Available Technologies for Changing Student Needs:

Using Technology to Reach Graduate Students on our Campuses

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Abstract

This paper advocates for increased attention to graduate students in student affairs research and reports on the ways the School of Interdisciplinary and Graduate Studies at the University of Louisville has used technology to support graduate student learning. The technologies reported on here are familiar and accessible to most all student affairs professionals; this report is intended to highlight the presence of these technologies, which may be taken for granted in our practice, and to encourage less tech-savvy practitioners to consider the ways they can build on existing tools to help their students reach their learning outcomes. It encourages an approach to technology integration that is responsive to a particular need or use and considers the affordances and limitations of particular technologies rather than embracing new technologies on account of their "newness."

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Though student affairs scholarship often focuses on the undergraduate experience, attention is being paid more recently to the needs of graduate students on our campuses as well.[1] While indeed the task of socializing and preparing graduate students has and continues to fall largely to students' own academic departments, through close mentoring relationships with faculty and fellow students, the changes to graduate education posed by globalization, federal and institutional financial constraints, a dire job market, and increased interest in interdisciplinary research and alternative careers have prompted more graduate schools and student affairs professionals alike to think seriously about what universities can do to enhance graduate student life and development on their campuses (Helm, Campa, & Moretto, 2012).

It is broadly acknowledged that graduate student needs differ from those of undergraduates (Keeling, 2004), but understanding what those needs are and how to meet them can still be a challenge, and it is too often true that graduate students are simply not considered in student affairs programming decisions. On our campus, we are often told by other offices that graduate students are "welcome to join" in existing events and programs; this approach is inadequate, as it does not acknowledge the fact that such programming has been designed with undergraduates in mind, not graduate students and their unique needs.

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This is a serious issue for universities to address, as some 40-50% of doctoral students are currently not finishing their degrees, and their attrition costs the university, the program, the community, and most importantly the student dearly in terms of time, money, and emotional investment (Nettles & Millett, 2006). Persistence and academic achievement are crucial outcomes for doctoral study, since the achievement of other learning outcomes relies on the presence of students on our campuses. In the case of the nearly half of our nation's doctoral students who are not completing their degrees, graduate student learning outside the classroom is clearly not being adequately supported (CGS, 2010). Though the focus of this article is on PhD students in particular, I refer throughout to "graduate students" and

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[1] For evidence of the elision of graduate students in foundational student affairs literature, see the American College Personnel Association (1996) *The Student Learning Imperative: Implications for Student Affairs* and the American Council on Education (1949) *The Student Personnel Point of View.* For student affairs work attending to graduate students, see Polson (2003).

"graduate education" because the needs of students and the gaps in programming appear to be similar at both the Master's and PhD levels. As Cheryl J. Polson (2003) has described it:

> Graduate students were once seen simply as an extension of their undergraduate counterparts. It was assumed that because they were mature, well-focused, goal oriented, and college graduates, they were capable of handing the responsibilities of graduate study without needing special services. Alarming attrition rates (Baird, 1993; Bowen and Rudenstine, 1992; Golde, 1998) have challenged that assumption and stimulated a reexamination of how institutions might better serve their graduate student clientele. (p. 59)

Polson goes on to argue for the importance of "rethinking and restructuring student services" in response to the changing graduate student experience, outlining programs that provide key support for students at different stages of adjustment to academic life--from socialization and orientation, to managing multiple roles and being mentored, to career searching. The Council of Graduate Schools (2010) provides a list of similar recommendations that focus on the importance of making connections with other graduate students and faculty, supporting students with families, and integrating students into their home department.

Again, these recommendations differ importantly from most undergraduate best practices. Susan K. Gardner (2010), drawing on the mentoring research of Chris Golde, has explained that "graduate student socialization is unique in that the student is becoming socialized not only to the graduate school environment and the role of student but simultaneously to the professional role (Golde, 1998)" (p. 63). This statement highlights how graduate education is already necessarily responsive to the "whole" student and her development as an individual--synthesizing her personal and professional experiences as she is socialized into her life's profession--yet in need of more support from student affairs. In other words, graduate education supports the definition of learning as "a comprehensive, holistic, transformative activity that integrates *academic learning* and *student development,"* as forwarded by the National Association of Student Personnel Administrators and the American College Personnel Association (NASPA and ACPA, 2010, p. 2). Student affairs needs to theorize practices that respond specifically to graduate students as both students and early-career professionals if we hope to facilitate transformative education for these students.

One of the unique challenges posed to student affairs practitioners working with graduate students, though, becomes how to communicate with and bring together these students, who often do not reside on and sometimes do not even come to campus in the later stages of study, and whose experiences tend to be highly centered on their home department. At our university, we continue to think about how technology can help us to accomplish this.

In this article, we will discuss how the Program Manager and Graduate Research Assistant at University of Louisville's School of Interdisciplinary and Graduate Studies have used technology not only to communicate to but to dialogue with graduate students from across the university, and to map interconnected learning across campus resources (NASPA and ACPA, 2010).

Necessarily working with limited funding and technology support ourselves, we want to recognize the incremental ways student affairs professionals can integrate technology recommendations into their praxis.

Though our individual competencies vary, we would not consider ours to be a particularly tech-savvy campus, and we have found that enhancing technology can be a scary--even threatening--topic for those offices with limited support or resources. Operating with limited funding and technology support ourselves, we want to recognize the incremental ways student affairs professionals can integrate technology recommendations into their praxis and illustrate how we have used well-established technologies and systems resourcefully to reach our student learning outcomes. While we have ambitions towards much more innovation in the future, our case demonstrates how familiar technologies can be used in more inventive ways.

We also want to highlight in this account that effective use of new media in student affairs involves serious consideration of both the affordances and limitations of new technologies for achieving and enhancing pedagogical goals, some of which may be well-defined in advance while others may be open to redefinition as we use new media. Drawing on the TPACK model for technology integration (Mishra & Koehler, 2006), which prompts teachers to critically consider the interactions among technology, pedagogy, and content knowledge, we illustrate the benefits that this reflective approach has for purposefully integrating new media into student affairs. We use this theoretical framework in deciding what technologies we want to adopt, for considering how we want to adapt them to our program goals, and for assessing the usefulness of the technologies in a cyclical and reflective process.

Building on this framework, we offer a model for other student affairs professionals who may be just beginning to integrate new electronic media into their praxis. In discussing our own modest situation, we hope to give others an idea of how to draw on the affordances of key technologies, even with minimal resources and staff support.

And, while the focus here on graduate education should continue as an important strand within student affairs conversations, we should note that these strategies might benefit any non-traditional student population, especially part-time and distance learners.

Program Background

In 2009, the School of Interdisciplinary and Graduate Studies (SIGS) at University of Louisville started a conversation about the needs of international students. The question was posed by then-Research Assistant to the Dean, Shyam Sharma, as to how international graduate students could be better integrated into the academic culture of the U.S. As an international student himself, Sharma knew the challenges of this cultural transition well, and Dean Boehm was familiar with the issue through her work with the increasing number of non-domestic graduate students attending the university. But almost as soon as the question was asked, it was deemed insufficient. Why, they realized, aren't we supporting the socialization and professional development -- the holistic learning--of *all* graduate students?

From this seed grew the PLAN professional development program, a framework for thinking about graduate student development in terms of four core areas: Professional development, Life skills, Academic skills, and Networking. SIGS has offered a series of workshops and events in collaboration with campus partners, built significantly upon connections with the Graduate Student Council and the Delphi Center for Teaching and Learning on campus, provided funding opportunities to support graduate students, and worked in many other ways to develop programs and partnerships for graduate student development.

The PLAN, now in its fourth year, has become a model for graduate student development, as well as the core of an enhanced focus on graduate education across our university. At this time, SIGS hosts some 25-30 workshops each semester, has established a Graduate Teaching Academy with focused pedagogy workshops, has developed a program and resources for faculty and peer mentoring, and co-sponsors a Program Manager position that is dedicated to graduate student affairs.

But as the program establishes itself and expands, we also identify new challenges and new frontiers. In particular, we have recognized the need to consider multiple delivery techniques for information and instruction, better ways of mitigating the "silo-effect" of departmental culture, better ways of reaching the non-traditional, part-time and extended time-to-degree students who might need our support the most, and the overall need for more attention to the graduate student as an individual and as a whole. That the answers to such challenges are increasingly found in technology is now almost a truism, but what we would like to explore here is not some new-fangled technology that solved all of our woes, but how we purposefully and strategically drew on the affordances of existing technologies and systems at our university to grow our program and support our students' learning. The remainder of this article will be dedicated to discussing some of the technologies we have utilized to meet the unique needs of graduate students at our university.

Website as Instructional Delivery and Engagement

One of the primary uses of technology in our office is the ongoing development of our websites. While many institutions have web space dedicated to graduate students, few have a concentrated space focused on responding to graduate student professional development needs. The primary website we use is the main PLAN page, which includes information about the PLAN framework, a calendar of events, the registration form, and links to other video and web resources. As we continue to develop this website, we hope to add more video clips from workshops and to increase access to materials from those workshops. However, we have had to think hard about the role we envision for our web-based materials, and to reflect on our beliefs and assumptions about the relationship between online and face-to-face interactions. Namely, we have limited the materials we make available online in order to encourage students to come to campus to attend the workshops in person, believing that the community fostered in such synchronous interactions in a shared physical space is an important and sometimes rare opportunity for graduate students (especially across disciplines).

The possibility of providing materials from workshops online has also had to be negotiated with the faculty workshop presenters as well. As we considered increasing the materials we provide online, we were met with resistance from some faculty, who had a strong sense of intellectual ownership over their workshop materials. These faculty expressed discomfort with having their materials available to a broad online community, but were often more amenable to the option of posting materials in a password-protected online space for our students to access. We will continue to work with our Dean and faculty presenters to develop our online materials in ways that continue to support our in-person learning outcomes.

What's your PLAN?

Areas of Graduate Student Development

P

Transitioning into Academic Life / Graduate Studies: Whether you just came out of undergraduate studies, are returning to school from the workplace, or recently arrived .... [learn more]

Learning the Ropes: The university is built on a history of academic and professional conventions. As a new students, you will want to learn the explicit and implicit .... [learn more]

PLAN Events

> Graduate Student Orientation (includes GTA orientation)
> International Students Academic Transition workshop
> Critical Thinking workshop

L

Preparing / Managing Financially: Managing financially is largely a matter of changing your priority and expectations while you are in school, as well as ... [learn more]

Balancing Personal / Family Life with the Academic: Taking care of children. Dealing with illness or other difficulties in the family. Facing depression. Connecting with spouses, family, and friends. Unlike many undergraduates, graduate students.... [learn more]

Understanding Diversity: The increasing diversity in university demographics makes it necessary for graduate students and research or teaching assistants to be .... [learn more]

> Finance 4 U workshop I, II, III, IV

> Grad Insurance Info session

> Time Management

> Diversity in the Classroom workshop

A

Identifying Program Requirements: While focusing on fulfilling academic requirements working in the lab or teaching, some graduate students find themselves almost at the end of their degrees before ... [learn more]

Setting Academic Goals & Priorities: Undergraduate students more or less follow the tracks of academic requirements set by the university; graduate students create their .... [learn more]

> Reading and Responding to Grad Level Scholarship

> The Role of Argument & Evidence in Grad Level Writing

> Revising and Editing Your Writing

N

Getting to Know Faculty & Other Students in the Program: The term "mentor" can be used to refer to the faculty member under whose supervision you work. It has the connotations of "guide" and "shaper" of your .... [learn more]

Finding & Working with Advisors / Mentors: Granted, this is an age of Social Networking. But networking in the academic and professional world can be a bit different than clicking on "add friend" and letting everyone know "what you are .... [learn more]

> Peer Mentoring Workshop I & II

> Minority Graduate Student Social

With minimal options for self-exploration or interaction on this website, then, the content has been designed instead to help students think about professional development strategically, to think about their own strengths and needs, and to access appropriate opportunities and resources. Students are encouraged to think of their professional development needs in terms of their own socialization into graduate school. Our stages—Getting Started, Moving On, and Moving Beyond—echo the sequential phases of graduate student adjustment theorized by Beeler (1991), Polson (2003), and others, and help students to prioritize educational opportunities suited to their level of graduate study while keeping the long-view of the development process in sight.

But while the uses of the PLAN website remain limited, we are beginning to recognize the affordances of online spaces not only for content management, but also for instructional delivery and engagement for students unable to come to campus due to full-time work, family, or distance. In this way, we have been experimenting with increased online content and interaction on our MentorCenter webpage, which is dedicated to resources for faculty and peer mentoring.

MentorCenter

For Faculty   *For Students*   MentorConnect   Resources

Faculty Mentoring Relationships

How do I chose a faculty mentor?

How can I supplement my primary mentoring relationship?

How do I make my mentoring relationships successful?

What are the advantages of having a contract with my faculty mentor, and how do I broach the subject?

How can effective mentoring relationships benefit me?

Where can I go to get answers to my specific mentoring questions and concerns?

Who on campus can I go to for help if I am having serious mentoring problems?

Peer Mentoring Programs

Why is peer mentoring important?

Why should I be a peer mentor?

How do I start a peer mentoring program in my department?

How can I support peer mentoring initiatives in my department?

What is expected of me as a peer mentor?

What is expected of me as a peer mentee?

How do I make my peer mentoring relationships successful?

What kinds of professional and social activities can my mentee and I pursue together?

The MentorCenter page features frequently-asked questions about mentoring for both faculty and graduate students, as well as a resource page with contact information for University-based offices and web-based resources from within and outside the University. Most important, though, is MentorConnect, our online system for connecting faculty and students with award-winning mentors from across our campus. With MentorConnect, users can ask questions of our local "experts" on mentoring, or request to be connected with a mentor at our university. This system helps physically distanced or otherwise disconnected students to interact with and learn from established faculty mentors online. We hope to build more opportunities for online discussions and knowledge-building in this space as we move forward.

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Facebook

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Facebook and other social media sites are a great place to establish a self-selected community of students with shared concerns. We use our Facebook page to connect graduate students with opportunities and resources, but also to connect them to each other. Community pages such as ours are a great way for students to identify and interact with others with shared interests and experiences online.

Emails and Listservs

Of course, emails and listservs are a well-established and hardly innovative technology on campuses. At the same time, they should not be overlooked as an important mechanism for marketing to discrete interest groups, especially those whose comfort level may be more attuned to more traditional technologies. While social networking sites like Facebook are effective at getting a message out to a larger community of students, we find programming to have the most impact when it is targeted towards individuals or groups based on their own special interests. For instance, while we do use general graduate student listservs to advertise graduate student-centered events, we also collect data on students' past participation and degree level to target late-stage graduate students for our career series workshops, or advertise a teaching with technology workshop to attendees of past workshops on teaching. While forms and spreadsheets help us manage some of this data, we often find analogue ways to supplement the digital, by assembling lists of attendees from sign-in sheets to compose a new specialized email group. And, of course, we utilize existing communication channels like our University news mailer, the student news mailer, the Graduate Student Council mailer, and the lists composed by other offices and centers that serve graduate students, providing a network of inter-related communications channels.

Text Messages

As cell phones and mobile devices become increasingly central to students' lives, we have tried to develop ways to utilize them to meet our program goals. By adding an optional entry for cell phone numbers and service providers in our event registration form, we are now able to email students workshop reminders that are received as SMS messages on students' phones. This strategy is in part responsible for our 13% increase in workshop attendance by registrants, since it is responsive to students' busy lab and research schedules by providing a timely reminder in a useful, immediately accessible form. Since our workshops are part of an extra-curriculum of professional development, helping students remember to attend is crucial to meeting the learning outcomes of the workshops that they select.

Simple Forms as Data Management and Networking

The website interface provided by our university allows us to create forms that will collate student-entered data for planning and analysis. Other free resources, such as Google Forms, exist for these purposes as well. We use these forms for workshop registration primarily, but have also begun to explore their use for facilitating networking opportunities between students and faculty. For instance, the MentorConnect area within the MentorCenter connects students and faculty to established faculty mentors through the completion of a simple web form. We hope to facilitate meaningful exchanges about mentoring to support students' understanding of this flagship pedagogy of graduate education, and to support a campus-wide interest in such conversations. In the future, we hope to extend this online platform to include opportunities

for users to identify and connect with faculty and students with shared research interests for interdisciplinary projects, which are increasingly important for graduate student work and development.

Conclusion

While much of graduate education takes place within a student's home department and in a close research relationship with a mentor, supporting the professional development of graduate students campus-wide is central to educating the whole student. While many students develop strong mentoring relationships with multiple faculty, staff, and students, not all students find the relationships, training, and support they need to develop as students, citizens and professionals within their departments and programs. It is important that universities and student affairs professionals provide centralized mechanisms to support the development of all students.

The technology we have used is not ground-breaking, but our case provides as example of how the affordances of key technologies can be sued rather simply to support and enhance graduate student learning outcomes.

The PLAN framework is a program designed to meet those unique needs of graduate students, but it relies for its success on the use of technology to reach its target audience and help them establish connections with other student resources across campus. The technology we have used is not ground-breaking, but our case provides an example of how the affordances of key technologies can be used rather simply to support and enhance graduate student learning outcomes.

Though we are not technology experts, we are continually researching new ways to use technology to reach our program goals and to help our students develop. Some of the next steps that we are in the process of developing include:

- Overhauling our websites to make them more navigable and more responsive to student needs. This will involve drawing on a series of student focus groups which will provide feedback about what aspects of the website are most useful to them, and about how they interact (effectively or ineffectively) with the current site design and content.

- Increasing online resources to include virtual workshops and links to resources both on campus and on the web. While interdisciplinary, in-person workshops will continue to be our flagship pedagogy, we acknowledge the material limitations of some graduate students that foreclose the option of attending, and are continuing to consider ways to extend the valuable interdisciplinary learning that occurs on-site to students unable to attend in person.

- Providing online tools to allow students to assess their professional development competencies, track their participation in graduate student professional development opportunities, and present evidence of their professional development growth in a professional portfolio for future employers.

- Streamlining our data management processes to ensure that we have sound program data to analyze the effectiveness of our student learning outcomes.

- Exploring the affordances of Twitter and other social networking tools to increase student involvement and learning outside the classroom, and to continue to build collegial interdisciplinary communities.

- Continually learning from the strategies of other universities and student affairs professionals to consider what strategies might help students meet their learning outcomes in our localized context.

As technology becomes more of a central aspect of student affairs work, it is important to remember that "technology" is any object or system that helps us accomplish our goals and reach our student learning outcomes, and is not about embracing cutting-edge software for its own sake. We have many technologies that are already well within reach (in terms of budget as well as accessibility) of any program. Programs do not need limitless budgets or technology experts to draw on the affordances of new media to meet their goals. What they need is a thoughtful consideration of their own goals and the existing technologies that can help them meet those goals more efficiently and effectively for their students.

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