

BLENDING IN THE BRONX: THE DIMENSIONS OF HYBRID COURSE DEVELOPMENT AT BRONX COMMUNITY COLLEGE

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ABSTRACT

To support the growth of its blended courses, Bronx Community College (BCC), a unit of the City University of New York (CUNY), participated in a CUNY-sponsored initiative to increase blended learning options for students. The initiative allowed BCC to expand its existing faculty development program. This paper describes major aspects of the program, including strategies for faculty recruitment, face-to-face and online workshop activities, faculty peer mentoring, recruitment and utilization of students as Instructional Technology Tutors, and the documentation created in order to evaluate program activities.

KEYWORDS

Faculty development, hybrid and blended course development, mentoring, assessment, instructional technology tutors

I. INTRODUCTION

Bronx Community College (BCC), a unit of the City University of New York (CUNY) enrolled 10,740 students in Fall 2010. The CUNY system, with 23 campuses spread across New York City, enrolls about 265,000 degree credit students and a similar number of continuing education students. BCC serves a low-income, minority population (94% Black and Hispanic), most of whom enter the college in need of developmental coursework. About 28% of BCC students are foreign nationals, and over half speak English as a second language. In Fall 2010, BCC offered 35 blended or hybrid classes, serving approximately 700 students. For Spring 2011, we will schedule approximately 50 hybrid classes. While not a large overall number, this represents a significant one-year increase. What follows will describe the institutional background, planning decisions, and program creation that have led to this anticipated growth. The article will also indicate how building a blended program has highlighted the challenges we face in providing online education for our student population.

Since 2005, BCC has built a faculty development program for online instructors consisting of a six-month cycle of course development leading to the delivery of an online class. The program has resulted in

modest but steady growth of both blended and fully online (“asynchronous”) courses, with approximately 80% of all online instruction at the college being taught by program “graduates.” In December 2010, completion of the program was formally adopted as a requirement for teaching a partially or completely online course at BCC.

Late in 2009, CUNY announced a “Hybrid Initiative” designed to increase the number of blended courses throughout the university. BCC was one of nine CUNY campuses selected to participate. By this point, our faculty development had evolved a set of structures, incentives, and supporting programs which enabled a strong proposal and plan to expand hybrid instruction in accord with university goals. Enrollment in online training averaged 12 participants per year between 2005 and 2009. In 2010, the university-supported initiative attracted 33 applications. BCC’s program provides stipends to participants, paid in increments tied to completion of program goals, and compensates peer mentors with stipends and reassigned time. University funding permitted a modest “sweetening of the pot” and doubtless encouraged this increased interest. But as we will explain, in key respects the university’s initiative permitted BCC to strengthen the existing program and accelerate its development and improvement. CUNY’s Hybrid Initiative Request for Proposals emphasized both administrative and teaching/learning dimensions in the creation of a strong hybrid program. At a moment during the 2009-2010 academic year when enrollments were growing quickly and classrooms overcrowded throughout the system, the RFP emphasized rationalized scheduling, efficient space utilization, and the appeal of a hybrid option to commuting students with oversubscribed lives. This dimension set in motion a kind of course schedule planning we had never seriously pursued. We have made modest progress on this side of the initiative. But from our standpoint, teaching and learning remain the most significant and interesting dimensions of online education. Since 2005, building pedagogies of active and collaborative learning which leverage the tremendous capacities of the online environment has always been our primary institutional goal. CUNY as a whole has pursued similar goals for many years. (In fact, three leaders in BCC’s program drew skills, knowledge, and organizational experience from CUNY’s Sloan-funded faculty development in the early 2000’s.) In that sense, the university’s 2009 directive to make “online instruction substantive and interactive,” referencing the strategies recommended in a widely cited 2009 U.S. Department of Education study [1], reinforced program goals we had already pursued intensively for some time [2].

This recent history gave BCC a rich context for pursuing the CUNY initiative. We were not inventing a program from scratch. The university’s offer of support jump-started the administrative side of our efforts around scheduling and room utilization and added resources to several existing elements of our online faculty development. The balance of this article will discuss these elements.

II. THE FACULTY DEVELOPMENT PROGRAM

Our campus work with new online instructors falls into two categories: faculty skills development along both technological and pedagogical axes, and support structures cultivated through peer faculty mentoring and the recruitment of students as skills and content area tutors. Our faculty development is centered in pedagogy and in the concept that academic objectives drive planning and decisions about technology use. Of course, significant effort also goes toward building skills in Blackboard (CUNY’s system-wide LMS). At the same time, we recognize the inherent risks—practical and pedagogical—of relying on one monolithic system. In 2009 we added a program dimension which builds faculty capacity to augment or replace the LMS by drawing upon both cloud-based Web 2.0 tools and our own home-grown multimedia streaming capability. On the support side, peer mentoring has been in place since 2005. It is consistently ranked by participants as a valuable and effective piece of their training, and the 2010 program used the CUNY initiative to bring in two new peer mentors, both of whom had “graduated” from the faculty development program in previous years and had gone on to teach well-designed, innovative hybrid courses. In BCC’s parlance, student assistants are known as Instructional Technology Tutors, or ITTs. They are typically recruited by faculty, demonstrate a good academic record, are open to improving their technology use, and have good communication skills. Over the past few years, ITTs have gradually assumed a bigger role in various college contexts, including both face-to-face and online tutoring [3].

Most recently, the CUNY initiative has led to broader and more ambitious deployment of ITTs specifically in connection with hybrid courses.

Our program's six-month project cycle, running from June to January, features intensive sessions, beginning with a series of fully face-to-face days in early June, followed by peer-mentor supported summer course development. In the fall semester which follows, participants teach a transitional "web-enhanced" course during which they try out pedagogical innovations and gain fluency in LMS functionalities. The program "deliverable"—in 2011 a 50% online blended course—then goes live in the spring semester. Since CUNY utilizes the Blackboard system, program support documentation and resources, as well as opportunities for online discussion, are housed on a Blackboard site. Recruitment and "placement" in the 2010 program among the 33 applicants fell into three categories: first-time developers working on key courses; experienced course re-designers; and finally, faculty whose skill level or target course did not fall within the range of activities we decided to support. For this last group, we designed an alternative, less intensive program.

Our underlying recruitment goal was to create blended versions of multi-section, high-enrollment courses, working with instructors who brought a good mix of basic skills and experience along with the approval of their department chairperson. While not every participant fit the "ideal" precisely, and some participants will be teaching courses which fall outside these exact criteria, we were successful enough to generate eight such courses with new online instructors, now about to be delivered in a 50% blended modality: in English, History, Communications, French, Sociology, Art History, and Music. They represent a significant expansion of BCC's capacity to provide a blended option for students enrolling in key required courses. In the long term, this strategy will support the project's scheduling initiative. It will also support another institutional goal: creation of an online degree program in which blended courses will be a recognized option.

Applicants whose qualifications fell outside our basic criteria included some who lacked even rudimentary computer skills. Hard-won experience had taught us not to permit them to enter a program in June 2010 which required a commitment to teaching online in January 2011. We similarly redirected highly experienced online instructors who preferred teaching asynchronously and instructors whose target course enrolled only one or two sections. Instead of a hybrid "deliverable," we designed goals for these instructors which corresponded to their specific skills and experiences. Beginners learned and applied LMS fundamentals; more experienced online teachers explored Web 2.0 or multimedia add-ons.

A. Workshop Activities

The face-to-face June workshop frames activities around three program elements: examples of effective methods for online instruction, one-on-one peer mentoring, and a set of Blackboard sites, including the program resource site, an empty course development "shell," and selected exemplary course sites. During the workshop participants meet the mentors, system administrators, ITTs, and other faculty participants; access the program site and their individual course shell; listen to presentations on pedagogy and LMS features and web tools; complete assignments that expand their knowledge of the LMS and online learning; and begin to plan their overall course development strategy. Prior to the start of the workshop, participants are asked to read a current article on distance learning and sign onto the learning management system. For our June 2010 session we chose an article focused specifically on blended course design [4].

The first two workshop days introduce new course designers to program requirements and resources, Blackboard features, and basics of online pedagogy, including selected literature in the field [5], [6], [7], [8], [9]. The first day starts with a discussion of the assigned article. Participants then learn good practices in site organization, online content presentation, and information about troubleshooting help, ranging from student inability to access Blackboard to classroom hardware problems. The second day introduces disability accommodation and methods for establishing instructor presence, facilitating communication, collaboration and interaction, and assessment. Over the course of the two days, participants receive two assignments and workshop time to get started on them, with mentors circulating, ready to assist. The first assignment concentrates on course appearance and information: changing

navigation buttons, uploading graphics, inserting appropriate contact and technical help information. The second moves more deeply into pedagogy: participants create a learning module consisting of content presentation, one web-based content object, an assignment based on the content, a communication or collaboration method, and an assessment of student learning. Detailed workshop documentation (discussed below) accompanies these assignments. Finally, participants are asked to complete a contract in which they explain which online teaching methods they will use, outline their course development plan, and create a timeline for completion of the course site.

On the third workshop day, experienced course re-designers and instructional technology tutors (ITTs) join new course developers for a quick introduction to Web 2.0 and podcasting methods. Again, our underlying goal is to introduce the pedagogical value of these technologies. Examples are shared, participants choose one area for application, and breakout groups then explore individual technologies in more detail. ITTs are assigned to faculty participants by content area and participate in breakout groups. The third day also features ample time for meeting with mentors and asking questions about course development contracts and the materials already presented. These are very intense sessions. Unstructured time for questions is a necessity.

Only experienced course re-designers attend the fourth and final workshop day, which features a streamlined version of materials given to new faculty and emphasizes the contract, disability access, troubleshooting, and more advanced Blackboard features. Participants are asked to create three new modules for their online courses and to specify completion and implementation goals.

Participant contracts are submitted and reviewed by faculty mentors within a week after the workshop. The contracts then serve as a template for summer course development; new course developers are to have a web-enhanced course ready for review by July 31st. Throughout the summer, mentors are available for face-to-face meetings and phone or email consultation and formally provide feedback to participants three times: 1) on the submitted contract mid-June, 2) early July on the June 30th goals indicated in the contract, and 3) early August on the completion of summer course development.

In the fall semester, participants teach web-enhanced courses and continue their hybrid design. Monthly program meetings provide the opportunity for discussion of successes and challenges, attention to pedagogy, and exposure to new technologies. A key culminating point arrives when mentors formally review each participant's prospective hybrid site using a site evaluation rubric. This "checkpoint," discussed below, comes at the end of November, just prior to the college-wide approval of spring semester courses.

B. Peer Mentoring

Over the past five years, faculty participants have consistently rated one-to-one peer mentoring as the strongest element of our program. In their Penn State University study of faculty attitudes toward professional development, Taylor and McQuiggan similarly found very strong support for peer mentoring [10]. After the summer workshop and apart from monthly fall semester meetings, most mentoring is virtual, conducted largely through online communication (e-mail, discussion boards, wikis) and course site reviews. Virtual mentoring sessions are therefore asynchronous, personal, and targeted to identified issues, whether pedagogical or technical. Mentors assume a variety of roles: advisor, colleague and even student to test and assess the developed course materials [11].

Mentoring has had beneficial impact both within and outside online course development. Fundamentally, it is a collaborative activity and encourages that spirit in participants. Like other campus-wide initiatives, it breaks down "silos" and builds cross-departmental relationships and communication. Those who have been mentored, and who discover a new application or software, or discover new uses for older tools, are more willing to share their ideas with colleagues. Similarly, the experience of learning new skills and methods in a supportive environment promotes further exploration and experimentation; each year, some former participants augment their Blackboard courses with Web 2.0 or multimedia content, often without formal training. This kind of activity has also provided a "turnkey" method for recruiting new campus leadership. Aside from two new mentors brought into this year's activities, we find among former

program participants a co-leader of BCC's ePortfolio program, and leaders of technology initiatives in the Art, Biology, Nursing, Chemistry, and English departments [12]. Finally, the mentoring role has become more demanding as the range of technologies expands, and the mentor-mentee relationship does not end when participants take their courses online. Given our current scale and available resources, we were able to maintain a ratio of one mentor for every four course-developer participants during the 2010-2011 cycle. Sustaining that ratio will be a challenge.

C. Instructional Technology Tutors

The ITT program originated about the same time as the faculty development workshop, though it initially evolved independently. The first ITT was assigned to an asynchronous capstone seminar in the Education program. His responsibilities were split between online instruction and face-to-face tutoring and his assigned title was "virtual tutor." The virtual tutor role soon expanded into other Education Department courses, and into other departments. Pilot funding was obtained and several tutors were trained and assigned. In 2008, additional grant funding permitted formalization of the ITT role and expansion into new academic areas as some online instructors began to recruit tutors. Training for the ITTs now encompassed three distinct dimensions: tutor certification (provided through the College Reading and Learning Association) [13], teaching assistant-level training in Blackboard functionality through the Office of Instructional Technology, and hardware/software training provided by BCC's Information Technology department. The 2010 Hybrid Initiative then catalyzed our next move, which brought ITTs more purposefully into online course development.

Once faculty recruitment had been completed, program leaders identified candidates for Education Department degrees who met specified criteria: a minimum GPA, documented familiarity with technology through successful completion of at least one distance learning class, and solid communication skills. Once they agreed to the role, these students made up the new ITT cohort; each was assigned to three faculty members. In addition to the training described above, the new ITTs attended a workshop session with their faculty supervisors. These assignments followed a rationale, in that those tutors who had performed well in a particular subject were assigned to faculty members in that area.

As the program grows, the ITT position assumes increasingly "blended" characteristics. ITTs help students and faculty alike with technical problems, tutor their peers in course content both face-to-face and online, and assist faculty with online content presentation. Some ITTs support lab-based instruction, sometimes using discipline-specific software, and some lead asynchronous Blackboard discussions. ITTs maintain classroom equipment, and have worked on large-scale digitization projects; for example, transforming the History Department's extensive collection of VHS cassettes into DVDs. More ambitiously, a Reading Department ITT reformatted instructional materials already in digital form into student-controlled media such as online quizzes and interactive videos. Transforming static into dynamic materials is perhaps the most recent twist on this evolving role. To be sure, the role is sometimes challenging for faculty to define, and success often depends as much on faculty flexibility and imagination as it does on the tutor's skills. Clearly, however, the position is here to stay, and as BCC continues to build academic technology resources, the ITT becomes an increasingly valuable departmental asset.

III. DOCUMENTATION AND ASSESSMENT

Transparency in expectations and assessments improves any program. Consequently, we have developed a series of documents which articulate goals and expectations for faculty participants. These and other documents, along with a rich variety of resources, are housed on the program Blackboard site.

Four key documents guide participants through course creation or redesign:

The Contract is a planning document, formatted in Microsoft Excel, which allows participants to describe materials to be created, changed, or uploaded into different parts of the online course, and to set a work timeline.

The Online Teaching Guide is a policy document which outlines principles of good practice in the following areas: instructor presence, responsiveness to student circumstances, course content, course site design, quality of assignments, evaluation of student work, accuracy and currency, and academic integrity and intellectual property. The Blackboard program site uses the same categories as an organizing principle.

The Learning Unit Planning Guide is a template for the development of effective online learning modules. It emphasizes the importance of active engagement, collaboration, and providing multiple opportunities to improve student learning. The Guide recommends that successful learning units include five essential elements: 1) unit instructions, 2) a course content presentation, 3) an assignment on the course content, 4) a method for communication and collaboration, and 5) a method for student assessment.

The Online Course Development Checklist provides a framework for self-evaluation as participants develop their web-enhanced and hybrid course sites. The Checklist is organized around the same presentation and content elements covered in workshop activities and the Online Teaching Guide. It pays special attention to “Course Information,” which includes a course syllabus with objectives, textbook information, a calendar of student responsibilities, site navigation and work routine instructions, links to all required plug-ins, evaluation information for all assignments, attendance and testing policies, technical help information, and academic integrity and “netiquette” policies.

As we prepared for Spring 2011 delivery of courses developed under the current project, these formative assessment instruments provided a reasonably accurate guide to participants' progress. In mid-October, we brought the group together to review, brainstorm, and troubleshoot course design and development. Participants reported mixed results in their web-enhanced courses. Some successfully implemented Blackboard functionalities such as quizzes, grading, blogs, and discussion boards, while others struggled to find effective methods for their disciplinary and student skills contexts. Among the more interesting results was the time-saving use of audio podcasts in an introductory French class: the instructor noted quicker skills acquisition and no longer needed to review elementary vocabulary as frequently. An Art History instructor found students very receptive to discussion board posting and now needed to focus on efficiently reading and evaluating this form of online writing. In a Philosophy class, silent in-class students had become voluble Discussion Board writers, but a wiki project foundered. In an introductory Music class, multimedia presentations and hyperlinked text documents had effectively replaced textbook content, but students' reading deficiencies remained a problem. Among our experienced course re-designers, an Anatomy and Physiology instructor had mounted an impressive array of web-based tools: interactive crossword puzzles, a dedicated YouTube channel, and a richly endowed discipline-based Google site, while an Education Department instructor reported that audio instructions about Blackboard use and course-related material proved more effective than the uploaded text files she had previously employed.

Six weeks later, at the end of November, peer mentors utilized a standardized rubric to conduct systematic course site reviews for course developers. The rubric allowed mentors to critique the course for instructional design and pedagogy, communication and feedback, assessment and evaluation, and technology integration. Participants received an overall review of their site and more detailed recommendations based on the course checklist and learning unit guide. Reviews were discussed in one-on-one meetings with participants, who were asked to address recommendations prior to a January 2011 meeting to be held just prior to courses “going live.” While almost all courses were judged on track for successful delivery, the instrument and review enabled mentors to concentrate on specific course elements needing further development. One course needed more interactive discussion board assignments, for example, while a second lacked information about plug-ins required to view media, and a third needed cleaner, more easily navigable content presentation.

With the current cohort ready to take their courses online, approximately 12% of BCC's full-time faculty will be teaching hybrid or asynchronous courses in spring 2011. Modest as it is now, that figure will continue to grow. As it does, so will the need for formal evaluation methods consistent with methods already in place for face-to-face classes. As a result, we have developed peer observation forms for

hybrid and asynchronous courses that are beginning to be used at the department level for tenure and promotion, just as in-class peer observations have been used for decades. A similar method for student evaluation of courses to match the current evaluation form for face-to-face courses has yet to be adopted.

IV. SUMMARY AND CONCLUSIONS

Improvement in the most recent iteration of BCC's faculty online course development program was catalyzed by the CUNY Hybrid Initiative. BCC has shown a steady increase to 50 hybrid courses and 12% of full-time faculty teaching distance-learning courses in the Spring 2011 semester. The six-month program relies heavily on peer mentoring and student ITTs to guide faculty in the development or re-development of a deliverable hybrid course. In particular, peer mentoring leads to a positive experience for faculty participants, the flexibility to tailor training for each participant, and the addition of the course review checkpoint in November prior to the scheduling of classes. Rubric-based course review and face-to-face meetings to discuss progress provided opportunities for both encouragement and, if necessary, intervention.

To the extent that the October mid-semester reports referred to student performance, they suggested another angle on assessment: the policy question we have come to call "student preparedness." At BCC, 75% of first-semester freshmen in Fall 2009 (n=2,073) failed one or more of the City University's skills tests in reading, writing, and mathematics, and 25% failed all three tests. Where co-requisites permit, some of these students enroll in hybrid or asynchronous courses before completing their developmental coursework. Such academic skills deficits are only one symptom (and quite possibly not the key symptom) of a larger problem. Experience and data suggest that we cannot presume in our students the dispositions identified with students who succeed in reduced-contact classes (whether hybrid or asynchronous): understanding the need for managing one's time and successfully completing tasks without the routine of regular classroom attendance [14], [15]. Performance data among all Fall 2009 BCC students enrolled in hybrid or asynchronous classes show that among students in good academic standing (GPA \geq 2.0), those at a high-developmental English level, taking a mix of distance and traditional classes, had an overall pass rate of 69%, compared with 84% for students at the same level taking only face-to-face classes. For students at the credit-bearing English course level, the same comparison yielded pass rates of 78% (distance and face-to-face) and 86% (face-to-face only). Clearly, a significant portion of our online students—somewhat larger than the analogous portion of the college population in traditional classes—needs help in order to pass and complete their coursework. However successful our efforts to develop faculty capacities to teach online, we can conclude that our progress needs now to be matched by an equal commitment to building student capacities to learn online.

V. ABOUT THE AUTHORS

Dr. Howard Wach is Director of the Office of Instructional Technology and a Professor in the Department of History at BCC. He first taught online in 1998 and has directed numerous campus-based academic technology initiatives at BCC since 2002. He is currently directing a five-year, \$2.75 million grant-funded project to develop technology-integrated curricula and infrastructure across the college.

Dr. Laura Broughton is an Assistant Professor in the Department of Biology and Medical Laboratory Technology at BCC. She has taught online since 2007 and mentored in the BCC faculty development program since 2008. She has presented her work at the Sloan Consortium Blended Learning Conference, the Ecological Society of America, the CUNY IT Conference, and the CUNY General Education Conference.

Dr. Stephen Powers is a Professor in the Department of Education and Reading at BCC. He has taught online since 2002 and mentored in the BCC faculty development program since 2005. He co-chairs the Teaching and Learning with Technology Roundtable (TLTR) and is a campus representative to the CUNY Academic Technology Committee. He has presented work at the Sloan Consortium Blended Learning Conference, the CUNY IT Conference, and the League for Innovation in the Community College.

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