

14 COLlaboratory: MOOs, Museums, and Mentors

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Walden3 is a virtual online community in which students are able to interact dynamically with other students from around the world. They construct museum exhibits, share service learning experiences, and collaborate on the process of communicating ideas, information, perspectives, and meaning. This virtual community allows electronic communication to cross disciplines and fosters an academic environment which engages a variety of learning strategies. Walden3 is an integral component of a much larger educational initiative called COLlaboratory at the University of Hawaii at Manoa.

The Program

The University of Hawaii at Manoa Rainbow Advantage Program (RAP) is a tightly woven learning community based on the coordinated studies model developed at Evergreen State College in Washington. It restructures the core curriculum in order to offer a supportive academic environment which promotes a sense of community and shared values. Students are actively engaged in their education and participate in a variety of approaches to learning. Education in this program is seen as the process of open-ended inquiry, and students are challenged to view learning as the development and building of connections. Therefore, the focus is on collaborative teaching strategies, cooperative learning techniques, a wide use of technology, and a variety of links to the wider community.

In order to produce lifelong learners, the teacher-as-bearer-of-knowledge image is replaced by the collaborative teacher-learner model, allowing for an environment which encourages students to be creative, original thinkers, asking questions and continually analyzing and evaluating their own learning. Providing a small college atmosphere within the larger university framework, RAP is

one of a collection of programs offered to first-year students in Hawaii to ensure them a successful beginning at the university.

The University of Hawaii is a research institution with approximately 15,000 undergraduates. Its student body is possibly the most ethnically and culturally diverse population in America. The students are primarily from culturally diverse Hawaii, representing a multitude of Asian, Pacific Island, and European cultures, with additional students from the mainland, including African American and Hispanic students. The students who choose to apply to the Rainbow Advantage Program are as various as the whole student population.

RAP students take fifteen to eighteen credits together during their first year (twenty-four credits is considered a full-time load). They enroll in core courses such as American studies, journalism, art, and English, and they take a year-long foundation course which serves as the forum for teaching communication and research skills, the class for which the project *Collaboratory* serves as the centerpiece. *Collaboratory* is an international initiative bringing together students of all ages from around the world. To date students from Canada, California, Pennsylvania, Guam, and Washington, D.C., have participated, working with museum staff and teachers on interpretations of ideas. These partnerships culminate in the installation of museum exhibits, amazing testimony to a variety of learning styles, to cooperative teaching and learning, and to the use of multiple media to interpret ideas, showing students that school is not contained inside the four walls of any classroom.

The guiding philosophy behind this project is twofold: (1) education is bound by neither time nor place, and (2) the student must be at the center of any curricular planning. Thus, students are involved in a multiplicity of activities all directed at allowing them to construct meaning from their experiences, heeding Neil Postman's call (1995) for a guiding narrative for schooling in general and students in particular.

The concept of a global classroom also informs the philosophy and activities of this learning environment. Students are linked with the wider community in three very distinct ways. The first type of connection is with corporate and community leaders who act as mentors and who offer experiences beyond the classroom, varying from Chamber of Commerce breakfasts to mornings spent shadowing a corporate president in her day-to-day activities. These mentors are committed to engaging the students in active discourse about the relationship of a liberal education to the rest of their lives.

Another community connection is service learning. All RAP students are required to do two hours of community service weekly. They have a variety of choices, such as working for the library, humane society, social agencies, and churches; however, they are strongly urged to participate in Kid's Kitchen, a project initiated by the RAP program. In partnership with Harbor House, Inc., a subsidiary of the Foodbank, Kid's Kitchen feeds dinner to latchkey children

Monday through Friday evenings. RAP students help serve the food, but more important, they serve as mentors and companions to the children, helping them with homework, playing games, and generally giving them what they need most: time and attention.

Collaboratory provides the third connection to the community. The goals of this project are to develop international partnerships, to foster collaborative research, to use appropriate and varied technologies, and to discuss ideas with others around the world. Students work in teams to further their critical thinking skills, broaden their base of knowledge, and enhance their understanding of culture. In each local community, a team or teams of college and K–12 students work together for a year toward an interpretation of culture that can eventually be developed into a museum exhibit. Partners in this project also commit to doing a variety of service learning activities throughout the course of the year. For instance, this past year the third graders of Le Jardin Academy who worked with RAP students on the GenX exhibit also spent their year adopting grandparents from a local senior center.

During Collaboratory's three years of operation, the exhibits installed in the Bishop Museum (a natural history museum) have varied. Students in the first year concentrated on Hawaiian culture and created large exhibits that displayed ancient Hawaiian games called the Makahiki; the art of net fishing in the town of Hana, Maui; and a model of a home destroyed on Kauai by Hurricane Iniki. In the spring of 1996, the students concentrated on a theme of community. The six exhibits ranged from a glitzy computer room asking the question, "Can you have a community on the Internet?" to a look at the changing Waikiki community. In the cyberspace community portion of the exhibit, they enlarged John Barlow's *Declaration of Independence for the Internet* and were delighted that Barlow came to the museum opening. Another exhibit showed the changing face of Waikiki over the past fifty years and asked visitors to envision the future. Small wooden blocks were placed in baskets next to a map of Waikiki. These blocks represented hotels and other buildings, and visitors were encouraged to place or remove blocks as they saw fit in their own perception of how Waikiki should look in the future. Another exhibit looked at how various modes of communication might have changed the way in which people view the size of their communities. For instance, did the telephone change our concept of space and time? Participants in this project began with the concept of the pony express and ended with new computer technologies.

The Project

The most recent exhibit, focusing on Generation X and how the media perpetuated a negative image of this group of people, was the biggest challenge to date and illustrates well how Collaboratory operates. University of Hawaii (UH)

RAP students worked with third-grade students from Le Jardin Academy and sophomores from Waimea High School on the island of Kauai on the planning, research, and design of a 2,400-square-foot exhibit. In early September the students got together at UH and began brainstorming on questions such as "Who am I?" and "Who are we?" They created poster collages of their ideas and then continued their discussions over electronic mail. In early November these students joined the RAP students at UH for an overnight activity. They spent the afternoon doing creative projects learning about the design and visual representations of ideas. This was followed by a potluck dinner, a trip to a UH volleyball game (several of the players were students in RAP), and an overnight event at the Special Events Arena at which time the students presented their afternoon projects to the whole group.

The rest of the year was spent working in teams, over electronic mail and face-to-face. The result was an exhibit which showed a roadway beginning at a chaotic wall filled with graffiti and images of body piercings, drug use, and drive-by shootings. However, visitors who followed the road found themselves in a totally different environment at the end, a hopeful one that depicted Gen Xers filled with promise, holding religious beliefs and dreams, working as volunteers, going to college, and participating in other productive endeavors. The third graders created sets of footprints with drawings and essays depicting their view of Gen X and their hopes for the future. These footprints were distributed on the walls throughout the exhibit to show that a younger generation is following behind, paying close attention.

Each year, one component of *Collaboratory* has taken place in a text-based online environment, a MOO (Multiple-user Domain, Object Oriented). Students learn MOO protocol and commands. They then enter a virtual world called *Walden3*. In this synchronous Internet community, students meet to share their ideas about exhibits, to try their hand at describing themselves to others around the world, and to hold discussions about their work with others working on similar projects. Members of the *Walden3* community develop MOO text files to make rooms and useful objects, to dialogue and provide verbal cues, and to create a virtual environment displayed completely in text. A MOO enables all users to converse with each other at the same time, if everyone is in the same virtual room, or space. However, users may also construct their own spaces which can be designated either public or private. Students may discuss any interests in these rooms, from surfing to cooking.

Of the many advantages enjoyed by MOO users, perhaps the most significant is the increased control over their learning options. People can find reference materials via the Internet and engage in conversations public or private about what has been found. For example, one tool, a text-based Web browser similar to Lynx, allows students to call up Web text from anywhere and then manipulate it on the MOO. The same is true with gopher text. These tools are

called webbers and gopher slates, respectively. Once called up, Web or gopher text is viewed privately by the user unless she chooses to share it with others. The premise in all of this is simple: give students a variety of options to gather, discover, analyze, synthesize, create, rearrange, share, and finally display information. The use of MOO technology is clearly one way to enhance this process.

The success of the MOO has varied from year to year and has been dependent on the amount of connectivity available to the K–12 students. During the first year, a team of high school students in Chicago worked with museum staff at the Museum of Science and Industry and created a virtual representation (in text) of the U-505 submarine which is actually on display at the museum. Students from Hawaii, Canada, and California would often join these Chicago students and take an online virtual tour of the submarine. At other times the RAP students would log into Walden3 and seek help from a librarian, meet with program staff, or chat with students in other states about their community service work or their projects. Or students might post to a MOO list and review a project or the entire exhibit. The following is an excerpt from such a post:

First we walked past the chaotic wall and I got a chill as I realized what violence exists in our world today and how much generation Xers are exposed to it. The drive by shooting took me by surprise because it is not something that one would think of in Hawaii, but they happen so often on the mainland. The sounds coming from the sound booth did not sound too inviting so I did not go in. The sounds added a dreariness to the negative side. The dead tree added a dead ambiance to the scene and the choices gave me a scary feeling. I hope that I never have to make a decision that could lead to one of those choices.

Many of the online conversations were not logged, as one does not necessarily need to record the activities of the students when on the MOO. Just knowing that they are actively engaged in “talking” to others as well as communicating in text is sufficient. After all, one must write when logged into a MOO environment; otherwise, one is only silent.

Communicating a Community

The University of Hawaii requires that each student take a minimum of five writing-intensive courses before graduation. These small classes require at least twenty pages of writing per course, peer editing, and many revisions. Students participating in COLlaboratory fulfill two of these requirements within their year-long foundation course. Students talk to each other online about their projects, they share ideas leading up to their exhibits, they post to lists on the MOO (such as specific lists on philosophy, or visual representations, or museums), they write weekly electronic journals detailing their work in teams and their progress both on the exhibits and on their community service, and finally

they write reviews of the exhibit itself. At the end of the year they all write reflective pieces on their community service endeavors as well as a lengthy course rumination paper on their personal growth, team collaboration, museum exhibits, and other insights. Throughout the first semester students develop an autobiographical portfolio that serves as their database for the eventual design of their museum exhibits. This project prepares them well for their exhibits, teaches them about information retrieval and critical reading of text, and hones their research skills. Critical reading and writing skills are integrated in every aspect of their Collaboratory experience: these students are engaged with text through in-class writing, long autobiographies, or online dialogues with students elsewhere.

Here is an exchange between two students working on a short story:

Roberta says, "Ah, speaking of 'Melissa', I found a neat turn of phrase you did in there, the words of which might work in a title. I flagged them. Hang on."

-----Roberta (#112)-----

sigh of relief. "I thought I was drowning in darkness!"

*potential title words

-----Roberta (#112)-----

Rosa nods.

Roberta says, "There: drowning in darkness. I liked how it sounded."

Rosa says, "I haven't given much thought to titles. . . ."

Roberta says, "Still, you might call it Melissa, though that's not super either."

This ability to share text across the ocean, in this case between Hawaii and California, enables students from different states to work together using the MOO for discourse, learning, sharing ideas, and developing text-based communication skills.

Text Immersion

One way to understand the value of text immersion is to think of a musician—a piano player or guitarist, for example. Fluency derives from facility and familiarity. The fluent musician has spent many hours playing scales in different keys, improvising, and practicing from sheet music. In the same way, students participating in Collaboratory are immersed in many forms of text, sometimes following grammatical conventions and other times allowing creativity to flow. The key, however, is that at all times they are practicing *how* to communicate ideas through text. Like all of us, Collaboratory students already intuitively understand the influences of context on communication. A MOO platform allows

the student to change the manner of presentation to reflect the present context, helping them develop fluency while being immersed completely in text.

A rich context enables one to make comparisons more easily, a vital part of language (Nilsen and Nilsen 1978, 157). Continued practice evaluating contexts and writing within them hones the writer's judgment regarding language use. On *Walden3* as students write to each other, the immediate situation revolves around the acquisition of critical thinking, collaborating, and writing skills, but these are hidden behind the students' desires to complete various projects. The students are being guided toward specific goals, and they acquire these other skills as a consequence of being members of the virtual community. Therefore, students immersed in communicating via written language naturally acquire more readily those conventions peculiar to such discourse, especially in the hands of an aware and intrepid instructor who models these conventions: "The first essential constituent of learning is the opportunity to see what can be done and how" (Smith 1986, 101).

Learning to write via text immersion can be perceived as making sense of more and more kinds of language in more and different contexts. When the instructor models the writing process and offers students the opportunity to imitate, students develop the intuition necessary to become independent writers and to develop what William Irmscher (1987) calls "syntactic maturity" (137). Text immersion helps to provide that experience. As communities tend to make and enforce their own rules, when proper language conventions are encouraged, the community learns to police itself quite quickly, and the remaining time is spent actually communicating. *Walden3* and similar educational MOOs should be seen as safe learning environments where participants can and do make mistakes. In the virtual community of a MOO, the targeted skills are used in classroom activities where students become comfortable using them in real life.

The Community

Members of *Walden3* create a sense of community in many ways. For example, the MOO allows people to "look" at each other, and everyone writes his or her own description. These range from the concrete, ". . . is five foot two inches tall with blue eyes and blonde hair," to the ethereal, ". . . seeks balance among all things"—and everything in between, the result of granting some measure of autonomy to students, unlikely in regular classrooms. In addition, the MOO provides students with the opportunity to develop a sense of self in a text-only environment. This systemwide feature allows more writerly freedom, which in turn is a tool of discovery and revelation (Ueland 1987, 133).

Another aspect of student autonomy is the ability to control levels of communication on the MOO, and this affects student language acquisition. There

are several ways to communicate on the Walden3, and we can subsume them under two broad categories: synchronous and asynchronous. We'll look at synchronous, or real-time, communications first.

Briefly stated, users control who sees what they write on the MOO as well as how it is seen. For example, in a virtual room filled with ten other people, the student can say something to everyone by typing, "Hello." Everyone sees this text. But just as in face-to-face encounters, it is likely that the writer will want to say something directly to another individual. In a normal situation we would look at the other person, get his or her attention, then say something directly to that person. On the MOO, we would type "to Fred hello," which would appear on the computer monitor as, "Samantha says, [to Fred] 'Hello.'" Everyone in the room can read what Samantha says to Fred, but Fred knows it is being directed to him. Such an option is necessary in collaborative work when several people must work together toward a common goal. But there is another, private level of communication where any user can communicate to another without anyone else being able to read it—only the sender and the receiver of the message can. And this is different from face-to-face environments when such privacy is nearly impossible in a small group working collaboratively. One could lean over and whisper to the other, an action which has a certain social stigma attached, but only if the other person sits adjacent. The MOO provides this extra level of communication without an accompanying social stigma and thus is an even richer and more fertile context with regard to the use of written words than is a face-to-face environment.

Asynchronous, or outside-of-time, communications comprise MOOmail, lists, e-mail, notes, and the use of tools such as blackboards and shared note boards. We have discovered that the tendency so far is for students to write rather more formally in situations designed to be read asynchronously, and it is likely that this is as it should be. Writing which is designed to be read outside of time shall have been revised for efficiency in communication, for unity and flow, and to achieve the writer's purpose. Such components are not as likely to be present in synchronous MOO communications—these writerly skills are not inbred but must be learned contextually, and a text-immersion environment is ideal for their acquisition. "Readers must bring meaning to texts. But obviously writers make a contribution too. And there must be a point at which readers and writers interact. That point is the text . . ." (Smith 1986, 167).

Writing a Community

What is compelling about this project is that students around the world can be simultaneously involved in local projects as well as in sharing their ideas globally. They can collaborate with students near and far and discover together some interpretations of their world. In the end they can look at themselves and

discover who they are. Students become the center of their own education, and participation in Collaboratory extends this by putting them into the center of their own cultures. All discussions on Walden3, through e-mail, and around the Internet are carried out in text under the watchful eyes of experienced writers and result in documents designed to make solid the self-discovery and creativity embraced by the program. Such text-immersion helps instill appreciation for language, fosters and supports the development of critical thinking skills, and engages students in the exploration of the possibility of a global community.

Works Cited

- Boyer, Ernest L. 1987. *College: The Undergraduate Experience in America*. New York: Harper and Row.
- Gardner, Howard. 1983. *Frames of Mind: The Theory of Multiple Intelligences*. New York: Basic Books.
- Goodlad, John T. 1994. *Educational Renewal: Better Teachers, Better Schools*. San Francisco: Jossey-Bass.
- Irmscher, W. 1987. *Teaching Expository Writing*. New York: Holt, Rinehart and Winston.
- Nilsen, Don, and Alleen Pace Nilsen. 1978. *Language Play*. Rowley: Newbury House, Inc.
- Postman, Neil. 1995. *The End of Education*. New York: Alfred A. Knopf.
- Sizer, Theodore R. 1992. *Horace's School: Redesigning the American High School*. Boston: Houghton Mifflin Company.
- Smith, Frank. 1986. *Understanding Reading*. New Jersey: Lawrence Erlbaum.
- Ueland, Brenda. 1987. *If You Want To Write*. St. Paul: Greywolf Press.

Web References

Composition Sites

<http://www.urich.edu/~ritter/CompLink.html>

<http://webserver.maclab.comp.uvic.ca/writersguide/welcome.html>

MOO sites

(through these sites, people can get everything about MOOs, from papers written about them all the way to an actual core, complete with instructions)

House of Words: Designing Text and Community in MOO Environments

<http://www.harbour.sfu.ca/ccsp/People/JQMaxwell/MOO/HouseofWords.html#intr>

What Can You Do in the MOO?

<http://mason.gmu.edu/~epiphany/docs/dointhemoo.html>

Necro's MOO Page (source code)

<http://www.mcc.ac.uk/~necro/moofaq.html>

VA Core Information

<http://miamimoo.mcs.muohio.edu/vacore.html>

Bibliography of Electronic Sources

<http://www.cas.usf.edu/english/walker/bibliog/html>

Server Related Site

<http://www.ccs.neu.edu/home/fox/moo/moo-faq-1.html>

ThesisNet FAQ

<http://www.seas.upenn.edu/~mengwong/thesisfaq.html>

Distributed Collaboratory Experimental Environments Initiative

<http://www.mcs.anl.gov/home/stevens/labspace/root.html>

Core Site

<http://aldan.paragraph.com/mud/0302.html>

More About MOOs

<http://www.itp.berkeley.edu/~thorne/MOO.html>

Indexes of /pub/virtreality/servers/Moo/Mac-MOO/

<ftp://eeunix.ee.usm.maine.edu/pub/virtreality/servers/Moo/Mac-MOO/>

<http://ftp.tcp.com/pub/mud/servers/moo/>

<http://moo.cas.muohio.edu/~moo/vacore.html>

IMI Client/Server Implementation Services

<http://www.infoman.com/database.html>

Walden3 MOO

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