Not Only The Lonely
implications of "social" online activities for higher education

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[4413 words]

"Only the lonely can play"– The Motels (1982)

"We can get together on the digital screen" – 'N Sync (2000)

As the pop music lyrics above graphically illustrate, we have entered a whole new, computer-based world of "social" interaction. Every day, it seems, we are finding new types of group interaction that can be done online. (Paradoxically, "online" includes wireless.) We can now play, joke, chat, spam, share, talk, broadcast, collaborate, exchange, discuss, conference, mentor, immerse, instant message, sit in class, shop, negotiate, gamble, find dates, be erotic, and even cheat with groups of people via computers. We have broken out of the paradigm of the "lonely," isolated, (some would say "asocial") individual on his or her stand-alone, non-networked computer, and are even past the one-to-one mode of earlier email and games. People (mostly young) connect and participate in online groups in an ever increasing variety of modalities. And these, we can say safely, are only the beginning.

As we rush to increase our institutions' reach and revenue through distance learning and online courses, we need to also be asking "What use are all these new online "social" interactions to us for education?" While nobody would deny that college is a 'social" experience, the academic model in higher education is not, at its core, a "social" one. "The culture of the university," says one observer, "tends to emphasize the individual learner over the group and has expectations related to accountability that require grading." [1] But the *online* academic model might just be different.

In our live undergraduate education, small group discussions and learning from peers are a frequent, although certainly not the major, part of the experience. The usefulness of

"social" experiences such as seminars, study groups and projects to learning is generally acknowledged (although the fact that "learning is a social experience" is still only a hypothesis. [2]). Its effectiveness, though, is certainly very specific to the structure, the quality of the facilitators and the efforts of the participants. As one observer notes, social learning "works best when learners are sharing ideas and experience, and adult learners may be more motivated to do this than undergraduates aged eighteen to twenty-one." [3]

My goal in this essay is to explore the variety of types of online "social" activities and interactions and to highlight their potential implications for higher education and academia.

While socializing is generally enjoyable, just because students get together in groups and/or form "communities" doesn't mean they are learning. And while "online learning communities" are all the rage – and are clearly useful for sharing specific information in professional communities – it is not immediately clear how useful they really are in higher education. If they are, we need to ask when and for whom? And how do we maximize participation and learning while avoiding their degenerating into the trivial conversations and the online equivalent of "bull sessions," talk radio and shopping malls that represent the bulk of "online community" today?

In short, can "online social interaction" ever become a really positive force in higher education? And what might we have to do to make it so?

People voluntarily come together to socialize and form communities for a wide variety of reasons – family ties, shared beliefs, interests and threats, tribal affiliations, recreation, competition, and emotional, moral, intellectual, financial and other types of support. The key word here, however, is "voluntarily." What one author calls "necessary communities,"[4] are those groups that come together because of a shared mission, something that each member is – to some degree – interested in pursuing. "Forced" social interaction is not always productive, at least at first, and is often counter-productive.

Of course people voluntarily come together in groups for learning, such as when they attend college. But an interesting question is whether the *academic* side of the experience is "voluntary" and "necessary," or "forced?" Whichever it is (and it is almost certainly some of each) we should still ask "What types of online social interactions are *both* voluntary and useful for learning?" Put differently, out of all the hype of "online communities," what types of academically-oriented online social interactions are worth striving for in undergraduate education?

Academic Online Communities

In fact, what, what exactly do we mean by "academic online communities?" One writer defines "online community" as "any group of people who communicate with each other via computers." [5] By this definition "Academic" online communities are "any group of people who communicate with each other via computers for a purpose related to the

academy." Of course only some of these purposes are learning – "online community" in academia covers a lot of ground.

What can, and should be, the roles of online communities in academia? It seems to me there are important lessons to be learned here from early experiments and successes, from community-oriented developments in the world of gaming and from the online communities of today. But first, let's look at what's out there.

On some university websites – such as Harvard's – "online community" means that alumni can look up the contact information other alumni, and can see the equivalent of an alumni magazine, delivered via "talking head" and classroom snippet videos. But when you sign up for the site, a little checkbox about online solicitations reminds you that the university also thinks carefully about "online community" as a fund raising mechanism.

Another current part of "academic online community" is administrative – a way to distribute course catalogs, and syllabi and to collect and distribute papers and grades.

A third piece of "academic online community" relates to publishing, reviewing sharing and researching faculty research and publications.

Interestingly, so far none of this relates directly to learning. What about the learning parts of the "academic online community"? Even this covers a wide variety of ground.

"Broadcast" models make up the largest part of so-called "learning communities." This involves periodically sending out information and links to "keep everybody on the same page" (which these days mostly means "web page"). It includes web pages for individual courses, departmental web-based newsletters, and subject or academic discipline-oriented sites on the World Wide Web.

There are also "one-to-one" models online of academic "social" interaction, including "tele-mentoring" and instructor-to-student and student-to-student e-mails.

Online Social Activities

But what I am more interested in here are social interactions where both multiple participants are connected and where participants can contribute as well as take things out. "What people put into the web is much more important than what they take out of it," says Tim Berners-Lee, the World Wide Web's inventor.[6]

Within this somewhat more restricted definition of online "social" interaction there are still many types of learning-oriented interactions. The ones we typically see today in distance and online "e-learning" are live chats, listservs where people can read postings and add new ones, and threaded discussions, where the replies are nested under the topic that provoked them. There are also collaborative tools and whiteboards, polls, application sharing, and virtual bulletin boards. In addition, there are the interactions in

synchronous on-line classrooms such as those provided by Centra (e.g. click here to raise your hand).

All of these, of course are merely the obvious metaphorical extensions of live learning interactions into cyberspace. More and more instructors are becoming familiar with them and are using them in live and online courses. As we will see in a moment, they are only the very tip of the iceberg. However to make even these work effectively for learning, a great deal of thinking and planning for these kind of experiences becomes necessary. [7] In other words, it is not just the fact of interaction, but the *quality* of the interaction that counts for online learning.

This can be illustrated by using some real-world examples to distinguish three types, or levels, of online discussion-based interaction in terms of their quality – i.e. their ability to produce learning.

At the lowest level are "free-for-all" discussions, which can be synchronous (i.e. live chats) or asynchronous. An example is Howard Rheingold's "Brainstorms" discussion group. In these interactions, the typical posting is a sentence or two. There is lots of opinion, little substantiation past a random reference here and there, and little linking to anything else. Except for discussions among small groups strongly focused around a particular goal (say a case-oriented study group) or an online conversation with an expert (or among experts), I see relatively little "quality" learning value in this "free-for-all" type of activity.

A level up from this is the listserv group, an example of which is the IFETS Discussion List run by Kinshuk, a one-named professor based in New Zealand. Postings in this type of forum (always asynchronous) are typically several paragraphs long, served up (at least in IFETS's case) in reasonably digestible bites of three postings at a time. The discussion is typically moderated by a guest moderator, and this moderator sets the topic and responds from time to time. People take positions, and respond to each others ideas and points of view. Outside writings are often cited or even included. These are pretty "serious" discussions compared to the first level. Although pretty much any one who really wants to can participate, serious thought and discussion is expected. Some useful learning can happen here.

However there is a third level which, in my opinion is the most useful (and highest quality) of all. This is the fully moderated discussion where the postings must be sent to the moderator only, who then decides what to post. An example is the www.edge.org, site run by literary agent and author John Brockman. While Brockman's agenda is a particular one – most of the people participating are his clients, so there is a commercial marketing "edge," the site is fascinating and extremely educational. The model is one that can be well-used for many types of learning. The idea is that one person puts up a thought piece, and others then react. While anyone can submit, the submissions are vetted, and people get posted only if the editor allows. This, of course is similar to a journal with editorial review. One thing that's nice about this model is that you have to

earn your way in, by submitting something deemed worthy of posting – an intellectual meritocracy rather than democracy, with participation by top minds in the field.

To summarize so far, we have a number of approaches currently being used to interact "socially" online for education, and these online interactions can vary considerably in quality. It is also possible to link many of these elements together, and many commercial software packages help do this. I recently was part of "Net*Working2002" a conference in Australia that was conducted entirely online through these types of interactions. Mini-lectures were downloadable and distributed on CDs, web-based activities were linked in, asynchronous threaded discussions were scheduled for particular days, and live chats for particular hours. The whole made for an engaging two weeks. While the quality of the interactions was mixed, it was the first time for most participants (including me) with this type of interaction and conference. I predict that once this type of thing gets perfected and catches on, the need to travel to face-to-face conferences will diminish considerably.

Other Types Of Online "Social" Interactions

But as interesting and useful as some of the interactions described so far can be when done in a "quality" manner, they represent only a small fraction of possible "social" interactions on the computer, and in fact only a small fraction of what students are already doing on their own time. Let us now examine a variety other types of online "social" interactions to see if they offer any additional help for our "learning communities," or for anything else in higher education. These social interactions have goals and objectives that are multiple and varied, ranging from informational, to recreational, to creative, to collaborative, to emotional and supportive.

Some of the most useful multi-user "social" interactions that college students participate in are not around conversation at all, but around "stuff." Probably the biggest is the exchanging and sharing of music and movies with peer-to-peer software such as Napster (previously) and Morpheus. eBay and other types of e-commerce sites provide another type of social interaction, with students exchanging everything from term papers to game characters. Amazon is also a good example of social interaction, with its ability to rate, review and recommend. Another big "social" use of computers among students is finding dates, usually though cell phones, especially in Europe and Japan. Some colleges use computers to match roommates. [8] Many students participate in SETI (Search For Extraterrestrial Intelligence) and similar programs which use idle computer cycles to sift though massive amounts of data, contributing to a shared whole. Others have set up their computers or phones as remote monitoring stations for phenomena such as weather. And of course students are constantly chatting online, often with several conversations going on simultaneously in different windows and setting up and reading Live Journals and blogs (web logs) [9]. Many participate in MUDs (Multi-User Dungeons or Discussions) and MOOs (Object Oriented Muds) for conversation with peers on topics of their choice.

And then, of course, there are games.

Most of us are at least vaguely aware that the era of the single-player game – an artifact of non-networked computers – has long passed. Over the last decade we have seen the

rise of multiplayer games and gamer communities in a huge way. Playing one-on-one versus another player is now so common that a new verb – to "versus" – has entered young peoples' vocabulary. Less generally well-known, perhaps, is the variety of ways that people can play in ways other than one-on-one. Hundreds of multi-player games (i.e. 3-12 players) and massively-multiplayer games (i.e. hundreds to thousands of players) are available online and are highly popular. Many players play them in teams, guilds and/or leagues. The largest online massively multiplayer worlds, such as *EverQuest*, have over 500,000 players, and have been sucking up huge amounts of college student's time since they were created several years ago. There are also the infamous LAN-based multiplayer matches that engender so much use that they bring down school and company computer systems.

Not only do players play these games together, but they also help build, add to and continually improve the games. Most 3D action games of the "first-person" variety allow players to build "mods" (modifications), which are, in fact, entirely new worlds to play in, with different looks, feels and even modes of play. This activity is free and highly encouraged by the game makers, who often provide toolsets. Many young players are quite adept at it. When the game *Star Trek* was contractually limited to only four ships, members of the gamer community self-organized themselves to build new ones, partitioning out the various tasks of building wireframes, skins, weapons, and their integration to various interested parties. *The Sims*, from designer Will Wright, has a highly dedicated fan base which has created – to the delight (and cost savings) of the publisher, Electronic Arts – not only millions of add-ons (new pieces of furniture or places) but also tools for building them. All this stuff is available for free on the web, from "the community." And of course gamers are in continual discussion on scores of gaming community websites, exchanging reviews, tips, hints, and "cheat codes."

And there is yet another interesting "social" aspect of gaming – the interplay between the live and virtual communities. All over the world, the distinction between live and virtual gamers is blurring as people get together physically to play computer games. There have, of course, been video game arcades since the beginning, with both casual and regular players. But now we are seeing the rapid rise of "cyber cafes" and "gaming centers" of which there are an estimated 500 in the US, but over 20,000 in Korea. [10] I visited one of these centers on a recent trip to Hong Kong. Part of it resembled a computer lab, where up to 50 people could play against each other simultaneously. But much more interesting were the many cubicles where enthusiastic groups of 4 players sat at square low tables with four flat panel screens, playing away, drinking tea and thoroughly enjoying themselves – this reminded me of the desks we pushed together into groups in elementary school! There were also a large number of two-person booths designed for couples.

It turns out that even these cyber-cafes and game centers are only a small part of this mixed in-person/online "social" phenomenon. All over the world there are now "large scale event-based gaming competitions." These began as groups of gamers getting together to both meet each other and make their gaming more competitive. By setting up large temporary LANS to play on, they can eliminate both distance effects and cheating

that happen on the Web, leveling the playing field. These annual gatherings, with names like "The Gathering" (Norway), "The Party" (Denmark) "Dreamhack" (Sweden), "Quakecon" (US), Cyber Athlete League (US) and the World Cyber Games (Korea) typically attract 3,000-6,000 participants at a time. Some offer purses of up to $100,000. Many have now become commercially sponsored, and some are even government-sponsored. Korea is sponsoring the World Cyber Games as part of a national strategy to increase its share of the world's $20 billion in computer gaming revenues.[11]

But Is This Educational?

How educational (in the academic sense) are these types of online "social" interactions? Probably not much at all. But the point is they *could* be. With a little imagination and a will to innovate *all* of these interactions can easily be adapted into undergraduate (and graduate) education.

For example, peer-to-peer exchanges a là Napster could be used to share and acquire libraries of whatever objects are important in various subjects. Rating systems a là Amazon could be used for evaluating everything from students, to teachers, to assignments, to other students' papers ("please read and grade everyone's assignment, justifying your grade in your comments"). All the computers on campuses (or better on consortia of campuses) could be constantly engaged in large scale, student designed SETI-type projects, of benefit to the students and worldwide research. Software developed for dating can be used instead to mach students with similar interests, or to find partners with different skills for projects.

Creating and using tools to improve each subject's or discipline's "Central Online Experience" (which, if it existed, would be a worldwide, open source phenomenon) can be part of every course, with various pieces of each "experience" the responsibility of particular institutions.

Case studies and projects can be built around the cyber-café model of small groups of students at a table each with a monitor, using either commercial software or local software created by professors and graduate students. Small group online discussions involving peers on different continents (both synchronous and asynchronous) can be a regular part of every class, facilitated by upperclass or grad students who master the art of facilitation as they prepare to become the next generation of instructors. Every subject can have its equivalent of a "language lab" or "computer lab." And every discipline and subject can have its own "World Cyber Games" that will be so exciting that students will compete to attend.

And this is just a preliminary list.

How "immersive" (and therefore expensive) do all these interactions and software have to be to be effective? Not very. While much current research centers around "telepresence" and "teleimmersive" environments for enhancing remote collaborative work and learning [12], this kind of sophistication is not necessary to get learning

accomplished. Despite any initial seductiveness, in terms of engagement and, I would argue learning, such "eye-candy" pales in comparison with the "gameplay" of really challenging interactions. You don't need to see or feel yourself in a photo-realistic environment, in order to enjoy a fun, challenging interactive learning experience. In fact, there is evidence that the more abstract the experience, the easier it is to identify with. [13]

Some final points about online "social" interactions:

- **The "social" communities of online learning are worldwide.** In the course of writing this essay I collected over 60 articles and sources from the World Wide Web on online communities and online learning communities– over 150 pages, over 70,000 words. In those sources, the words worldwide or global appeared less than 50 times, mostly concentrated in a few sources. We are often extremely parochial in thinking about our academic communities – often not thinking past our own walls and alumni. Electronic "social" interaction changes all of that. Any communities built can and should be thought of as being global, even if they have local components. The University of Western Michigan's *ThinkQuest* program (http://www.wmich.edu/~coe/research.html) is an example of this. [14]

- **The best and most effective communities are self-organizing and self-regulating.** Like the games communities, online communities are not things that can be kept under faculty (or anyone's) control, although perhaps pieces of them can, and the rest can be monitored to be sure that it is not taken over by elements that work against it's principles (although in some cases this may be unavoidable). The best way to make this happen is to make as much of the community as possible open source and modifiable. If someone starts a site on chemistry, (e.g. see Physical Chemistry On-Line (http://pcol.ch.iup.edu/)) every chemistry professor and student in the world ought to be able to make not only contributions, but modifications and improvements, without compromising the basic integrity and usefulness of the community. This requires open source software and a strong commitment on the part of educators to maintenance and improvement.

- **Quality must count.** We typically assess quality in our learning as the quality of the content delivered. What we should also be assessing is the quality of the interactions produced. In my database, the word "quality" appeared only 20 times in 70,000 words.

- **People want to come together.** If the online interactions are strong enough, coming together will make them even stronger, and people will be eager to do this. The opposite is not necessarily true.

- **We need to level the playing field.** In all social interactions there are experienced people and "newbies." It is important to structure the online learning interactions in such a way that participants at different experience levels all feel comfortable and can take something out of the interaction. While some games allow experienced players to "kill" newbies, others reward players for helping them. Many games have levels that are restricted to, or recommended for, experienced players only – just like course catalogs.

- **We need to produce value.** The online "social" interactions we create and use have to produce value for time and money spent, which in the academic setting is learning. A good way to do this is to encourage, promote and design for self-organization, so that learners can help create the structures they need to learn.

- **New teaching skills are needed.** To produce effective learning, online "social" interactions require skills that are not typically in the skill sets of college instructors. These includes moderating online chats and discussion groups, as well as structuring and facilitating the newer forms of online "social" interaction. It is only through being required to do these things on a regular basis that these skills will develop.

In the world of our students, electronically-mediated "social" interactions are growing at an extremely rapid pace. This important part of their lives and communication has broad implications for how we structure both on campus and online university education. Although we may not ourselves be the users of these new modalities of group communication, it behooves us as educators (and people of experience) to be thinking about ways to use the communication structures of our students to bring to them the messages – and education – we think are crucial.

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Notes

[1] Susan Imel, Learning Communities/Communities of Practice Trends and Issues Alert No. 26, 2001

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[3] Banks, Sheena. Email s.b.banks@shu.ac.uk.

[4] Joe Saling, unpublished paper, cited by Eric Crump, NCTE at http://216.239.39.100/search?q=cache:27d9oML2BF0C:www.ncte.org/community/+%22online+learning+communities%22&hl=en&ie=UTF-8

[5] What are Online Communities? At http://www.ifsm.umbc.edu/communities/

[6] Heard in a public lecture by Tim Berners-Lee, circa 1998.

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[9] David Gallagher, "A Site To Pour Out Emotions and Just About Anything Else," *The New York Times*, September 5, 2002

[10] Matt Richtel, "A War Room to Die For, At Any Age," *The New York Times*, September 5, 2002

[11] McGuire, F. van Lent, M. Prensky, M. and Tarr, R. "Defense Combat Sim Olympics – Methodologies Incorporating The Cyber Gaming Culture." Paper presented at I/ITSEC Conference, Orlando 2002.

[12] "Online Learning Communities", a Stanford course taught by Professor Roy Pea, http://www.stanford.edu/class/educ298/

[13] Scott McCloud, *Understanding Comics: The Invisible Art*, Kitchen Sink Press, 1993.

[14] ThinkQuest is a global network of students, teachers, parents and technologists dedicated to exploring youth-centered learning on the Net. ThinkQuest is an online community where young people learn, teach, mentor, discover, research and grow through ThinkQuest programs. The ThinkQuest World encompasses young people, educators and technologists in more than 100 nations who come together as digital learners, web creators, and Net entrepreneurs. Through ThinkQuest, young people work together in teams, use the Internet to research a topic in science, mathematics, literature, the social sciences or the arts, and publish their research as an educational web site for peers and classrooms around the world. ThinkQuest participants learn the 21st century skills of online collaboration, Internet research, asynchronous project management and web communications. They think critically about their selected subject and organize their research into a format that educates and engages their audiences. Teachers, parents and other interested adults support the participating young people as coaches, technology mentors, and subject-matter guides. They leave the hard work of defining the project, organizing the work, conducting the research and mastering the web technologies to the participating ThinkQuest team members. http://www.wmich.edu/~coe/research.html