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Out of the Classroom & Into the Boardroom

In this paper we argue that the future of learning needs to move out of the box—whether it's the little red school house or the course management system. Digital technologies, the Internet, and an unpredictable, global knowledge-based economy require a new way of thinking about teaching and learning that put not just the learner, but learning at the center.

Times change and technological creations have accelerated the pace of that change faster than our institutions have successfully accommodated. Our students and their peers create, adopt, and adapt technology at a blistering speed. Think of the three friends who wanted to share videos, frustrated at sending them as e-mail attachments, so instead created YouTube. Who knew? Certainly not those in the entertainment industry who initially filed copyright complaints, and eventually adopted YouTube as a means of making money by allowing music videos to be posted.

Technology invented is not always used in the manner that was imagined, which points to the acute challenge for those in education responsible for preparing tomorrow's leaders. Facebook, a social networking tool, is well used for its original purpose by students and young alumni but is also used by people seeking more information about

jobseekers who apply for employment opportunities. What is appropriate information for dating and partying is potentially disqualifying in the job search process.

There is a growing digital divide between faculty and staff who get a year older every year and students who are always 18 to 22. Technology adopted by students and their peers is often resisted by faculty and staff who see texting, instant messaging, and wireless in the classroom as disruptive to the natural flow of traditional teaching. "Whatever happened to I talk you listen?" one faculty member said to one of the authors. Collaboration, common in faculty life but discouraged by faculty in their teaching practice, is natural among students. Yet many faculty call student collaboration by another name: *cheating*. The careers that our students go on to achieve require teamwork and collaboration skills yet we do not create the

opportunity to collaborate pervasively across the curriculum throughout the years of education. From this flyby, this divide, a disengagement crisis has emerged. School, students come to understand, is not the “real world.”

In the “unreal” world of higher education, we have established vehicles for the creation and management of *school work* that exist in the classroom but will not survive beyond the term, beyond graduation. When we lock students’ intellectual property into a four year box, we fail on many fronts. We miss the opportunity to maintain a long term relationship with the student by creating something that can be searched by prospective graduate schools and employers. We miss the opportunity to create an experience that is authentic, that is real. We create, rather, a disposable education, a “*Drive Thru U.*”

By merging online course management with Portfolio in support of a lifelong learning model, we retain the ability to connect with our alumni and offer a career-long service. In maintaining the link, we acknowledge and encourage the process of lifelong intellectual development.

We need to refocus technology in education on the student rather than view it solely through the lenses of the faculty and staff. We need to provide our students with enduring collaboration and intellectual property management tools that will provide a personal foundation for the lifelong learning process.

What Is Already Happening

Think again about Facebook, a well known tool for organizing college drinking events. But Facebook is a collaborative space. The Ultimate Facebook Group was a collaboration to create a super-sized group. Another group spun off that one to look at the mathematics of the growth of the group. To see Facebook used for political organizing, one only needs to Google “Facebook organize protest” for a range of news stories worldwide. Doing the same search, substituting “MySpace”, will turn up similar political organizing.

George Hotz’ blog chronicling his iPhone hack demonstrates students can collaborate world-wide and create portfolios that make learning visible. When the news of Hotz’ exploit broke in late August, attention of the media was focused on the accomplishment—the 17-year-old that had foiled two multinational corporations. But Hotz pointed to something more important during his various public appearances—he made a point of giving credit to his

collaborators and pointed to his blog on Blogger, where everything was documented. The press missed the story within the story—“teenager forms ad hoc international collaboration to solve difficult technical problem and releases the IP to the public.”

What do these stories have to do with

higher education IT? Nothing. Higher education is largely ignoring the collaborative and self-initiated learning potential of today’s students.

Even while pouring more resources into the campus Learning Management System, IT planners need to be preparing for a move in another direction—the support of student-controlled collaborative tools. For example, at Washington State University, an “Engineers without Borders” student team used a SharePoint MySite to organize their team’s collaboration. No one told them to; instead, the university was doing a quiet launch of the technology and the students found the tool, figured it out, and began applying it.

What if the campus were to help students create and manage their scholarly profiles and intellectual collaborations? Such a space might support class projects, or might support other endeavors that spanned classes and even extracurricular ones. Recruiters could troll the space looking for evidence of employees who could form teams, frame problems, and complete projects. Such an “IP Facebook” could be a centerpiece for the campus image and strengthen its connection to alumni.

Putting Students at the Center of their Educational Universe

To move beyond the “walled gardens” that frame the learning experience in higher education, the years of variously sequenced and isolated learning experiences, each student should have their own learning space to aggregate, synthesize, and reflect upon their learning inside and outside of the classroom. Maybe LMS goes to school and products like SharePoint stay for life?

Suddenly what happens is the need to distribute

authority to the student and allow students to control who accesses their “walled garden.” She/he needs to control how she extends access to his/her space as well as how she/he extends her own reach.

In this model a course exists outside of the student’s own learning space (it proceeds, for instance, with or without the participation of any individual student). A course is one of many hubs of designed and facilitated learning objects and activities, and it links to an established social network of students and professionals exploring the same content and activities.

In the model facilitated by SharePoint as an ePortfolio, the student is the central node in the learning network. A course, learning object, learning activity is available and students are invited to engage, but they are the owners of their own space and the work they will do, share, and showcase in that space.

As we envision it, a faculty member will still be able to ask students to submit work into the classroom hub, as they see fit. But the free range ePortfolio approach challenges us to think of the student/teacher exchange in a new way. Students should be encouraged to develop their work recursively, in stages. It recognizes the point the learning expert John Bransford makes when he argues that intelligence is “what we do when we don’t know the answer.” Students should be encouraged to share their work and their thinking by affording their peers and mentors access to their working spaces that might be populated with guidelines recommended by their faculty. They should be encouraged to make their learning visible. When students are ready, they will invite their faculty mentors into their workspace. Further, we anticipate that faculty will be increasingly encouraged to keep their students’ best work as artifacts in their own teaching portfolios and so will be required to *ask students’ permission* to keep and display their students’ work as evidence of their own teaching.

In this model, a course becomes a hub of activities facilitated by the expert—the faculty member. But it remains outside of the traditional course space, in students’ own ePortfolios, which transcend the limited space and time that any single course can be expected to provide.

The concept of students being at the center of their educational universe or node turns the prevalent attitudes such as “I have to do this paper for old man Brown” to one that has many parallels to “I am working on my blog.” The traditional model from “I do not own my work”

evaporates to one where “I am responsible for building my resume or portfolio from my first day in college.” Instructors and professors become true mentors throughout the process of this educational endeavor. In many cases, it shifts the instructor from the role of “assignment cop” to consultant.

In this model, assignments are no longer submissions to the “altar” of the drop box to be locked away in oblivion. Every work starts with the potential to be a *Thought Paper* that might be read by millions, just as a blog would be read by millions.

This model of putting students in the center of their educational universe has several psychological and procedural ramifications. First of all, it can be daunting and worrying for any freshman that assignments would eventually become part of his or her educational portfolio (their “educational blog”) that would be seen and critiqued by many hundreds or thousands of people (that might include potential future employers). This is where technology becomes subservient to the goal of helping students build their learning portfolios.

Students in a particular field of study (such as first year marketing) might build the folios to be seen by group mates, classmates, and by their instructors. As time passes, they expand their sharing to include upper classmates, college mates, college-to-college audiences, and finally the general public. Each step of the way, their audience gets wider. Students start from a small circle of trust, get feedback, incorporate that feedback into their work, and venture into the next larger audience circle. By the time their work reaches the general audience, their portfolios have been vetted and debated by multiple audiences starting from the students’ closest circles of peers and mentors.

In conjunction with Active Directory, Active Directory Federation Services, and Windows Rights Managements Services, Microsoft Office SharePoint System 2007 (MOSS 2007) is one platform that has the foundational underpinning for supporting students in this type of educational universe. Washington State University has since deployed an Electronic Portfolio System whose primary audience was the students, faculty, staff and broader community of Washington State University.

Final Thoughts

The LMS provided a low level entry on the web. Envisioning learning as it happens beyond the classroom walls or the LMS virtual box creates a few technological challenges. Preparing graduates for the 21st century, it is useful to recognize that intellectual property is the central asset in a global and knowledge economy. The model we have advocated in this white paper has the potential of engaging students not only beyond the classroom walls, but beyond institutional and national boundaries as well. At Washington State University, SharePoint is already being used by first

year World Civilization students as a shared project space for sharing ideas and information with peers in Africa. Student leaders are anxious for opportunities to build and extend their own social capital with leaders at and beyond WSU, and they are using their ePortfolio blogs to do so. Finally, the evidence is overwhelming that students are using the Internet and Web applications to build new collaborations, whether they have been authorized by our institutions or not. The question for the IT planner is: what policies, procedures, and practices would we need to put in place to begin to implement this emerging vision?

The Technology Implications

The approach that provides each student with his or her own ePortfolio site for the duration of their matriculation and beyond their graduation suggests that any candidate technology requires some capabilities. They are the following:

- Student as System Administrator: The technology has to give students (who are at the center of their educational universe) the ability to expose their work to different audience circles without taxing existing IT staff. In other words, students should have "Systems Administrator" privileges of their own portfolio sites without having to call the IT helpdesk to set them up.
 - Students should be able to administer the technology with minimal training.
 - IT staff should be able to provision "Administrator" privileges automatically to bona fide students of the campus.
 - Prepackaged Audience Groups: Students should be able to provide access to audience groups (e.g. project work group, section audience, college audience, inter-collegial audience, corporate partner audience and the general public).

- The IT staff has the ability to automatically create these audience groups, taking into account that in Higher Education, the sectional and collegial audiences change every quarter and semester.
- Federated Audience Groups: Students should have the ability to release their electronic portfolios to both corporate partners and to other colleges that might have various levels of interest on work being "published" by students.
- Digital Rights Management: As students develop their work, they increasingly will demand that their portfolios have the appropriate protections. Only approved collaborators might edit their documents. The college, too, might demand that project group work can only be edited by project group participants. Students may need a "college seal" from their professors and instructors stating that the portfolios are solely the work of the students and the professors have previously reviewed the work.

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