Chapter 17: Collaborative Text-Based Virtual Learning Environments*

RHONNA J. ROBBINS-SPONAAS† AND JASON NOLAN‡

†Department of English, The Florida State University
‡School of Early Childhood Education, Ryerson University

MOOs are text-based online environments that allow users to create representations of people, places, and things and share them with others (Nolan, 2001). A MOO is a collaborative space where people come together for communal purposes. They construct the MOO-space according to agreed upon criteria. They can create their own towns, buildings, rooms, objects, and personal avatars and then interact with others in these created spaces. The spaces can be institutional—like a school or a classroom—or they can be literary, like the topology of a novel. Or they can be chaotic, like a frat house. Each MOO has its own personality, characteristics, special features, and purpose that create cohesion and community within its boundaries.

MOOs are collaborative online virtual environments that go worlds beyond the concept of a chat room, online game, or a simulation. A simple way to visualize a MOO is to think of a chat room, then add a room description so the chatters have some idea of a place, perhaps graphics, a character description for each user, objects that the participants can pick up, handle, and manipulate. Allow the participants the ability to create their own objects or object behaviors (e.g., an object designed as a dog may bark at irregular intervals), or to work together to create as many rooms as they would like and link them all together to create a house, office building, or village. Throw in the potential for HTML and multimedia content and tools, and you will begin to have the idea. Unlike online role-playing games (RPGs and MRPGs), there is no inherent restriction or limitation as to what can be created or what object behaviors can be initiated or how they may be modified.

MOOs are generally perceived as being a new and breaking technology, and, perhaps in a biological evolutionary scheme of things, they are. In the fast-paced world of information technology, however, MOOs and their MUD predecessors are rather like the modern-day shark—they are constantly redefining themselves into a more effective species, but they have been around for the data equivalent of eons. Unlike the immediately recognizable silhouette

of the shark, however, MOOs have inadvertently maintained such a modest profile that even within the communities which most use them, the technology is still relatively unknown and boasts virtually no recognition value with the general public. While that condition is changing with the advent of more sophisticated MOO technologies and interfaces, blank looks and glazed expressions at the sheer mention of MOO and MOOing are still the general rule rather than the exception.

In fact, MOOs could be said to suffer from dual difficulties. The opportunities they afford for online learning, in a conceptual and practical sense, outstrip anything presently available; they are just too much a part of the cutting edge of both learning and technology. Conversely, much of the code that makes up the bulk of MOOs—even the fancy GUI, web-based MOOs—is moribund and requires significant redesign and coding so that its connection to the contemporary internet is more than jury-rigged patches. Nevertheless, even with these “patches,” MOOs currently offer more opportunities than most other tools presently in use. Despite the fact that MOOs offer opportunities currently impossible in any other actively developed online communications environment, they have remained largely the purview of hackers, coders, and academics for a number of reasons, none of which preclude their potential value in mainstream academic and commercial environments. Rather, they offer a potential pathway for collaborative virtual learning environments (CVEs) to reach the promise only hinted at in today’s offerings.

MOOs predate the onslaught of interest in the internet brought about by the popularity of the World Wide Web in 1994 by a number of years. Organizations such as Xerox Parc, AT&T Research Labs, and NASA’s Jet Propulsion Labs (JPL) have devoted resources to exploring the possibilities that MOOs afford, and many commercial ventures, such as PlaceWare (now known as Microsoft Live Meeting) and Diversity University have developed as offshoots of MOO-based technologies. Organizations and institutions such as the University of Toronto’s Knowledge Media Design Institute, MIT’s Media Lab, SRI International, and the University of Toledo’s Department of Health and Safety have hosted MOO-based projects, with research sponsored by the U.S. Department of Defense, SUN, the NSF, Industry Canada, and NASA, among others.

The first question that comes up when discussing MOOs is, of course, “What the heck is a MOO anyway?” MOOs are collaborative virtual environments that are generally hosted on the internet and are accessible via a variety of programs that range from telnet to web browser. Their ancestors, Multi-User Dungeons (MUDs), were—as the name suggests—originally widely used by the gaming community (Aarseth, 1997; Bartle, 1990; Curtis, 1992; Curtis & Nichols, 1993; Rheingold, 1993). As technology redefined itself and grew increasingly more sophisticated, the environments gained the opportunity to be object-oriented; that is, they could be generated by creating a series of inter-relating but relatively self-contained segments of code that in turn