## Broadening Horizons: The Role of Bricks and Mortar Institutions in Building Web-based Infrastructure Cynthia Merriwether-de Vries

That's great, it starts with an earthquake, birds and snakes, an aeroplane and Lenny Bruce is not afraid. Eye of a hurricane, listen to yourself churn - world serves its own needs, dummy serve your own needs. Feed it off an aux speak, grunt, no, strength. Ladder start to clatter with fear fight down height. Wire in a fire, representing seven games, a government for hire and a combat site. Left of west and coming in a hurry with the furies breathing down your neck. Team by team reporters baffled, trumped, tethered cropped. Look at that low playing! Fine, then. Uh oh, overflow, population, common food, but it'll do. Save yourself, serve yourself. World serves its own needs, listen to your heart bleed dummy with the rapture and the revered and the right, right. You vitriolic, patriotic, slam, fight, bright light, feeling pretty psyched.

It's the end of the world as we know it. It's the end of the world as we know it. It's the end of the world as we know it and I feel fine.1

With apologies to Michael Stipe, REM and members of the traditional academy, it did not really begin with an earthquake. Rather it began with a rapid (albeit deliberate), world churning, often chaotic paradigm shift that has brought the world of ivory tower academia to a position approaching left of west. "It" happens to be the approach of the academic world as we knew it, or at least as it was previously configured. Rather dramatic for a process that has gone unheralded by most including those most directly impacted by this purported end. Given the current state of pending global conflict this statement might seem to many quite an overstatement. To others this statement might suggest an opening salvo in yet another postmodern manifesto. It is neither. Nor is it some idle pronouncement in a nostalgic plea to return to some elusive version of the academia of old. Quite simply this statement reflects the current state of academia in a "wired" world. So what exactly is coming to an end? After 20 years of readily available, increasingly inexpensive desktop computer technology, how could this possibly be news? Dare I suggest the emergence of a brave new world? A world of self-directed learners, keyed into wireless web-based computer learning networks, replacing classroom interaction with instant messaging and textbooks with text files? Not quite, at least not yet.

Computer technology in general and the World Wide Web specifically have become phenomenal supplements to the traditional college classroom. These same technologies also currently have significant limitations. Anthropologist Gregory Bateson stated, "Cybernetics is the biggest bite out of the fruit of the Tree of Knowledge that mankind has taken in the last 2000 years. But most of such bites out of an apple have proved to be rather indigestible – usually for cybernetic reasons."2 More often than not, the institutions that have the most difficult time identifying, consuming, and digesting new technologies are those institutions that have smaller enrollment, are more focused on providing a liberal arts education and possess significantly smaller endowments than their counterparts. Sound familiar? While higher education was shaping and being shaped by emerging technologies many mid-size and smaller institutions were slowly losing the competitive edge.

Larger institutions cultivated larger faculty pools, developed specialized curricula and used emergent technologies in the classroom. Small, elite institutions with large endowments followed suit, pursuing curricular and technological initiatives rivaling larger institutions in scope and depth. Small and mid-size institutions with comparatively small faculty pools, smaller endowments and big plans shifted their emphasis to building intra-institutional technology access, replacing outmoded hardware systems and attempting not to be outpaced despite being outspent. Curricular initiatives emphasized institutional missions, stressed concepts like "student centered" learning and engaged in institutional finger crossing while attempting to develop a competitive edge in the quest for the brightest and the best undergraduates. At a time when these efforts appeared to have a minimal tangible impact on the ability to compete for students, funds and prestige, the Andrew W. Mellon Foundation instituted The National Institute for Technology in Liberal Education or NITLE.

During 1993, the Andrew Mellon Foundation provided funding to Vermont's Middlebury College to develop instructional models that used technology to enhance foreign language education. As a result of that initial Mellon Foundation grant the Center for Educational Technology was created. Concurrently, the Mellon Foundation began to work with the Associated Colleges of the South, the Associated Colleges of the Midwest and the Great Lakes Colleges Association to enhance technological access among smaller institutions. By June of 2002 it was clear from the 44 participant institutions that the integration of technology and the improvement of technology-enhanced teaching and learning were among the most significant issues facing a growing number of smaller institutions. In addition, there was a need to enhance the ability of these institutions to explore, strategically develop and disseminate the best practices for sustainable and scaleable technological and institutional resources. It became evident that the noble stance of independence and "going it alone" would be far less effective than working together to develop economies of scale that enhanced institutional strengths.3 The strategy that was adopted created regional centers to provide organizational and technical support to a wide range of institutional collaborative efforts.

Juniata College joined 36 other institutions in what is today known as the Mid-Atlantic and New England Regional Center (MANE). Through MANE, 37 colleges share technology, faculty resources and work to develop and test the best practices for technological and educational innovation. MANE, together with the Associated Colleges of the South, the Associated Colleges of the Midwest and the Great Lakes Colleges Association, forms a collaborative of 81 institutions that generates projects across a wide spectrum of disciplines including the humanities, the natural sciences and the social and behavioral sciences. These 81 institutions have promoted a value-added economy of scale approach, which enables institutions to enhance their curricular offerings and to support collaborative faculty efforts without increasing institutional costs or reshaping institutional missions.

If I seem pretty psyched about all of this it is because I am. During the summer of 2002 I was selected to participate in the NITLE initiative to develop an Arab World informational site. What follows is part travelogue, part memoir, part commercial and wholly unadulterated excitement. I had no idea what I was signing up for last midwinter and I was less clear about what I was accepted for last spring. Since then I have become one of the biggest proponents of NITLE, collaborative projects and technology-augmented curricula. As a result of my participation in this project I developed the Reflections and Reconciliation website and I am more committed than ever to continue my affiliation with and work within the Arab World collaborative.4

During the spring of 2001 Provost Lakso distributed to faculty a memo inviting applicants to the upcoming workshop to be held that summer in Middlebury, Vermont. Following the events of September 11, 2001, I wanted some information that would enable me to enhance my ability to incorporate the experiences of Muslims into my courses. As someone who teaches a course on the sociological exploration of minority statuses and experiences I believed that this workshop would go a long way in serving my own needs. I was able to find lots of "classical" information about the practice of Islam and numerous ethnographies focused on the family structures in the Arab world. Unfortunately I found very little that enabled me to meaningfully address some of the more vitriolic post 9/11 responses that proliferated in print and broadcast media. Since the use of popular culture illustrations of sociological principles was a mainstay of my course this scarcity presented a serious impediment in my class-room. Commentaries from incredulous African Americans about the instantaneous shift from the transgression of "driving while Black" to the far more heinous "flying while Arab" became standard fare.<sup>5</sup> Although there were many catchy vignettes that purported to "tell the story" of being Arab in a post 9/11 world, little emerged that helped delineate the diversity of Arab and Muslim experiences. The NITLE workshop seemed the ideal place for me.

I departed for Vermont intending to employ the "intellectual bank" method. Reviewing my early email communication following my acceptance it was clear that I intended to bring back all that I could. I wanted to know the format of the materials and what media would be most practical to facilitate the data transfer. I wanted to know if there would be printed proceedings or if participants would have access to online materials. In short, before I entered the Center for Educational Technology (CET) building I wanted to know what these people had for me and how I could get it all back to the Juniata campus in the most suitable form. I was convinced that these facilitators had something for me that would improve my teaching and that I could walk away with an abundant intellectual bank account ready for the first August withdrawal. After all, I was going to attend this workshop with Doug Davis of Haverford College, the co-author of the landmark book on cross cultural adolescent development in the Arab context; surely I would come away with some really valuable stuff.6

Although the door to CET was only labeled with the name of the regional center, in retrospect, a much more appropriate lintel would include the phrase "Abandon all preconceived notions all who enter here." Our first activity was to plan our course of action for the next 10 days. This task was complicated by the fact that among the 16 faculty present many had arrived with similar plans to simply receive and return home. We began with an earnest searching for a sense of consensus. More importantly, we moved away from the goal of what we could take and began taking those first tentative steps toward articulating what we would like to see, assuming that someone would take on such a monumental task.

Most of the selected participants were drawn to this workshop as a result of a deep emotional reaction to September 11, 2001, and

our personal frustrations with the limited media and academic response. We believed that we could work to develop a sense of what would meet our academic and personal needs when we returned to our respective campuses. Many of the participants were from institutions that could not provide the range of resources that we needed in the time frame desired by most academics (immediately if not sooner). Finally no one, most especially newly hired faculty, was comfortable with the idea of developing something that would make our courses appear superfluous to our home institutions. Based on this emergent consensus we developed the task outline for the workshop.

We all knew that we were about to begin a Herculean task: contribute to the body of knowledge across a wide range of academic disciplines with one unifying theme using a format that no participant had fully mastered. Our first task of developing a work plan gave us the first glimpse of the enormity of the task. Our goal was to develop an informational site that reflected the state of the art for web-based instruction. To accomplish that goal we first needed to develop a working knowledge of the process of generating webbased learning objects. Generation of a high quality learning object required the ability to identify or generate solid content. We also needed to develop scalable modules that could be implemented immediately as well as expanded in future iterations. Since much of this could not be completely accomplished in 10 days we needed to develop strategies for collaboration that could occur over significant distance. During the development of this work plan and the process of setting our initial assignments I began to realize that the development of this ideal site would fall largely upon the shoulders of the 16 workshop participants.

How could I meaningfully contribute to the content component of this project when all I really knew were the limitations of the resources that I had discovered? I was even more apprehensive about the technical aspects of this project. My previous experience with web-based instruction amounted to plugging data into "canned" software templates and pointing students to online supplemental readings. Quite frankly I was known to the Juniata campus technical staff as the faculty member most likely to discover a program glitch by attempting to perform a task that the software program designers had never intended the program to perform. Did the program facilitators have any idea that I could crash a program at twen-

ty paces? I did honestly consider booking the next red-eye flight to Pennsylvania but the project had begun to intrigue me and I was curious about what this group could do in the remaining nine days.

One of the first tasks on the second day was to explore some of the existing examples of computer-mediated communication and collaboration (CMCC) produced for government, industry, entertainment, and education. We saw examples from a range of projects produced by "deep pocket" organizations with multi-million dollar operating budgets to projects produced comparatively "on a shoestring" budget by colleges smaller than Juniata. The panic of the first day was slowly replaced by an emerging sense of possibilities. I saw tangible evidence that projects could be developed that would meet the needs of my students and students like them all over the world. More importantly I was able to speak with faculty who had made the process work on their own campuses.

Although I had a sense that I was aiming for a location that was just left of west it became clear that the possibilities were only limited by imagination. The person who brought that point home again and again was Bryan Alexander, the current director of CET. One of the phrases that we began to repeatedly hear was "blue sky" planning. Rather than limiting our planning focus to what we knew how to do or on using the resources with which we were familiar our focus began to shift to the identification of what we could accomplish given the unlimited range of blue sky. An idea that created a world churning, earthquake paradigm shift for a new faculty member at a small liberal arts college.

One of the most salient examples of a CCMC was the site that was produced by Bryan Alexander and his colleagues in the Associated Colleges of the South collaborative. The site, titled "The American Experience in Vietnam," was developed for an interdisciplinary course that explored the social historical and emotional legacy of the Vietnam War through an exploration of the literary, photographic, and policy record of the war.8 The course was offered on three Associated Colleges of the South campuses and combined online and traditional classroom instruction. I emerged from those second day sessions with a sense that much more was possible than I had ever imagined.

Much of the work of the next several days was focused on turning our areas of interest and training into learning objects that could be used in the NITLE site. Our working site is called Al-Musharaka: The Collaborative for Teaching and Research in Islam, the Middle East, and Arab Culture.9 It led to the development of the "Arab Culture and Civilization," a site presenting a range of information on Middle Eastern culture, history, language, and religions. The site was designed for use by academics and non-academics alike.<sup>10</sup> In addition to the work on Al-Musharaka, participants were encouraged to develop a work plan that reflected our interests and that we could implement upon our return to our home campuses. One of my areas of training is qualitative methodology, specifically oral history methods. One of the frustrations that contributed to my desire to attend this workshop was a definite lack of first person perspectives from Muslims documenting their experiences in a post 9/11 world. Following that "blue sky" model I began to dream about what I could do with my interest, my skills and my desire to make a contribution to the process of understanding others.

Upon my return to the Juniata campus I began to consider the options available to develop and implement a project that would both commemorate the one-year anniversary of September 11, 2001, and educate about the experience of Muslims living in America. I also wanted this project to be scalable and to grow as my understanding grew. I began the project by attempting to identify a set of general research questions that I wanted to explore. I followed this with an exploration of the resources available to implement a webbased project. I discovered that one of the most abundant resources available on the Juniata College campus was the administrative and technical staff. What followed was a whirlwind of activity and race to the rapidly approaching anniversary date.

In what seemed at the time like a tremendous series of endless phone calls and meetings (in retrospect the meetings were actually very short in duration but quite extensive in number) the project began. Within a week of my return I had secured administrative approval and a pledge of web resources. Two weeks after my return I had obtained a signed Human Subject Research Protocol approval. Thanks to the work of the student services administration and staff I had also obtained the names of several Muslim and Middle Eastern students currently matriculating at Juniata. I had also begun to develop a sense of what the finished product would look like. Now all I needed were participants to interview, content to incorporate and the technical expertise to make it all hang together in cyberspace.

After another week of phone calls, emails, and meetings I had identified several willing participants. I had also been given a generous offer from Belle Tuten, associate professor of history at Juniata, to access and link to information available on her course web page. Content from other sources was also beginning to emerge and I was able to generate additional content. The only thing that I lacked was the technical expertise to record the interviews, digitize the recordings, and place it in a user friendly web-based format. Enter the Juniata College Solutions Center team. Jacob Dickerson, Joel Pheasant, Nathan Wagoner, and Solutions Center director Rob Yelnosky patiently listened to my vision and set about the task of making that "blue sky" dream come true. In a matter of days they performed a series of miracles, including converting Joel's office to a recording studio, taping and digitizing my interviews, setting up the web links, incorporating the content and even securing a wonderful splash page photo based on my vague and amorphous comment that I wanted the opening page to prominently feature water.

The finished product was the Reflections and Reconciliation web site.11 The site has been featured on the NITLE News online newsletter and has been used by students at Juniata and a number of other institutions. 12 I hope to expand my base of interviews and to update the featured interviews. My goal is to expand the interview base to include the perspectives of Middle Eastern and Islamic women; eventually I hope to produce a monograph of the interviews for publication. So just how does this bit of adventure constitute "the end of the world, as we know it?" Quite simply, the pattern of collaboration, cooperation, and technical savvy would have been unimaginable in the academia of old. The growth of the web-based infrastructure on the Juniata campus would not have been possible just a few short years ago before the formation of NITLE. The access to the information and expertise that shaped the development of the projects described here were done at large institutions but not at small liberal arts colleges like Juniata. Distance learning seemed to be the emergent trend for large research universities, and online education had no place in small bricks and mortar institutions. Thankfully all that has changed. Places like Juniata College do have contributions to make in the world of web-based learning and with the continuation of support from NITLE those contributions will continue to grow.

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## NOTES

<sup>1</sup>Michael Stipe, It's the end of the world as we know it (and I feel fine), R.E.M. Document © 1987.

<sup>2</sup> Stewart Brand defines cybernetics as "the science of communication and control." The term cybernetics is defined as the theoretical study of control processes in electronic, mechanical and biological systems. Currently the term cybernetics is used to encompass both the nature of the computing process and the physical infrastructure used to produce computer and computer-based learning. See Stewart Brand, II Cybernetic Frontiers: Both Sides of a Necessary Paradox (conversations with Gregory Bateson) & Fanatic Life and Symbolic Death among the Computer Bums (New York: Random House, 1974), 28.

<sup>3</sup>NITLE [http://www.nitle.org/about\_us.php], May 2003.

<sup>4</sup> Cynthia Merriwether-de Vries, "Reflections and Reconciliations from Juniata College," [http://www.projects.Juniata.edu/reflections], May 2003.

<sup>5</sup> Robert Franklin, "The Risk of Racial Profiling," [http://www.npr.org/news/specials/response/essays/010925.robertfranklincommentary.html], Sept. 25, 2001.

6S. S. Davis and D. A. Davis, Adolescence in a Moroccan town: Making social sense (New Brunswick, NJ: Rutgers University Press, 1989).

<sup>7</sup>A learning object is defined by Karen Belfer of the Technical University of British Colombia as "a reusable online learning resource, which could be an applet, an animation, a block of text, a segment of multimedia or another form of multimedia...embedded in the text of an online instructional presentation." K. Belfer, "A guide to learning objects," [http://www.etl.tech.bc.ca/data/0010GuidetoLearningObjects/index.htm], July

25, 2002.

8 "The American Experience in Vietnam,"

[http://www2.centenary.edu/vietnam/vietnam.html], May 3, 2003.

9 "Al-Musharaka: A Collaborative Initiative for the Study of the Islamic World, Arabic Culture, and the Middle East,"

[http://manila.cet.middlebury.edu/almusharaka/], August 17, 2003.

<sup>10</sup> "Arab Culture and Civilization," [http://www.nitle.org/arab/], August 17, 2003.

11 Merriwether- deVries, "Reflections."

12 "The NITLE News Volume 1, Number 3, Fall 2002,"

[http://www.nitle.org/newsletter/v1\_n3\_fall2002/index.php], August 17, 2003.