovation (figure 4.2).

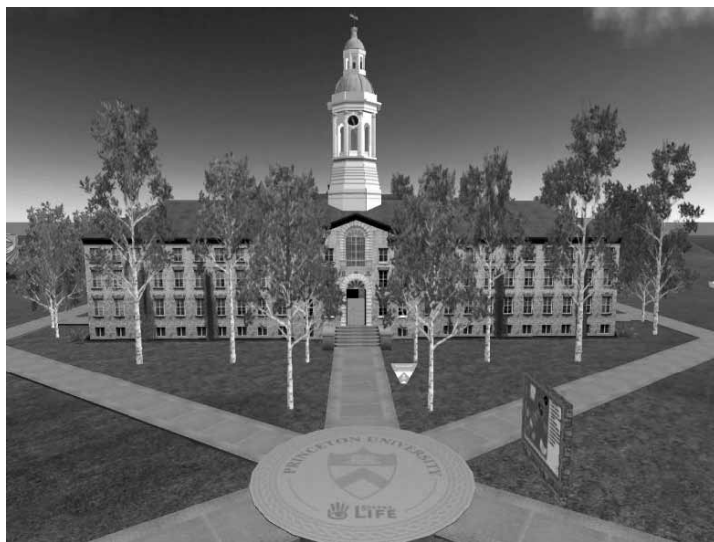


Figure 4.2

Entrance to Princeton's Second Life campus (http://ald03635.files.wordpress.com/2009/03/princeton-university_001.png?w=340&h=238, accessed March 1, 2009).

There have been rapid transformations in learning environments in the past two decades prompted by emergent digital technologies. Increasingly, these developments have prompted people to participate in media and the learning possibilities they entail, rather than simply consuming them. Feedback regarding their participation has become far more immediate. Learning tools and content can be shared nationally and internationally. Learning environments and techniques can be customized. There is almost instantaneous and easy access to vast amounts of new information. And new media such as massively multiplayer online gaming environments and virtually enabled social networks pose not only new challenges to learning—new worlds require that we learn about them—but also new possibilities for learning media themselves.

Digital media accordingly have significant potential for learning when people use digital means for creative production or to communicate with one another and contribute their knowledge and expertise to solving a problem, to a body of collective knowledge, or to reporting on community activities in a responsible way. Technologies that promote participatory engagements across physical distance enable people who might not otherwise know one another to meet together online for a collective purpose, adding their knowledge to a common and public site. They offer the possibility of learning from each other (through digital dialogue and communication), as much from those who share the same interests as those who do not. Collaboration in learning, spanning geographic distance, has broad potential for significant impact.

These new possibilities come with significant challenges. To be precise about the kinds of difficulties and possibilities faced by academics interested in participatory learning within a traditional university environment at this historical moment, this

chapter considers one case study. This example is fictitious, designed to highlight the different kinds of issues that academics negotiate on a regular basis.

Let us say that two professors want to coteach an introductory course on *The Future of Learning Institutions in a Digital Age* (aka FLIDA 101). For the sake of discussion, let us assume that those two professors are this book's authors, who teach at Duke University and the University of California at Irvine. Duke University is a private university of 6,000 undergraduates located in the Southeast; the University of California at Irvine is a public institution with more than 21,000 undergraduates (and growing) located in Orange County, California. Team-teaching such a course means traversing physical distances between the East and West Coasts, cultural differences between the student bodies of each university, and institutional disparities between private- and state-funded universities. It is hard enough to teach across the many campuses of the University of California system, let alone across the country and across divergent institutional structures.

The sort of virtual learning environments that Web technologies have enabled offer genuinely new learning spaces, with new possibilities, novel learning relationships—to texts, to educational authority, to other learners—and distinct challenges. They differ even as they draw on traditional structures of higher education institutions. But they are different, too, from earlier models of correspondence education, where one worked alone, isolated at home or at a residential institution (e.g., for incarcerated individuals who resolved to better themselves) with snail-mail written feedback from an instructor or supervisor with whom one had scant interaction. They differ again from more recent distance-learning programs that have tried to mimic the traditional classroom environment as much as possible, but with instruction beamed in remotely, and interaction with the

instructor mediated by the distance and the limitations of the technology. Virtual environments have freed up learning in all sorts of ways—undercutting the demands of physical presence, opening up a range of possibilities for delivery of learning materials, for participatory and collaborative interaction even at a distance, and for instantaneous response.

Virtual environments proliferate the challenges faced in setting up a course such as FLIDA 101. For one, there are disciplinary differences to consider. Davidson is an English professor and historian of technology. She is also a professor of interdisciplinary studies, who publishes widely on gender and race in Americanist contexts. Goldberg is trained as a philosopher and is a professor of comparative literature and criminology, law, and society. He publishes widely on race and race theory. One is a former full-time university administrator; the other currently is an active administrator. Although both professors are cross-disciplinary in their intellectual interests and approaches and have worked extensively on other projects together, the disciplines they cross are different. This new course in “The Future of Learning Institutions in a Digital Age” has never been taught before, by either of us or by anyone at either of our institutions. It is a blank slate. What might such a course look like? What institutional obstacles might they face? What possibilities for digital learning might they explore?²

Steve Anderson and Anne Balsamo note in one of the best essays theorizing the implications of teaching in new digital environments, “A Pedagogy for Original Synners,” that it is hard to “gain perspective on the contemporary scene of digital learning” precisely because we are in the midst of it.³ They quote cyberpunk writer William Gibson’s provocative comment on the problem of studying the contemporary or prognosticating “the future”: “The future is already here, it’s just distributed

unevenly."⁴ By focusing on a specific (if hypothetical) course, this book makes tangible some institutional problematics in an unevenly distributed future of participatory and digitally aided learning.

FLIDA 101: Course Design

Given the topic of the course and their commitments to exploring digital forms as learning platforms, the professors are determined to teach FLIDA 101 in a virtual environment that the class will build out together. Specifically, this involves multiplayer online games and other kinds of virtual environments as spaces for a new form of interactive, participatory, digital learning. They plan to meet, virtually, in such an environment for biweekly class sessions. Second Life (SL), a product of Linden Research, Inc., is the most obvious choice of an environment at this historical moment, although it is not without its problems (and there is no predicting what environments might appear and trump SL within the next decade).⁵

The challenges of virtual learning environments, in general, and of the problems posed by SL, in particular, will be the focus of some of the course discussion (figures 4.3 and 4.4). Indeed, almost every feature of the arrangements of the course will also be a topic for consideration and debate. The professors will want to consider what it means to use SL as a virtual substitute for the physical gathering place that has been the hallmark of the traditional university since medieval times. What features does SL share with the more typical campus (in any of its possible configurations), and what features are new? What is productive about SL in enabling traditional learning practices, in transforming those practices, and in prompting new learning practices and possibilities not otherwise available?



Figure 4.3

The New Media Consortium's campus in Second Life (<http://www.nmc.org/sl/about>, accessed June 30, 2009)

**MM 490: FIELD RESEARCH IN SECOND LIFE
JANUARY INTERIM, 2007, M-F, 6-9PM**

Join Professor Beliveau (aka Dr. Ed Lamoureux) in a class adventure in *Second Life*.

From our base on the New Media Consortium *SL* campus, you will learn to apply the basic practices of ethnography of speaking in the online world of *Second Life*.

Daily class meetings, readings and discussion, field research, and student presentations will be held "in world" in *Second Life*.

Online course. Jr./Senior standing. Requires fast graphics card & a computer with a broadband connection. Reserved, see Dr. Lamoureux for admission. Limit 8 students. Mandatory pre-class meeting 11 am-noon, Saturday December 2. Preparation and study between Dec. 2-January 2 required.

Figure 4.4

Poster for a Second Life course led by Ed Lamoureux at Bradley University.

SL would thus function in three interlocking ways in FLIDA 101. These functions are themselves a hallmark of the form of participatory digital learning the professors are advocating. First, SL will be their meeting space, a way of making a new collaborative bicoastal learning site, a virtual geography of proximity even when the participants may be living in different places. Second, SL will be their subject (one focus of their critical, historical, and theoretical analysis of the future of learning institutions). Finally, SL (or at least their particular island or piece of projected real estate) will be created by the students, a product of their individual and collective creative, computational, and customizing skills.⁶

The professors expect that typical FLIDA students will be used to customizing the social technologies with which they work. One demographic of students who will be drawn to such a course is exactly the do-it-yourself (DIY) student who already spends a lot of time customizing online. The professors also expect, however, that even the most dedicated DIY customizers will *not* be used to assessing the theoretical, historical, ethical, social, political, and technological implications of the social technologies with—or on—which they work. The professors assume that the discussion of these matters will take on added force because of the amount of time, dedication, and personal investment involved in creating a virtual environment or an avatar. The most theoretical discussion of identity, for example, gets quite personal when the focus is on a remix of the identity of the avatar someone has painstakingly created.

The theoretical issues the professors plan to discuss throughout the course as part of the future of learning institutions include such things as virtuality as a form, persistence, access, privacy, intellectual property, social contracts and social organization (in virtual as well as in real spaces), participation and

collaboration, work credit, social privilege, digital divides, the nature of institutions, virtual “statehood” (and its geopolitical virtual boundaries), and the definition of learning. Race and gender will also be key issues, as will be all matters of disparity and prejudice that are developed and enacted in the design of a virtual culture. These issues will likely have an unusually visceral (if virtual) component.

For example, intellectual property, individual rights, and fair use discussions may turn up when the professors focus on the creations of the class. “Information wants to be free!” is a rallying cry of this creative generation. Peer-to-peer file-sharing of music, DIY videos of television shows posted on YouTube, and other activities that infringe on patent or copyright law occur daily as part of youth culture and the cry for open access. Remix culture is all about adapting someone else’s initial creation and reusing it for one’s own creative purpose. Most students today have no argument with a remix model. But how will they react when the professors suggest that others be allowed to take and remix the avatars and the real estate the class develops? Since our SL environment and the students’ avatars are being generated in a nonprofit educational context and might be useful to other students and teachers, once class is over, the professors might decide to allow anyone anywhere in the world to take over the classroom and to use the student-created avatars and repurpose them however they wish. Information, after all, wants to be free. Or does it?

Putting together creative technology development with critical thinking forces certain issues in new ways. What, in fact, if the professors propose to be open source with the avatars while the course is in process and not just after the course is “finished”? Would that serve as a firsthand lesson in the limits of the anarchic? A discussion of authorship and publication might take

on new energy if posed in this way. It will likewise raise interesting questions about avatar design appropriate to different environments, about thorny questions of race, class, and gender representation, and about wise decision-making on the Web.

Since the professors do not spend their leisure hours customizing their personal SL environments, this course also makes certain assumptions about differential expertise. Some students in the class no doubt will be far more expert at SL than other students or than the professors. This raises another interesting question about the traditional hierarchies of learning and the future of participatory learning. If the hierarchy of who teaches and who is taught is one of the persistent features of the traditional university, what happens in a course that, structurally, puts the professors in the position of learners? Hierarchical models of learning—the conceptions of pedagogical authority and respect they entail—give way to different learning dispositions. Flat (more horizontal) learning environments suggest the need for greater openness to multiple inputs, to more experimental trial and error, and to less authoritative classroom arrangements. Instructors end up being less like content-experts in every domain on which the course touches and more like effective learning coordinators, identifying who best might lead the learning trajectory at each moment. These issues of pedagogical collaboration, leadership, and hierarchy, too, would serve as topics for discussion in the class since the future of learning is tied to tacit hierarchies of who has what to learn and from whom and to a collaborative and participatory spirit of learning well from one another.⁷

Since we will be meeting in SL, every member of the class must customize an avatar to represent himself or herself online. The classroom itself will be in a space that the class develops and customizes together. Basic affordances such as classrooms

are usually a given in the traditional university setting—yet that given is also full of ideological and hierarchical assumptions (the challenge more traditionally posed when an instructor proposes to hold a class outside on the lawn on a sunny summer day makes that stabilizing underpinning clear). In this virtual learning environment much, if not all, is a matter of choice, or at least of choice within SL's parameters (see figures 4.5 and 4.6). Even one's presentation of a pedagogical self—the quiet student, the contentious student, the studious student, the flake—is rarely so visible as when one actually must make a visible representation of oneself to be performed in a public, virtual space.



Figure 4.5

Schome Park, a classroom run by the pupils in Teen Second Life (http://www.schome.ac.uk/wiki/Schome_Publicity_Pictures, accessed July 5, 2009).



Figure 4.6

Lecture Hall at Kansas State University (<http://www.ke5ter.com/tag/education>, accessed July 29, 2009).

There is also the question of time. Digital technology has certainly compressed space and time, famously speeding up activities such as instantaneous communication, the capacity to check facts and sources, the possibility to produce work. The seduction of speed often blinds one to just how time-consuming digital production can be. It is not just that one receives so many more communications, wanted and unwanted, than one did in digital prehistory, nor that one has instantaneous access to so many more sources of information. It is also that the setting up of the infrastructure, the testing of new applications, the creation of user spaces, the inhabitation of landscapes of identity, and the experiment of working across varying institutional cyberinfrastructures can all be enormously taxing. These considerations (the hidden labor of instant communication) will create subject matter for the course.

These issues of time and labor are theoretically urgent, but they also have a practical component. One quarter (10 weeks) or

one semester (14 weeks) is likely too short to go from conception through construction to the full service of a virtual classroom—especially if one expects the virtual environment to be fully serviced and comfortably inhabited by students and instructors. A full additional term probably would be required: one for creating the space and one for actually deploying a course within it. We are looking at a year-long course—in short, a real commitment.

Since the goal of FLIDA is to understand the potentials and limits of virtual environments as collaborative learning spaces—learning institutions of the digital future—one of the course objectives is to prompt thought about the social and intellectual implications of the design choices made for the environment to be inhabited and for the avatars class participants make to represent themselves. It is important, for example, that the class not just assume it is going to set up a classroom in SL. The class must select SL as the site from among other available possibilities and carefully consider why it is making this particular selection. What if the class had decided that, in fact, learning is not about being in a shared space (virtual or physical) but is about the *agon* of ideas? The class might then have decided that the educational equivalent of *World of Warcraft* would be a better environment and a better way to embody the future of learning institutions in a digital age.

The point is that in traditional education much is already a given: the physical setting, the structure, the institutional rules, the admissions policies, the requirements for graduation, and the assumptions about what constitutes learning. If teachers and our students are selecting which kind of environment best represents learning needs and objectives, they are also thinking profoundly about what learning is and what constitutes a learning institution. One of the professors' jobs will be

to remind students by reminding themselves that every conversation about the virtual and the future is also a tacit reflection on the actual and the present, and the historical conditions that shaped that past and may haunt the present.

There is a pedagogical method implicit in this participatory form of learning. At HASTAC, this method is *collaboration by difference*, and it is the method by which many of our interactions across disciplinary boundaries are structured. That is, when one is working with people who do not share one's basic assumptions and skill sets, who are (in whatever way) different from one, many keywords, assumptions, terms, and material conditions that once seemed obvious suddenly require explanation and redefinition before any significant collaboration can happen. It often turns out that what seemed obvious or the same is actually opaque and alien.⁸

Analyzing such embedded contradictions and unbraiding and unbundling terms—a methodology most commonly associated with Derridean deconstruction and probably as dated as Socrates—is one aspect of participatory learning that the professors of FLIDA intend to encourage. However, prodding likely will not be needed since one mode of youth discourse in the Internet age is snarky backchanneling (typically, instant messaging that provides a countercommentary to the teacher or other authority figure, a quietly twittering form of critique shared by those put in the position of normally passive listeners). Backchanneling is a tool of participatory learning.

SL is an exceptionally well-developed Metaverse, already inhabited in 2008 by over 13 million residents. The FLIDA class is not building a future learning institution from scratch but rather erecting an establishment within a well-populated virtual world. A first issue for the course will be the advantages and disadvantages of locating the class in a virtual world that is

already populated by millions of people, that offers the amenities of cities (including well-established learning institutions) and many pastoral places and includes abundant goods and services (from operas and art exhibits to gambling and prostitution).⁹ SL is a virtual world that now comes with an array of established institutions (many of which mimic the physical world). It operates on existing social rules (although these are not autocratically or corporately enforced). And it has a relatively stable economy (see http://secondlife.com/whatis/economy_stats.php). Most anything can be purchased within SL with Linden dollars, valued in April 2009 at L\$270 to one U.S. dollar.¹⁰

The discussions leading to the selection of SL as the FLIDA meeting place and digital learning institution are not limited to one discipline. The authors' syllabus of secondary readings is *long*. It is also evolving and expanding. It is hard to imagine any social science discipline that would not contribute to an informed choice about a virtual living space. Similarly, various issues in the biological, environmental, and computational sciences must be considered. Nor are the issues purely virtual. In the real world, SL takes up an extraordinary amount of server space. Servers, like most computer hardware, are full of toxic materials and consume excessive amounts of energy, both when they are being produced and when they are operating. Here again the knowledge hierarchy becomes an issue, since the authority figure on a given topic shifts constantly. An undergraduate major in environmental studies may well know more than the professors about the specific contribution of the Internet, desktops, mobile phones, and other technologies to global warming, but that same student may know little about history, science fiction, graphic design, ethics, critical race theory, intellectual property law, or programming.

Ideal students in FLIDA 101 are interested in virtual learning and would be willing to put their knowledge into practice and think critically about their practices. That is a lot to ask of students. Students must also risk feeling at sea some of the time. Since students do want to be certified to enhance job prospects as well as to learn, this poses a different kind of challenge. Not everyone will be equally good in FLIDA 101 all the time. The potential to receive a mediocre grade is high when one may fail to understand some of the core topics or possess all of the skills a course demands. The ideal FLIDA student also must be willing to translate since, in many instances, the student will have specialized knowledge not shared by other members of the class. Whether that specialized knowledge comes in the form of code, equations, or the specialized language of critical theory or social psychology, there will be terms, concepts, and assumptions that will need to be translated for other intelligent people whose knowledge, aptitudes, and interests are at a more basic level. As in any such translation, a FLIDA student is not just traversing virtual worlds but is exploring a range of disciplinary, hierarchical, and affective frontiers as well.

As noted earlier, professors sometimes forget the environmental impact of digital technologies, but, as a lesson in being cognizant of our environmental footprint, one collective class project might be recording daily the energy consumed by FLIDA 101 as well as the pollutants produced and putting that information in perspective with other forms of learning. Creating the design of the experiment, measuring it, analyzing and interpreting the data, putting the findings in institutional and historical perspective, and then presenting the findings to the world in a compelling multimedia format that would have maximum impact would require a range of skills and different forms of knowledge.

The professors also expect that the course will constantly surprise. For example, SL presents programmers with choices, and with limitations. Navigating virtual worlds to their fullest is not trivial, in a computational sense, especially as one sport among engineers is to see if they can outsmart the owners of Linden Labs as well as current residents by building ever-new and challenging applications, devices, tools, and weapons. One of HASTAC's summer interns, Evan Donahue, for example, working with Mark Olson, HASTAC's Director of New Media at the time, was able to develop a way of simulcasting real-time multisite video conferences in SL, a capacity that SL supposedly lacks.¹¹ Outside of his internship, Evan Donahue was also written up in his Brown University newspaper as a "virtual arms trader" for the SL weapons he created and sold (for real money) on eBay. This aspect of customizing would also be a class topic for discussion in FLIDA 101 since commerce and ethics also have a role in creating virtual worlds.

As these two examples illustrate, there are technological, ethical, and economic implications to design choices in virtual worlds, just as there are in real life. Again, like material life, the narrative, linguistic, and aesthetic choices in selecting SL as the course site call upon the histories and theories of the range of the humanities and the arts. In establishing the site, the professors would need to think through some key ideas in cultural studies, gender theory, critical race theory, and postcolonial theory to inform the class's thinking about the ethical and social questions arising from the built-environments in the virtual world. There are questions about where and what to build, whose avatar and by extension actual lives the class would be impacting. This entails surfacing questions of class, wealth and resource distribution, region, nation, neighborhood, access, sustainability, resource use, and so forth.

Significantly, these same implications pertain in the site of a course held in a conventional classroom at a traditional university. However, university instructors (the authors of this book included) more often than not take the material circumstances of education as a given and only rarely apply critical skills to understanding the underpinnings (in every sense) of the conditions of labor and resource distribution that underlie higher education.¹² As with the legal and intellectual property issues discussed earlier, a transitional moment often exposes assumptions held so long that participants no longer see them. The critical, ethical questions evoked by selecting a virtual learning environment holds up a mirror, making participants more aware of the questions that must be asked about everyday life.

Once the FLIDA class begins to build its futuristic learning institution in SL, a new roster of interconnected issues comes into play. Namely, what will the class itself look like? Collectively, what does it represent? What is the demography of the virtual collective class, both actually and avatar-virtually? Male or female? In SL, about 70 percent of the residents are male, 30 percent female. In undergraduate American university classrooms today, the split tends to be more like 45:55 in favor of women. Which ratio better represents the gender breakdown in the FLIDA classroom? Do the class's avatars even have gender, traditionally conceived? Should that gender be intergender, transgender, or no recognizable gender at all?

What about race, class, region, or national origin, the kinds of identity categories one checks off on census forms or are meaningful still to many? Typically, in SL, people choose and customize avatars that are remarkably like themselves only better—same race and gender but better looking, stronger, and sometimes with superhuman powers (e.g., an ability to fly). If the students in FLIDA come from a range of disciplines from

computer science to art, are those particular skills, specializations, and affective issues also reflected in the avatars they create? How many of one's real-world characteristics are projected onto one's avatars? These are all questions of choice and selection that make for individual introspection as well as for stimulating classroom discussion. Imagine the class introductions, as participants proceed around the *room*. Indeed, what takes introductory precedence, the room or the *room*, a student's actual identity or his or her avatar? "I am so-and-so, and I . . . ?" The question of self, embodied in one way or another, is in question from the outset.

Indeed, any single one of these issues could be not only the motivation but the specific *content* of the group-generating syllabus of FLIDA 101. "Race in Virtual Worlds" is its own topic, with an increasingly extensive syllabus of secondary readings.¹³ So also is "Gender and the Future of Learning."¹⁴

Class disparities emerge as students and professors set about creating their avatars.¹⁵ If the class is working in SL, it needs Linden dollars to give the characters "skin." More Linden dollars are required to give them costumes and various mythical or whimsical physical characteristics and abilities. How are gender and race apportioned? Are all of the avatars even human? If not human, are they animals, droids, aliens, or superheroes? What capacities do animals have in this virtual world? Can they speak? What about the superheroes? Do superheroes ace all the tests? Do they fly? Are they geniuses? Is anyone in this virtual classroom overweight or disabled? Is every one young and good-looking? If so, what prompting relations are there between prevailing entertainment media and choice of avatar identity, between notions of beauty, embodiment, and virtuality?

These are all social and philosophical issues that take on a different urgency when students (and faculty) are both design-

ing idealized avatars of themselves and face-to-face with one another. What is the definition and value attached to the self in a virtual classroom? What is the relationship between *self* and *avatar*, and where do collective concerns like privacy, gossip, reputation, and respect come into play in virtual worlds and how is this the same or different from actual environments?¹⁶

These are profound issues and the stakes of the discussion are higher when students are designing the virtual worlds that they embody. This integrated mode of teaching-and-doing (artistic and technological creativity paired with critical thinking) is the point. FLIDA 101 is not only thinking about the future of virtual learning institutions; it is thinking about them in the DIY customizing style that makes such virtual learning appealing, possible, and potentially rich for the current generation of students (and, not incidentally, their professors).

FLIDA's Community-Generated Syllabus

The FLIDA course will involve developing some technological and social knowledge, technical skills in computing and critical theory, and facilities of scientific and humanistic thinking. The point in proposing this pedagogical allegory is that, in addressing issues of the virtual, one *is* addressing the future of learning institutions, and that overlap means creating or revising an expanding range of courses across the curriculum, in and between the sciences, humanities, arts, and applied areas—the mechanisms for building the environments and avatars for the sort of digital institution characterized by FLIDA 101 are as much the medium for skill-building as the course content is the medium for knowledge formation.

Through class blogs and wikis, students will constantly challenge one another's assumptions and will be adding to an

evolving class syllabus. Professors will vary as much as students in the SL skills to develop impressive avatars (some professors may even bear the brunt of student satire in this regard, but the capacity to handle derision with dignity may likewise offer lessons in social skill). Surely this model of learning together is preferable to the sort of self-proclaimed political policing of courseware and culture practiced today by the likes of Campus Watch. Other traditionalist or even reactionary organizations, too, seem determined to promote a nineteenth-century hierarchical pedagogy for higher education equivalent to the antiquated No Child Left Behind model¹⁷ on the K–12 level, even though twenty-first century students come with new collaborative interests and skills and, equally, go out into a job market in which training in interdisciplinary teamwork is demanded.

Notwithstanding, professors can generate an extensive syllabus of secondary theoretical and historical readings to encourage students to think deeply about every term in our course title: *future, thinking, learning, institutions, digital, and age*. What constitutes a *digital age* and how is it different from other eras in the history of media and technology? What is the relationship of the future learning institution professors and students are cocreating to past experiments in utopian learning or in technologically enhanced learning, many of which failed dismally? What is learning, and what could it more effectively be? What is an institution, and how does virtualizing institutions alter their modus operandi, if not their definition (see chapter 5)?

Readings beginning at least with Plato and running to contemporary learning blogs would frame the course. For the course properly to fulfill its mission in moving from a hierarchical, one-to-many classroom to an interactive and socially networked classroom, the syllabus would also need to be constantly enlivened by the students' own curiosity and not just

simply contributing to the development of a new technological formalism (see figures 4.7 and 4.8). Google jockeys set to searching and then reporting to the class on any idea that arises in the discussions would supplement reading materials.¹⁸

Students generally would be encouraged to propose readings for one another, based on what they find through their searches and from what they have read in their more standard courses. A wiki forum would enable those in the class to comment on each other's suggestions and on the reading materials themselves, producing a critical consensus of what is compelling and critical, what is informative and insightful, and what is misleading



Figure 4.7

Image from Davis' slideshow on how to create a flat classroom, slide 1 (<http://www.slideshare.net/coolcatteacher/flatclassroom-presentation-il-tce>, accessed July 5, 2009).

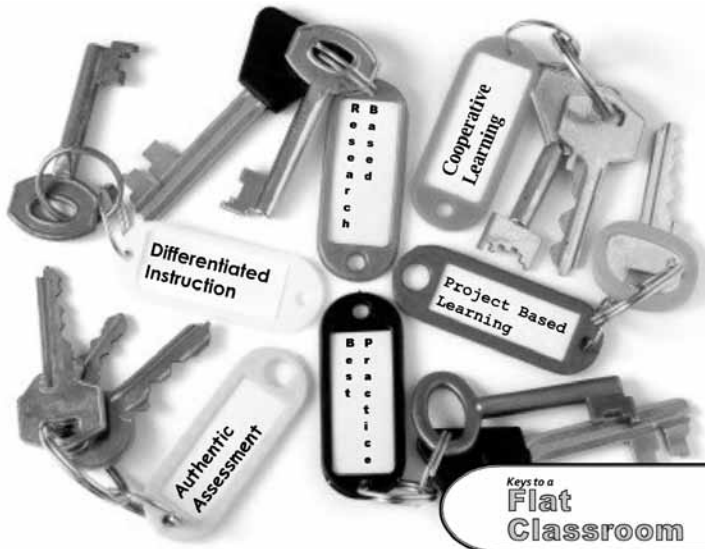


Figure 4.8

Image from Davis' slideshow on how to create a flat classroom, slide 2 (<http://www.slideshare.net/coolcatteacher/flatclassroom-presentation-il-tce>, accessed July 5, 2009).

or missing the point (see figure 4.9 for an example of how wikis can be used in the classroom and figure 4.10 for a comical representation of how wikis are affecting our everyday lives).

In addition, the students' own weekly blog postings would be part of the syllabus, and those postings would change according to the reading but also according to what topics arose from the SL building task at hand. One basic issue in thinking about how learning should be structured and enabled by digital technology concerns the function and organization of the library as repository and medium of information for virtual

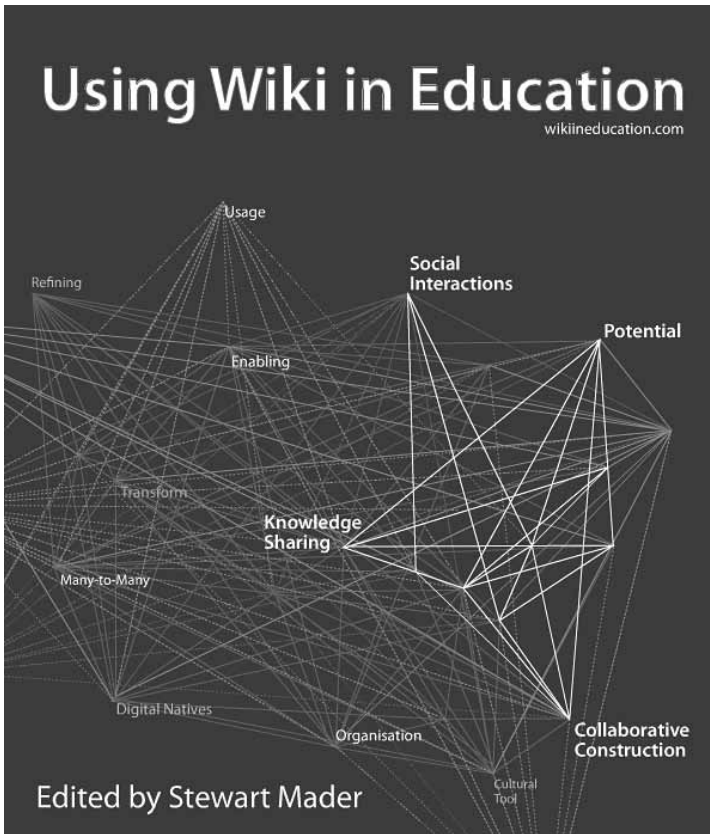


Figure 4.9

Cover reproduced by permission from Stewart Mader, ed., *Using Wiki in Education* (Lulu.com, 2008) (<http://www.lulu.com/content/2175253>, accessed July 5, 2009).



Figure 4.10

Wikis on Toilet (image taken from http://upload.wikimedia.org/wikipedia/commons/thumb/7/73/Warning_-_Wikis_on_toilet.svg/600px-Warning_-_Wikis_on_toilet.svg.png, accessed July 5, 2009).

institutions of advanced learning. Should a virtual learning institution such as FLIDA University have its own library that only its “registered” students can use? Should that library emulate online how university libraries function in their material manifestations? Or should the FLIDA class be working with other SL inhabitants to build interoperable information systems where all the world’s knowledge can exist in some open-access knowledge nirvana where copyright no longer pertains, all knowledge is coproduced, collaboratively vetted, loosely structured to maximize alternative modes of presentation, and readily available to all?

Potential students might think of this free-flowing world of ideas not as nirvana but as hell, as anarchic and too unformed to be useable, let alone useful. Too little informational structure and too much freedom of choice risks disorder, insecurity as a result of lack of predictability, and ultimately the incapacity to act because of the unreliability of information sources and the resulting failure of replicable experimentation. In a world where anything goes, one risks the danger that everything goes. Such a copyright-free world has the potential of depriving a would-be professional writer in the class of a livelihood. Why, she might ask, should the words and ideas that she generates be available without cost when nothing else is? If she must pay for all kinds of goods and services manufactured by people with MBA degrees, why do those same businessmen and women think they are entitled to her art for free? In discussing the mechanisms for dispersing the books and articles on the syllabus, yet another syllabus of readings on open access, open source, intellectual property, and other crucial issues will be generated. In short, the structure of knowledge on which learning is predicated implies a certain structure to the world; the world structured in certain ways entails that knowledge and learning will be tailored to inform such a world. World-making and world-learning go hand in glove.

In FLIDA 101, students and instructors learn by doing, and they learn from one another as they are doing. Class participants will use technology creatively *because* they are being critical and introspective about the technology itself. Participants are not simple consumers of SL or any other technology. They are using the experience of building a creative, digital learning environment to think deeply about the nature of all learning institutions, about the structure of knowledge, past and future.

Participants are solving problems as they arise but not reducing all learning to the solving of problems. We learn too from critical reflection, from cultural engagement, from failure. A philosophy of learning is implicit in and, in turn, shapes the nature of learning institutions. As learning and learning institutions go digital, it would be naïve to think how, what, when, and where one learns would not be dramatically transformed as a consequence.

FLIDA 101 is a pedagogical allegory, imagined to help us think about pedagogy in digital worlds and the way such courses might work in actual traditional and transitional institutions. Already, though, a growing number of creative courses dot the landscape of higher education and challenge institutional assumptions, including courses exploring the enhancing technologies of three-dimensional representation, the virtues of digital mapping and visualization technologies—whether to bring to life geographic references of literary classics or to make available to learners in dynamic ways historical archival content they can mine together—or that allow students to create and draw on laser-generated digital reproductions of works of art and architecture revealing features of those works otherwise hidden from view. Such ventures in cultural analytics not only make knowledge potentially more accessible, they also encourage and make possible productive new modes of participatory learning.¹⁹ The pedagogical point of the FLIDA 101 allegory: New technologies can prompt genuinely new questions. In doing so, they promote the emergence of a genuinely new knowledge formation not otherwise within reach.

FLIDA 101 in the Traditional University

Clearly FLIDA 101 is a far-reaching course that raises many issues about both virtual and real worlds. The creation of such a

course also poses important issues about institutions. How would such a course work in the most practical, curricular terms? How does it count toward that all-important degree?

A first issue might be disciplinary. In what department would a university offer such a course? As is often the case in team or cotaught courses, the FLIDA 101 professors each have multidisciplinary and multidisciplinary home departments and affiliations. They teach at universities that encourage interdisciplinarity and consider it a hallmark of those institutions. The most likely host sites for FLIDA 101 in any institution would be nonstandard innovative programs. Trying to have FLIDA cross-listed in more traditional departments, even with the institutional flexibility at the professors' respective universities, would be challenging.

Since the range of bureaucratic issues is so different across institutions, this book will not belabor all of the discrete (and enervating) hurdles of departmental approval and counting that arise with any interdisciplinary course. Anyone who has ever tried to offer a team-taught and cross-departmental course runs into such issues. Faculty wanting to pursue digitally-enabled virtual team-teaching across institutions will confront issues faced by faculty wanting to team-teach across units within an institution to the power of 10. Different institutional and administrative cultures, different ways of assessing credit for cotaught courses, the divides between public and private institutions, different levels of student expectation and expertise, and different institutional levels of technological support and openness to technological as well as pedagogical experimentation. Such issues will frame the institutional conditions of success or failure.

The sort of course FLIDA represents poses special challenges, since it would involve students and professors from many

fields—engineers, social scientists, artists, computer scientists who specialize in artificial intelligence (AI), philosophers who contest current (limited) definitions of AI, literature professors who understand narrative, anthropologists who can do ethnographies of game play, political theorists who can help understand the social rules of the constructed virtual environment, and law professors for the intellectual property issues, human rights issues, and highly contested issues of who is responsible for policing violence and other social misconduct in virtual worlds. One can add many more examples to this list. As exciting as such a course could end up being as a learning experience, it poses conceptual, architectural, and logistical challenges, too. And yet it is safe—and sorry—to say that many faculty and administrators in all of the departments listed above would not necessarily recognize the subject matter of FLIDA as their own. It is even possible that *no* department would find FLIDA comprehensible. That is the dilemma of innovation at the edge, to use John Seely Brown’s term.²⁰ What happens then?

Many students might not be able to take FLIDA because such a course belongs in no single major, and students at most traditional universities are required to check off all the myriad requirements for general education and a major before they graduate. This is an “elective.” But assuming there are adventurous students who want to take such a course even though it may not count institutionally, what happens when we go to the computer science department and find out that, at some of the most distinguished departments in the country, games are considered unworthy of scholarly attention—despite the fact that games require some of the most complex code writing? Who in the computer science department might want to join us in team-teaching the course?

Often the person most prepared to participate in an innovative course such as this is the brilliant adjunct professor, the non-tenure-track research professor who works in some full professor's lab, or the quirky but marginalized maverick professor in the department. That person may well be on unstable grant money, because she was not able to find a *real* job in a traditional computer science department or dismissed for doing work out of touch with mainstream *real* science. Grants likely do not cover teaching, and a side interest to departmental pedagogy may not count toward teaching credit. Such instructors would have to contribute to FLIDA for free, on their own time, at personal cost. The course, if it were to be offered at all, would likely run once, tolerated for its quiriness but just as a one-time anomaly. This may be exciting for the student, surely, but it is not exactly in the best interest of a professor and not the best way to promote institutional change. And it is no way to have a lasting impact on the curriculum and on the future of learning institutions.

The silos that separate departments, disciplines, and divisions of universities are a problem well beyond the customized, collaborative, and collective form of participatory learning this book promotes for the digital age. However, the digital exacerbates the problems created by the existing silos that are so deeply entrenched within traditional universities.

Also entrenched are the specific systems of reward and recognition that have evolved at each university. If the FLIDA 101 professors wish to team-teach a cross-institutional course in a virtual environment, there are a host of other institutional issues that must be considered. An innovative institution such as the University of California's systemwide Humanities Research Institute (UCHRI), directed by one of this book's authors, is

relatively rare in its spanning of the separate institutions within the vast University of California system encompassing 10 universities. UCHRI brings together faculty across the system for shared research. Yet, even as it can assist in setting up the virtual infrastructure for the course, UCHRI has no standing within the university administrative structure to offer accredited courses of any kind.

Some years ago, two colleagues at Duke University and the University of North Carolina decided to team-teach a graduate course. Only 11 miles separate the two campuses, so it was decided that half of the course would be conducted at one university and half at the other. However, working out the details of how the course would “count” turned into a nightmare. The challenges ranged from those of scheduling to grading and from course accreditation to faculty workload (not to mention insurance considerations for faculty and students traveling from one campus to another on university business). For example, the identical grade at the one institution did not necessarily count the same as it might at the other because of different gradations (pluses and minuses versus a numerical system) within grading structures.²¹ In the end, the two professors decided to act as if they were not team-teaching at all, even though they happened to be meeting in the same classroom at the same time and teaching the same course—just filled half with students from Duke and half with students from the University of North Carolina. If the institutional obstacles were simply too difficult to negotiate for a course otherwise recognizably similar to regular college courses on each respective campus, how much more difficult for courses conducted largely, if not exclusively, in and through virtual environments, bicoastal and multi-institutional?

Virtual Learning, Traditional Institutions

It would be all too easy to end this allegory of participatory learning with a screed against the intransigence of the academy. In truth, the authors of this book have each spent a significant portion of their careers working against institutional barriers, as have many faculty now fueled by recognition of the dynamic possibilities for participatory learning that new media suggest. However, as frustrating as are the obstacles posed by the bureaucracies and silos in traditional universities, it is acknowledged that they will not go away any time soon. Indeed, as Craig Avery notes in a comment on the Institute for the Future of the Book site, one goes to college not only to learn but also to receive a degree. Avery asks: "What is (will be) the focus here regarding curriculum outcomes, outcomes assessment, skill sets, and professional certification? It seems to me that there are at least two forms of learning outcomes here—implicit 'discovery' models that encourage and facilitate students' ability to undertake open-ended personal searches and explicit "satisfy the gatekeeper" outcomes that meter out graduates subject to and capable of passing institutional review to enter business, medicine, law, and other professions."²² From its inception in the West, these two functions—teaching to inspire and learning for learning's sake, on the one hand, and official certification, on the other—have operated simultaneously. Virtual learning may fulfill the first role but, if we are going to fulfill the second—of achieving a degree—then the virtual must recognize the way it nests within traditional universities.

It has long been the case that a degree is not just about knowledge. It is a certification that one is capable of performing long and complicated tasks, according to specific standards, along a

strict timeline, fulfilling a range of requirements, adapting to the demands (hierarchy again) of various people in positions of power, and balancing institutional (or professional) demands with social life. It also indicates to some degree that one has the capacity to negotiate and execute an extremely complex and interconnected series of operations that require everything from time management to independent thinking to subordination to psychology (being able to understand and meet the expectations of various institutional officers). No wonder that those with an advanced degree have far greater earning capacity over the course of a lifetime! All of these skills are less about formal learning than about learning to succeed in an environment that looks a lot like middle-class occupational roles. To quote the droll title of writer Irvine Welsh's recent collection of short stories, *If You Liked School, You'll Love Work*.²³

Virtual learning both resembles and is different from traditional institution-based learning. The idealistic rhetoric of many-to-many, smart mobs,²⁴ long tails, and Web 2.0 must be set against the realism of the myriad social norms that undergird the virtual. Here is an aphorism: Virtually nothing that happens virtually happens in a vacuum. When Clay Shirky announces "Here Comes Everybody!" and focuses on "The Power of Organizing Without Organizations," he highlights exactly the collaborative, adaptive, improvisational character of participatory learning that this book, too, embraces. At the same time, Shirky acknowledges the limits of this model: "The logic of publish-then-filter means that new social systems have to tolerate enormous amounts of failure. The only way to uncover and promote the rare successes is to rely, yet again, on social structure supported by social tools."²⁵ But often, too, the viability of virtual learning environments, of the conditions of possibility enabling virtual social arrangements and their insti-

tutional expression, is predicated on preexisting institutional arrangements that are willing, materially and discursively, to support or at least tacitly tolerate them.

FLIDA 101 has the potential to be effective as virtual learning precisely because of its uneasy, prickly, and nested relationship within traditional institutions. Virtual learning rarely exists without some kind of support from traditional institutions. Henry Jenkins reminds us that the digital divide is closing across class structure, but a significant gap in participatory learning online remains precisely because customizing and interacting virtually often requires (often personal) economic resources and the availability of technologies that may not be readily within reach for impoverished youth.²⁶ For example, the laptop of an enormously creative teenager at an after-school digital learning center on the south side of Chicago had been stolen. It was the only laptop in a household unable to afford a replacement, and he was able to continue his intensive experimental creative practice only by attending the after-school program every afternoon (figures 4.11 and 4.12). Economic class is one of those social structures, in Shirky's term, that order the virtual world.

Social structures and social institutions support virtual learning in myriad ways. Sometimes those institutions are corporate. Google's motto may well be "Don't Be Evil," but Google's initial public offering, in August 2004, netted \$23 billion, and it is naïve to think that any corporation of that size manages always to be on the side of the angels. Google's brilliant idea was to make user preference the base of its search functions. *User preference* is a form of social networking and spontaneous organization. That does not make it free, democratic, or inherently not *evil* (whatever that word might mean in the Google economy).



Figure 4.11

See Cathy Davidson's HASTAC blog from June 15, 2008 (<http://www.hastac.org/node/1435>, accessed June 15, 2008).

The point is that many creative sites, where learning is part of social networking, thrive on user-generated content (UGC) and generate enormous profits from that UGC for their corporate owners. SL, Facebook, MySpace, YouTube, and Flickr are all virtual learning spaces in the sense that users create, customize, share, exchange information, and socialize together. Meanwhile, from all this participatory activity, corporations, shareholders, investors, and entrepreneurs engage in a form of e-commerce and global capitalism that coexists with traditional forms. Thus a traditional media mogul like Rupert Murdoch can move rather seamlessly from the acquisition of newspapers and tele-



Figure 4.12

See Cathy Davidson's HASTAC blog from June 15, 2008 (<http://www.hastac.org/node/1435>, accessed June 15, 2008) .

vision to gobbling up MySpace. And then there is Google—which voraciously feeds off everything else.²⁷

Anne Balsamo reminds us of how, before the bursting of the dot.com bubble in April 2002, there was considerable rhetoric about the new Internet world operating according to entirely new sets of rules and being beyond capitalism. The emphasis on customizing, on user-generated content, and on participatory learning, information exchange, and peer-to-peer sharing (in sites such as eBay) meant we had moved into a “post-Fordist organizational form.”²⁸ The dot.com bust revealed the hype and the myths. Virtual capitalism had little ability to

sustain itself outside the rules of corporate capitalism. In any case, capitalism's chameleonlike capacity to adapt to new circumstances is notorious. It is fueled, after all, by the drive to fashion new desires, as John Stuart Mill long ago observed. Underpinning e-commerce are the likes of Wall Street, and thus many of the spectacular successes (and failures) of the e-economy are bankrolled by conventional players in the global economy.

Yet there *is* something new about the participatory possibilities of the Internet, even with this realistic assessment of all the traditional institutions that undergird it. Some scholars, such as Michael Strangelove, steadfastly adhere to the utopian vision of an Internet culture that continues to exist outside the normal corporate capitalist hegemonies.²⁹ Strangelove focuses on hacker culture and other anarchic online communities that he believes continue to resist capitalism and globalization in all forms. This is the Internet as an alternate space dedicated to “anarchic freedom, culture jamming, alternative journalism, and resistance to authoritarian forms of consumer capitalism and globalization.”

The potentials for collaborative, participatory learning that the Internet fosters are exciting, even if a more sober assessment of its revolutionary political potential is assumed. Thus, one can be frustrated with the sometimes knee-jerk resistance within traditional academic structures to new modes of creative learning and, at the same time, be suspicious of new technology utopianism that fails to attend to the traditional structures referenced above, whether those that thwart the new or those—wittingly or not—that support individuals (including the authors of this book) whose research, teaching, and practices push the conventional limits of the institution.

As the cotaught, cross-institutional FLIDA course makes clear (as does any course seeking to advance technology-centered collaborative learning), the virtual world exists in parallel and interdependence with the actual world. Participatory learning exists as an overlay on institutions that support and provide sustenance to “the new.” Those servers that support the FLIDA course in SL are real. They cost real dollars, spew real toxins, and are manufactured by the standard principles of global commerce (including exploitation of workers). Real material conditions, in other words, undergird new media and, therefore, participatory learning. No rhetoric of democratization, participation, customization, or the many-to-many, nonhierarchical models of learning can erase real disparities and inequalities institutionalized beyond the computer screen or supporting the virtual environment.

The same institutions that frustrate innovators with their solidity support almost every aspect of the digital. Whether talking about legal and social institutions, cultural institutions, or learning institutions—family, state, and nation can serve as all three—each is part of the social fabric undergirding technology. Technology is not just software and hardware. It is also all of the social and human arrangements supported, facilitated, destabilized, or fostered by technology.

FLIDA 101, then, would be difficult to offer across Duke University and the University of California (or most any other institutions). There are numerous institutional barriers to be overcome or, for those that cannot be overcome, finessed or worked around. Yet, without these institutions, FLIDA 101 could not even exist. This point is important because far too much of the rhetoric of virtual learning, participatory learning, and customized learning is detached from real-world conditions and

real-world disparities. New media (including participatory and democratized learning) are supported by the same material and social arrangements—including conditions of privilege or inequality—that support the most staid and traditional institutions of what, for now, seems like “old media.”

Every aspect of this project (including the computers and networks and wireless systems over which the authors of this book have exchanged numerous drafts) is supported by an array of institutions, private and public, innovative and traditional. To believe that the digital and the virtual have no connection to the real, no foundation in complex institutional and commercial arrangements, is, we insist, one of the most insupportable and potentially dangerous fantasies of the digital age. Among other things, refusing to attend to the virtual’s connection to the actual material arrangements of society plays into the Internet fantasy of its own free and open access at precisely the time when the Internet is being corporatized and regulated beyond recognition of its idealistic founders such as Tim Berners-Lee and other leaders of the W3C (World Wide Web Consortium).

Indeed, courses like FLIDA 101—courses in virtual learning based in virtual environments as well as courses enabling collaborative participatory learning enabled or enhanced by the unique social networking possibilities of today’s digitalities—should be required of students because their virtuality helps to expose the tangible, persistent, and real institutional arrangements undergirding digital ones. At the same time, working through the thicket of rules and assumptions in order to make such a cross-institutional, cross-disciplinary course possible is an excellent way of promoting change within traditional institutions of higher learning.

This pedagogical allegory is one of change and resistance to change. The virtual is susceptible to the same tugs in opposite directions as brick-and-mortar learning environments, and good pedagogy means confronting both the traditions and the potential for transition within even the most stolid institutions. To that end, chapter 5 considers how digitally prompted and promoted prisms and practices of social networking suggest the need for a different conception of an institution as a learning environment.

