

PRESIDENT TO PRESIDENT

IEWS ON TECHNOLOGY IN HIGHER EDUCATION

EDITED BY: JACQUELINE POWERS DOUD, MARYLOUISE FENNELL, AND SCOTT D. MILLER

Chapter 10

SunGard Higher Education
Council of Independent Colleges

Using Technology to Further a Culture of Innovation

By President Esther L. Barazzone, Chatham University

Technology has long been thought of as a byproduct of innovation. But can technology help foster innovation? Recent events on our campus have shown that technology can be quite effective in speeding up the pace of change and encouraging creativity.

Chatham, like many small colleges and universities that survived and thrived in recent decades, did so by acting like the high tech start-ups of the 70's and 80's. Our campus could easily have been compared to a "skunk works" – that wonderful phrase coined for a small group of people (often in the computer or aerospace fields) working together with non-bureaucratically-impeded creativity. Because of the campus culture we created, we were able to approve and implement change rapidly, without the occasional excesses of process that plague many academic institutions, while preserving our historic commitment to quality. Faculty's mutual trust of their colleagues' academic integrity meant that we could move more rapidly than was customary in creating and implementing new academic programs. "Chatham Time" became a code for our commitment to action.

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In large part because of this culture of innovation, Chatham changed remarkably between 1992 and 2007. We evolved from an historic women's liberal arts residential college of 500 undergraduate students to a coeducational

master's university with nearly 2,300 students in three colleges. We have an undergraduate women's college and nearly 20 coeducational graduate programs through the doctoral level. We continued to grow at double-digit rates almost every year. The faculty was equally committed to remaining an integrated institution and therefore only students, not faculty, were separated into the colleges, the new academic units.

In 2007, our new academic and organizational complexity was compounded when the Eden Hall Foundation gave us the extraordinary gift of 388 suburban acres – the "Eden Hall Campus." By spring of 2009 we began to teach on our new campus and we plan to have 150 students living there and attending a new School of Sustainability & the Environment within five years. Over the summer of 2009, we also moved a significant number of students and programs (mostly graduate) into a newly acquired urban property ("Chatham Eastside"), less than a mile from our original urban campus on Woodland Road.

Whereas in 2007 our campus had been concentrated on a small 37-acre arboretum within the City, by 2009 Chatham had become the largest landholding institution in Allegheny County, with three dispersed educational sites (not including our virtual campus) totaling nearly 450 acres. Our Woodland campus, once traversable in a three-minute walk, was now separated from the Eden Hall Campus by a 35 minute drive, and from Chatham Eastside by a distance that discourages many people from walking. The distances are especially challenging since, as the alma mater of Rachel Carson '29, we have dedicated ourselves to "walking the talk" in reducing our carbon footprint.

This growth, however, threatened to derail one engine of our change: the smallness, intimacy and lack of bureaucracy that had fostered our culture of innovation that we wanted to continue. We feared losing the communication – among faculty, between faculty and students (who frequently need comforting about change) and among the administration and faculty – that was so central to our change-oriented culture. Could we preserve our "skunk works" culture with so much separation among sites and people? Could the creativity that is ignited by the intellectual sparks that occur when people are in close proximity continue when they don't see each other as often?

Perhaps not surprisingly, some of the earliest steps we took to retain our campus commitment to being an integrated institution had little to do with technology. We worked to create physical presence at all sites of key people, as well as the presence of students from more than one program or degree level, so that the sense of the broader university community was preserved. Though no students yet live year-round at the Eden Hall Campus, a senior administrator was asked to reside there to establish a university presence. We thought it important that no site would come to be seen as the exclusive domain of any population. Eden Hall Campus has been used by undergraduates and graduate students, as well as alumni as part of orientation, reunion, retreats, and a new class in organic gardening. Meetings and events, including board meetings, were spread around the different venues. The vice president of academic affairs regularly goes to our new Chatham Eastside site to meet with faculty, rather than have the faculty always come to the Woodland campus.

However, it soon became apparent that these more traditional measures alone would not preserve the "skunk works" culture that had flourished on our smaller campus. They might serve to link dispersed populations better, or to personalize the non face-to-face learning experience, but they could not satisfy the need for a creative, intellectual community where innovation could thrive. We turned to the infrastructure already in place to create that community – online for those who were dispersed and even for those sitting in adjoining offices.

Chatham already had a comprehensive intranet capability with "myChatham," which is easily accessed through the internet and provided the customary central repository and clearing house of university information, holding such things as event calendars, directories, forms, student and faculty data, accounts and rosters. All three physical sites are wireless and all undergraduates

over the last five years have been issued tablet computers, a highly-portable computer which most faculty also use. While grant applications have been made to enhance the computing power through the addition of direct, high-speed fiber lines to provide better future networks, (and better linkages to outside infrastructure such as the Carnegie Mellon supercomputer) sufficient electronic capabilities were already in place. We also had experience in fostering a very good sense of community and personal connection through our online education programs, where we serve approximately 500 students.

A group of faculty members developed the first experiment that showed how technology could be used for new program development. They created “Farm 101” as a Moodle site where faculty, students and staff who wanted to be part of Eden Hall campus planning could share their thoughts and learning. It was also used as a clearinghouse where members of the campus community were asked to register their relevant life skills. Did anyone know how to keep bees or chickens, can produce, or create an organic garden? In relatively short order, Farm 101 became the equivalent of a “skunk works” from which emanated a number of innovative ideas – many of which have already been implemented or incorporated into future planning. Most importantly, Farm 101 created a community of collaborators to help develop this new campus and its programs. The Alumni Office and the College for Continuing & Professional Education further broadened the environmental planning community by creating an online book club to discuss Barbara Kingsolver’s *Animal, Vegetable, Miracle*.

We are looking now at ways to use technology to reduce the costs of making progress on disparate sites, by not replicating offerings. For example, when the Eden Hall Campus is built out as the home to the new School of Sustainability, it will offer master’s programs and collaborate with the College for Women to offer undergraduate degrees and experiences for students who want to take advantage of the courses offered at this new all “green” site, regardless of whether they are environmental studies majors.

We are also studying ways to expand online offerings as part of our existing traditional undergraduate program, along with imaginative rescheduling of coursework on the Woodland campus to make it possible for future students to pursue experiences on both campuses (for example, organic gardening at Eden Hall Campus) in an organized, concentrated schedule of offerings that will minimize commuting between sites and prevent the isolated development of the three sites as places that pursue different, unconnected activities.

We have already tried this “mixed metaphor” of academic offerings in our current undergraduate program as our faculty have begun to deliver part of our general education curriculum online. This summer, faculty who might never have taught online before did so in order to make good on our new policy of offering general education courses online by our regular faculty at competitive rates,

rather than permit students to take general education and disciplinary introductory courses at community colleges and transfer them back in (a practice which was costing us both in educational continuity for the students and in lost tuition revenue). At least one outstanding traditional faculty member found the experience so exhilarating that she has become a leader on behalf of this concept on educational, not economic, grounds — an important development.

Experimentation is also taking place in our graduate programs. Some of the most important graduate programs from our earlier growth period are attractive targets for expansion since they are proven quality winners with great appeal. However, they would be enormously expensive to expand by traditional means, in part because of the difficulty of finding field placement sites within our region where there are now many other programs seeking the same placements. In the case of one highly sought-after health science program, the standardization of academic experience which technology offers will be utilized in the future to perpetuate the strength of the core academic program through online classes, and the field opportunities expanded and dispersed through field experiences in supervised, distant, and even off-shore, locations.

The future challenge will be to strike the right balance between the “face” time necessary for continued trust that must undergird team-based innovation, and the use of more technology for communication and collaboration as we work to keep creativity, innovation and the sense of being one academic community, albeit in three disparate sites, alive.

About the Author



Esther L. Barazzone
President, Chatham University

Esther Barazzone, President of Chatham University since 1992, has been a leader in efforts to internationalize higher education. Chatham received the Institute for International Education's Heiskell Award in 2003. President Barazzone serves on the board of the Council for International Exchange of Scholars (CIES) and her work has been recognized by honorary doctorates from institutions in Pakistan, Korea, and Japan. She has also participated in several international delegations during her presidency, to Southeast Asia, Germany, and Egypt.

During President Barazzone's tenure, Chatham has developed programs in areas of the environment, international education, and women's leadership that have resulted in significant institutional growth and university status. President Barazzone also served as a faculty member and administrator at Hamilton and Kirkland Colleges, the University of Pennsylvania, Swarthmore College and Philadelphia University.

President Barazzone holds a Ph.D. and Master's of Art in European Intellectual History from Columbia University, where she was a Fellow of the Faculty. She was a Charter Scholar in the first graduating class of New College and received a Fulbright Student award to Spain in 1967. She has also studied at the Wharton School of Business Administration and at Harvard University's Institute for Educational Management.