Title: *The CUNY Academic Commons: Fostering Faculty Use of the Social Web*

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Purpose: *This paper analyzes the implementation of an academic social network that connects faculty members, administrators, and graduate students in a multi-campus university system. Part of a new generation of university-sponsored virtual spaces that foreground social networking, the CUNY Academic Commons has fostered a growing community of members who use the site to collaborate with colleagues across the system. This paper describes the processes involved in creating the site and offers guidance to institutions considering similar projects.*

Design/methodology/approach: *The paper presents a case study of the CUNY Academic Commons that is supported by site analytics, usage reports, and public site materials.*

Findings: *The CUNY Academic Commons has increased awareness of member projects and research interests; built a greater sense of community between discrete campuses; promoted an open culture of sharing; and encouraged collaborative ventures across the system. The site gives members a greater degree of control over the design, presentation, and content of their own web-based work than is traditionally possible in closed-source, closely managed university websites.*

Originality/value: *The paper will be of interest to academic institutions interested in using social-networking technologies to strengthen their communities.*

Introduction: Some Starting Points

Located throughout the five boroughs of New York City, the 23 institutions of The City University of New York offer over a quarter of a million students access to undergraduate and graduate degrees, while nearly that many again are enrolled in adult and continuing education programs. Geographical proximity and a common state budget ensure some modicum of integration, yet these campuses have, historically, been a loose federation. For most of the 21st century, CUNY's web presence has been a collection of campus websites, essentially static affairs for providing information to visitors. While these sites have been places to find things, the web has increasingly become a place to do things.

Other changes have overtaken the University. In recent years, enrollment growth has brought tens of thousands of new students each year, placing significant expectations on online and blended learning, not as distance education, but as a way of preserving access to the public that CUNY serves. Enrollment growth, along with turnover, has also fueled extensive faculty hiring for the last decade. Even if the newer, younger faculty had not brought with them interests in academic uses of technology, such changes were reaching the older faculty, sparked by student interest as well as news of and administrative interest in such trends.

Without cross-campus communication, such changes are more likely to be centrifugal than centripetal in effect, with each campus and even department taking its own approach to incorporating technology into its workflow. Communication networks have long been in existence, of course, but in ways that reified existing units and communities, enclosed in their own listservs and intranets. There needed to be wider – and especially University-wide – means of discussing and sharing academic uses of technology. With that in mind, the University Provost created the CUNY Committee on Academic Technology (CAT), inviting two representatives from each CUNY campus to join it and begin pooling best thinking and practices. And that newly constituted group immediately realized it needed a means of extending such discussions that would allow new points of focus and even new communities to emerge.

The Idea of a Commons

The need to extend discussions meant that CAT needed more than a static site to which resources could be uploaded and archived. Most repositories of learning objects enable members to deposit materials into a website with a pre-determined taxonomy. Such repositories facilitate certain kinds of sharing, but they do little to foster active communities of practice. All too often, the standard caveat with such sites is that if you build it, they won't come.

The obvious and opposite alternative to the static digital library is the social network. In an ever-more connected world, social networks enable rich means of interacting with others, sharing news and interests, keeping up with events in one another's lives professionally and personally. Anyone who uses them, however, is aware of their downsides: they can be intrusive, time-consuming, and sometimes trivializing. Colleagues don't exactly crave more online activity. In fact, there is a danger of "interaction overload" as the next stage of "information overload."[1]

If the Commons was to be a successful experiment, it would have to combine the best features of a static archive with the virtues of a social network. Providing neither resources without activity nor activity without resources, it would instead offer an amalgam of the two that would allow faculty members to decide for themselves how much time to invest in either.

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[1] Almost a decade ago, the London School of Economics ran a workshop on "interaction overload" (Sørensen, 2001). For a more recent discussion of similar issues, see Wright, 2008.

Building the Commons

In preliminary discussions about the potential shape of the Commons, CAT members professed a desire for a site that would be open and organic, and that would be flexible enough to be molded to the particular needs of its members. An early suggestion was that the taxonomic structure of site resources had to be determined before the site itself could be built. This was tabled in favor of a design that would allow folksonomic structures of organization to emerge from the community itself, primarily through acts of tagging and categorizing. CAT members were drawn to a vision of the Commons that would be open to reconfiguration, changing as users' needs and interests evolved. It would be both public and private, structured and open, full and expandable. It would maximize possibilities while minimizing costs. In short, it would be open source.

A CUNY Academic Commons Subcommittee of CAT formed and examined several possible platforms for the site, including Plone, Drupal, and WordPress. Each offered its own set of advantages and challenges; ultimately, given the demands placed on the Commons, no single open-source platform would suffice. The subcommittee settled upon a "small pieces loosely joined" approach[2] that would use WordPress as both the blogging tool and backbone for user data on the site; BuddyPress, a social-networking layer for WordPress, as a space for individual profiles and groups; BbPress, a discussion-board tool (later integrated into BuddyPress) as a forum tool for groups; and MediaWiki as the platform behind a public wiki that would contain best-practices documentation.

Having cobbled together a set of tools that were best-in-breed for particular site functions (as opposed to a single content management system that would have offered more unified integration but less varied functionality), the Subcommittee engaged a group of freelance developers to make improvements to the initial mock-up of the site. One early and important result of this work was the creation of a single sign-in system for WordPress and MediaWiki—functionality that, despite the popularity of both tools, had not yet been created (Gold, 2009). Since the team immediately made this innovative code public, the single-sign on system was utilized rapidly on both academic and non-academic websites, enabling other communities to add collaborative wikis to their blogging systems.

As the Commons Development team gelled, Boone Gorges, a freelance developer and a student at The CUNY Graduate Center, assumed the role of Lead Developer. Working with Project Director Matthew Gold, members of the Subcommittee, and Systems Administrator André Pitanga, Gorges created a series of WordPress and BuddyPress plugins in response to user requests. These plugins included a finely grained email notification system for group forum posts; an invitation tool that could be

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[2] Although the term "small pieces loosely joined" derives from David Weinberger's 2002 book of the same name, the sense in which it is used here to characterize the mashing together of multiple platforms in an open educational technology environment was described by instructional technologists Brian Lamb, Alan Levine, and D'Arcy Norman at the 2004 New Media Consortium conference. See Levine, 2004.

used to invite prospective members into the Commons and into specific groups; a tagging system that allowed members to make terms in their profile searchable across the site member listing, helping members find others who shared their interests; and tools that allow administrators to incorporate RSS feeds into sitewide activity streams.

Like all innovations made in building the CUNY Academic Commons, these plugins were carefully documented and shared freely with the open source community. One early measure of success was the popularity of these plugins, whether counted by number of downloads or quality ratings. Collectively, the plugins released under joint authorship of Boone Gorges and the CUNY Academic Commons have been downloaded a total of 37,867 times, and most have been given the highest possible quality rating by members of the WordPress and BuddyPress communities.[3] Although the Commons was built to accommodate the needs of a single university, its active participation in the broader community of open-source developers has been a key element of the overall success of the venture. At a basic level, the Development team modeled the inward-and-outward facing quality that it hoped the site as a whole would acquire, both by sharing its work openly and by building upon the work that others had created and shared.[4]

The idea of measuring success by "the key metric of use" has recently been discussed in depth by Tom Scheinfeldt, Managing Director of the Center for History and New Media at George Mason University (Scheinfeldt, 2010). In a recent blog post about an NEH-sponsored summer institute, Scheinfeldt wrote that CHNM judges the tools it produces by use in part because tools that are widely used and that have found connections with user and developer communities are more sustainable over the long term. As Scheinfeldt writes, such communities "commit their time, effort, ideas, code, heart and soul to a project, [and] are the ones who will keep something going when money and institutional interest runs out."

Collaborations with the larger open-source communities behind WordPress and BuddyPress have resulted in real gains for the Commons, both in the form of help in finding and fixing software bugs, and in joint authorship of plugins used on the Commons. Indeed, one of the earliest and most popular blogs on the Commons was the Development blog, which the team used, along with Twitter, to promote its work. Similarly, the bug-reporting page on the wiki was the most active page in the early days of the Commons. The team behind the Commons always made a conscious effort to discuss its development process publicly, and to build trust with its user community by dealing with bugs in an open and honest way. The Commons, in other words, was from the first a space of open experimentation, open communication, and open sharing. And

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[3] A list of plugins created under the auspices of the project, along with download counts and quality ratings, is available at http://wordpress.org/extend/plugins/profile/cuny-academic-commons. Download numbers were current as of 22 October 2010.

[4] Open-source communities hold promise for projects emerging from institutions with limited budgets and development expertise, though the relationship should be collaborative rather than exploitative. The Commons Development team has made an effort to blog about its work publicly so that other teams developing similar projects might learn from its experiences.

it was this spirit of openness and this engagement with both academic and non-academic audiences that set the stage for the communities that would flower there.

Assembling the Community

Although the Commons was always intended for a large membership of faculty members, graduate students, and administrators in the CUNY system, it was first released in a series of soft launches to small groups of members. At its February 2009 creation, it was populated chiefly by members of the CUNY Committee on Academic Technology (CAT) members. BuddyPress had been marketed initially as "Facebook in a box" (Mullenweg, 2009), with an emphasis on typical social networking features such as "friending," but members of the Commons used it for collaborative academic and committee work. An early adopter of BuddyPress, the Commons released plugins for BuddyPress that emphasized productivity-oriented features of the social networking environment, helping to make BuddyPress an increasingly effective platform for collaborative academic work.

Members of CAT were initially encouraged to invite only their "tech-savvy" friends into the site, and they were asked to refrain from wider announcements because the site was still in an alpha state without a support staff in place. This strategy bore fruit for the site in several ways:

- it meant that for the first five or six months of its existence, the Commons was populated by a small, but dedicated, group of users who approached the site as a work in progress, and were thus willing both to report bugs and to work with developers on the bug-fixing process;
- it gave tech-savvy early adopters time to create content on the site, so that when membership became more open at a later date, new members would be able to see activity on the site and models of behavior they could follow;
- it created a sense of investment in the site for those early adopters, many of whom provided support as new members joined the site and posted questions;
- it gave the development team an active member community to consult as new site features were developed and deployed.

By the end of the summer of 2009, the site had become more stable, and the University's small initial financial investment in the project had resulted in a great deal of activity, both in terms of member contributions and development; the University responded with a significant commitment to fully funding the initiative. This funding allowed the project to hire "The Community Team"—a group whose main focus was on stimulating activity on the site and making connections among members. The creation of this team acknowledged that social networks, perhaps especially in academic contexts, don't build themselves; they need to be nourished and fostered, sometimes even kick-started. The Community Team members, with titles like "Community Facilitator" and "Wiki Wrangler," did just that. They performed a variety of important tasks, ranging from troubleshooting registration problems to helping groups start wiki pages to writing support documentation.

It was important to help members help themselves. Given a small support staff, the project had to disrupt the typical client-service model of academic technology, a model that may deter more than support faculty engagement with technology. Instead of adopting a procedure whereby faculty members could request that tasks such as the creation of blogs and wiki pages be done for them, the Commons adopted a self-service approach: members were responsible for fashioning their own spaces. Those with questions or problems were supported (all queries were answered within 24 hours, and often within the hour), but faculty members who wanted blogs would need to set them up themselves (if not without help). Though this policy could be seen as unsupportive, even unrealistic for some academic cultures, it had an unanticipated positive result: a core group of members started their own user-support forum, answering many of the questions that new members had. As the Community Team became more integrated into the workings of the site, it aided these grassroots efforts and collated information so that it could be found more easily. In the end, one challenge of running a community site turned into an asset: the need for help fostered collaboration and created a shared knowledge-base – not simply support documentation or support services, but a support community.

An Academic Social Network, Premised on Serendipity

The prospect of missed connections had been one of the principal reasons why the Commons was formed: it seemed a shame that a Chaucer scholar in an English department at Baruch College in Manhattan would miss knowing a fellow CUNY faculty member at Kingsborough Community College in Brooklyn who also specialized in Chaucer, and it seemed even more of a shame that an arts-and-design specialist interested in educational games at Hunter College might never connect with a computer scientist with the same interest at Queens College. The Commons was created to put faculty members like these in dialogue. But how would they find one another, and what would they do once they connected?

The Development team created several ways members could find one another serendipitously. As noted above, one of the first plugins created for the site allowed members to designate certain terms in their profiles (such as the word "Chaucer" in the Profile field "Academic Interests") as searchable keywords; when clicked, these terms would return lists of members who had that term to their profiles. A friending system allowed members to make connections with other members[5]; they could also be invited to groups or to blogs, or to contribute to wiki pages. Sitewide RSS feeds tracked all public activities on the site, ranging from a member creating an account, to two members becoming friends, to a member editing a wiki page or creating a blog. The site design highlighted these feeds prominently, giving special prominence to new blog posts, which were featured on the front page of the site. A personal "mention" system—now a native part of BuddyPress—alerted members by email whenever they were cited

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[5] The question of whether the term "friend" was appropriate in an academic context was discussed several times by members of the project staff (Gold, 2010).

in a public update. These social networking features helped keep site members aware of the site, returning to it to accept friend requests and to join groups. Notably, these drivers of activity came not from top-down directives, but rather from peer-to-peer interactions.

It is important to note that while some of these features were part of the "out-of-the-box" elements of the platforms used by the Commons, many were custom-coded for the community by the Development team. In this sense, the use of open-source software enabled what Christopher Kelty has called "recursive publics" (2008)—the ability of communities to become autonomous by reshaping their virtual environments in response to the needs of their members. As a website and a community developed in tandem with responses from its membership, the Commons has empowered members of the CUNY community with digital spaces in which they could directly shape their own work and community.

Promoting Engagement

The CUNY Academic Commons was created to promote greater cohesion and engagement between members of the CUNY system, but what measures can and should be used to demonstrate the impact of the site on the CUNY community, especially when the kinds of connections the site fosters are often informal and collaborative? That the site has experienced rapid adoption within CUNY can be seen in Figure 1, which tracks the steady rise of members, groups and blogs on the site, which was first created in February 2009 and officially launched in December 2009:

Figure 1: Members, Blogs, and Groups on the CUNY Academic Commons[6]

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[6] Data collected from the WordPress dashboard of the CUNY Academic Commons.
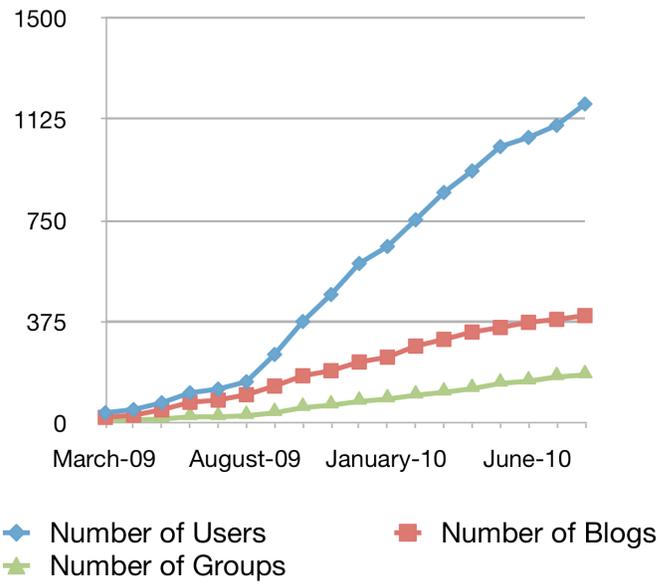
	Number of Users	Number of Blogs	Number of Groups
March-09	38	21	9
April-09	50	29	12
May-09	75	49	15
June-09	112	77	23
July-09	126	85	23
August-09	153	105	27
September-09	254	137	38
October-09	376	175	57
November-09	476	194	66
December-09	591	226	80
January-10	654	244	89
February-10	753	285	103
March-10	854	310	114
April-10	934	337	127
May-10	1024	354	147
June-10	1058	373	155
July-10	1103	384	171
August-10	1182	398	178

These numbers provide an overall picture of membership on the Commons, but the tools to create finely grained statistical reports of activity in social networking sites are still being developed. One of the biggest obstacles to gathering data for such sites is that a great deal of activity takes place in password-protected spaces such as private groups (75% of groups on the site are private or hidden, visible only to their members), or through private site-based email and messaging systems; this makes tools like Google Analytics only marginally useful as gauges of site activity. The CUNY Academic Commons has created an early version of one data-gathering tool, the BP Systems Report plugin, which will indicate how many members, groups, and blogs were active during a given period of time (Gorges, 2010), but it will not capture intangible effects, such as the ways in which participation in an open network has affected pedagogical activities or university-wide initiatives.

As the site develops, statistical reports will be supplemented with user surveys and longitudinal studies, but at this early stage, a few examples of collaborative activities fostered by the site can suggest the larger possibilities of an academic social networking project:

- Two Queens College faculty members used the forum of the CUNY Game Network group on the Commons to post a working version of a survey of college student videogaming habits (Fernández , 2010). Within a number of hours, they received feedback from scholars working in that field, which yielded a more robust survey.
- George Otte, the Director of Academic Technology at CUNY, used a forum post on the Open Access Group to find members interested in helping to start a new online journal (Otte, 2010).
- The College of Staten Island English Department joined the Commons to improve its intra-departmental communications and to archive departmental documents.[7]
- The cross-campus ePortfolios group made use of a group, a series of wiki pages, and a blog to document its work and promote interest in ePortfolios.[8]

In each of these cases, individual members have reached out to collective, self-selected groups on the Commons to distribute professional materials related to research, teaching, or administration. While such groups certainly could have formed without the Commons, having them gathered together within a single, networked platform has had accretive effect on community-building efforts at the University.

Some Preliminary Conclusions

Our discussion of the CUNY Academic Commons has stressed its open and participatory nature, but openness and participation are relative. What would make such forms of openness and participation worth emulating? Do they really make a difference of more than degree, of dramatic change? The answer is a cautious Yes. Even relative changes can lead to what, in physics, are called phase changes – when, for example,

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[7] Available at http://commons.gc.cuny.edu/groups/college-of-staten-island-english-department/ .
[8] Available at http://commons.gc.cuny.edu/groups/eportfolios/

the increase or decrease in the temperature of water makes it stop behaving like a liquid because it has become a gas or a solid. And peer interaction can make the faculty experience – often isolated and isolating activity – a radically different experience.[9]

One useful conceptual framework is Jonathan Zittrain's notion of generativity. In *The Future of the Internet—And How to Stop It* (2008), Zittrain discusses generative tools and systems, which he finds much more productive than "tethered appliances" and closed systems. Generativity, for Zittrain, has five characteristics (71-73): *leverage* (making it easy to do more), *adaptability* (making it easy to change), *ease of mastery* (making it easy to adopt), *accessibility* (making it easy to get entry), and *transferability* (making it easy to share). These are all desiderata, but Zittrain is careful to note that these means of change can take the form of disruption as well as innovation. The question is how to foster generativity without also opening up vulnerabilities such as an increased loss of privacy, because the alternative is locked-down control that constrains users and closes off innovation.

Even and especially in education, a changing dynamic of interaction is hardly risk-free. New modes of interaction have transformative effects. Without giving an exhaustive inventory, we offer the major transformative effects already adumbrated in the foregoing. Here they appear diagrammatically, each as a movement from old to new that is also an unresolved tension, one that may pose new problems even as it poses solutions to old ones:

• Hierarchical relations --> flattening and re-formation ("*accessibility" in Zittrain's generativity schema*): The imposition of a social network imposed on a work culture defined by rank and position has a democratizing effect that is both liberating and disturbing: authority, once characterized by increasingly limited access, is now forged by responsiveness in open forums; leadership is gauged by helpfulness, not determined by a chain of command; expertise is demonstrated by active public engagement.

• Compartmentalization --> recombination and even re-compartmentalization (*Zittrain's "adaptability"*): Freed from those places (topoi: disciplines, departments, campuses) to which they were assigned, faculty are free to follow interdisciplinary or multidisciplinary interests, to regroup and reconfigure themselves, to use the serendipity of searches to realign themselves. But the Commons is not one vast "open"; these realignments involve refocusing, new alliances, perhaps even new kinds of enclosures.

• Externally imposed direction --> self-direction (*Zittrain's "ease of mastery"*): While hardly unconstrained, deciding where to invest time and effort is increasingly a matter of choice rather than assignment, and the choices multiply with each investment. Marshalling time becomes critical, as does decision-making about which options to pursue or make special investment in, since the alternative is a scattering of attention and investment.

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[9] See, for example, the recent experiment in open peer review conducted by the academic journal *Shakespeare Quarterly* (2010).

•   Ownership --> collaboration (*Zittrain's "transferability"):* The ability to say, "This is mine" is undermined by the collaboration that characterizes the new environment. Individual contributions (posts to a forum, additions or revisions to a wiki, entries on a group blog) are not hard to pinpoint, but they are contributions to a larger whole, a group effort. The individual has to give some motive force and ownership over to the group, work less malleable by individual will, more subject to group dynamics.

•   Meeting as face time--> meeting at anytime (*Zittrain's "leverage"*): The "anytime" nature of online interaction frees groups from need to arrange a time and get a room, but it also invites potentially endless incursions on members' time, fragmenting attention and diffusing energies. The ability to do more is predicated on the availability to do more, not an unalloyed good.

More open and participatory forms of academic social spaces within the CUNY system encourage peer-to-peer learning among faculty members and experimentation with social media in the classroom. As a generative platform for engaging social media, the CUNY Academic Commons is making the professoriate of the largest urban public university system in the world more visible to itself and to a wider public. How much this alters the university and the professoriate remains to be seen, but the changing dynamics are making for undeniable differences and new possibilities, not without potential downsides we will need to watch.

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