

The Campus Portal

5 Best Practices

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By Matt Villano

So much has changed since those early campus portal efforts! Heed these tips in five best practice areas, and get it right.



Not that many years back, portals were nothing more than splash pages from which users could click on links to navigate a school's web-based resources. Today, however, they are much more: single sign-on gateways that easily enable users to do everything from pay tuition and view transcripts, to purchase parking permits and sell used books.

Still, engineering portals isn't easy. Many schools embrace the challenge on their own, employing programmers who can write custom code in HTML, Java, XML, and other languages. Other schools pay for portal prowess, turning to vendors such as Jenzabar, Datatel, and open-source guru Unicon for their expertise. Yet, no matter how your school approaches (or plans to approach) portals, following these five steps can make portal projects more powerful.

1) Survey, Survey, Survey

Before you get going on your portal, it's a great idea to figure out what your users want. One way to do this is to guess. An infinitely better way is to ask them, via web-based surveys and special focus groups. This was precisely the strategy at **Southern Adventist University (TN)**, where, earlier this year, representatives from the school's information processing department interviewed hundreds of student and faculty users before even thinking about planning myAccess, the

At **Southern Adventist University (TN)**, the portal team surveyed users and discovered that faculty wanted to use the portal to **access class rosters complete with student headshots for quick identification in class**. Students wanted a portal destination where they could receive alerts about pending registration issues, overdue library books, and other logistical issues. Everyone wanted better navigation, a need the team hadn't even anticipated.

school's most recent portal implementation.

The process began in 2006, when, through a web-based survey linked to SAU's existing portal, technologists discovered that ease of navigation was more important to users than content itself. Inspired by this inside scoop, technologists created a navigation bar that appeared across the top of every page of the portal. They also created "navigation by topic" off the main menu, and provided additional navigation by constituency: separate menu bars for students, faculty, and staff members alike.

Ironically, "Navigation was on our list, but it wasn't even in the top five," says Herdy Moniyung, associate director of information processing. "Suddenly, we asked ourselves, 'What *else* are these people going to want from this technology, that we aren't thinking about?'"

To make sure they would stay on top of user need, when the new navigation went live in 2007, the IT department placed a big "Feedback" button on the portal, in an attempt to make it easier for users to provide unsolicited comments. Simultaneously, the school's Marketing department sponsored additional surveys, and the University Relations team got involved to pull students, faculty, and staff members into focus groups for face-to-face questioning. By the time the last focus group concluded in January 2008, the school had polled more than 1,000 users to find out what other navigational improvements users were looking for. The process revealed even more surprises.



TO MAKE SURE they would stay on top of user need, the Southern Adventist IT department placed a "Feedback" button on the university portal, to make it easier for users to provide comments.

Faculty members, for instance, said they wanted to use the portal to access class rosters complete with student headshots, so they could see which students were in class and which were not. Moniyung and his team responded to deliver an application programming interface (API) that provided this mix of data. Students, on the other hand, wanted a place on the portal where they could receive alerts about pending registration issues, overdue library books, and other logistical issues that pertained to them. Again, Moniyung and his team came through and delivered an API they call the Message Spot.

2) Make the Data Count

SAU technologists took to heart all of the feedback they received, and added the needed Web 2.0 technologies to myAccess, which went live this spring. From a technological standpoint, the portal now connects SharePoint technology from Microsoft and the ActiveCampus solution from Datatel with the school's student information system (SIS) from Blackboard. From an organizational perspective, however, Moniyung says the portal incorporates far more.

"With all of these surveys and the feedback we received, we were able to get a sense of which additional technologies our users wanted, so we could give them exactly what they want," he notes, referring to technologies such as blogging, collaboration suites and, eventually, ePortfolios.

State of the (Portal) Union

From Unicon Senior Software Developer Andrew Petro, a look at portal trends from the market perspective.

THESE DAYS, THE HIGHER EDUCATION CUSTOMERS I see implementing portals are less interested in bells and whistles and more focused on delivering more effective user experiences.

Campus information technology landscapes are complex. Portals make it simpler to navigate this complexity: to sift it to relevance and be aware of it without being overwhelmed by available information. The portal efforts at **The Johns Hopkins University** (MD) for instance, are not about the gee-whiz factor but more about the sensible realization of an opportunity to **use the portal to make mobile devices a more effective tool** for coping with the complexity of the campus information technology landscape.

Schools are interested in **adding social networking** to their portals, as well. Both **Duke University** (NC) and the **University of California-Irvine** have developed Facebook integration portlets for use in portals (including uPortal "open" efforts). Schools also are **moving to integrate blogging**. And they are using portal capabilities to **incorporate user attribute and group information**, and utilize that information to **personalize the content delivery and user experience**.

Most of all, schools are using portals to make it easier for staff to access information in their ERP applications, to **present announcements and alerts** to portal users, **leverage user-group information already stored** in campus LDAP directories, and more.

In short, schools are now using portals to make the campus IT landscape less frustrating and more navigable, usable, and transparent. This works because the portal platform makes it feasible to ease access to applications through single sign-on, aggregation, and support for custom portlets for specific integrations. Announcement, notification, and alert features also are valuable because they play to a portal's strengths and leverage the power of a well-trafficked web platform.

Finally, **portals improve communication**. E-mail has become overwhelming; an out-of-context, unreliable way of communicating with university constituents. The portal platform can be one for more focused, connected, conditional, actionable intelligence. This leads to better compliance and better reliability of messaging and alerts around important university business processes.

At **Grand View College** (IA), another school that utilizes a blend of SharePoint and ActiveCampus, a similar battery of focus groups and questionnaires led to two up-to-the-minute features on a new campus portal dubbed myGVC.

The first of these features debuted earlier this year and is similar to the Message Spot feature at SAU-- a simple alert function that notifies student users upon login if, for instance, they have holds on their registration. These holds can be for any reason at all: an unsigned financial aid document, or perhaps an unpaid parking ticket. On each user's homepage, a special link leads to step-by-step instructions to eliminate the hold. The goal: to save users time.

Bud's List, a second new feature rolled out in beta tests this spring (and honoring the name of the school mascot), promises to make a much bigger splash. The feature is a homegrown, Craigslist-type message board where users can buy or sell books, tickets, office supplies, and other items. Users can set alerts for particular items going up for sale, and IT staff recently wrote an API that allows students to see the seven most recently added items to the list, every time they log in.

"We are anticipating a *huge* response to this," says Tim Wheeldon, director of information technology, acknowledging the school's commitment to moving the portal into a Web 2.0 world: "Anything to make the portal something students will embrace."

3) Tackle Governance

Once IT departments incorporate into the portal the technologies users want most, it's important to take the time to decide who's going to own it: In other words, who's going to oversee the technology, overall. According to Eric Dalquist, portal consultant at the **University of Wisconsin-Madison**, this is a step that many schools overlook-- an oversight that can cause big problems down the road.

At issue here is the notion of determining which department (or departments) on campus should be responsible for the portal. Even with implementations engineered by a third-party vendor, *someone* on campus must be held accountable. Should the effort originate in the IT group? Should it fall under the auspices of library services? Should it be administered by another department? These are all good questions to ask, says Dalquist.

Technically speaking, portals can reside in the domain of just about any department. But as the consultant notes, if a school does not decide which department is to take ownership, confusion can lead to inefficient management down the road.

"With the right kind of commitment from the people in charge, portals can work in any environment on campus," he says. "With the wrong kind of planning and leadership, one problem can lead to another, and the entire portal can end up costing two or three times what it should."

For governance to work efficiently, Dalquist recommends that schools designate one person or a team of people to manage the portal. In this vein, and in case something goes wrong, it's a good idea for the individual or team to be familiar with coding and programming. Dalquist notes that in his experience, however, the best implementations have been driven and supported by a school's academic technology group, working in cooperation with faculty and student groups on campus. Not surprisingly, myUWMadison, the school's implementation of the open source portal platform uPortal (see "Open Source Fanatics Embrace uPortal 3"), operates under this arrangement.

Bud's List, a new portal feature at Grand View College, is a homegrown, Craigslist-type **message board where users can buy or sell books, tickets, office supplies, and other items**. Users can set alerts for particular items going up for sale, and students can even see the seven most recently added items to the list every time they log in. Administrators are anticipating "a huge response."

4) Manage Expectations

The individual or entity ultimately charged with overseeing the portal must make sure users are not disappointed with the end result. One way to do this is to ensure that the responsible department has enough people to write and monitor applications that increasingly facilitate integration with other campus systems. Another option-- particularly for those schools that have embraced open source portals-- is to outsource these services to a third-party vendor.

Today, a handful of portal vendors provide a smorgasbord of management flavors-- everything from writing workarounds to answering everyday e-mails about how features work. One of the largest of these vendors is Unicon, where CEO John Blakely says his company provides higher education institutions with appropriate expertise and support staff to manage user expectations over time. Through this process, Blakely says most of his customers request the latest and greatest Web 2.0 technologies: social networking capabilities, blogs, ePortfolios, and more.

"What makes a particular platform a portal is that it integrates with high-tech systems and some of these social networking capabilities," says Blakely. "Your ability to successfully integrate will be greater if you can dig down to whatever level of detail is necessary to succeed, and sometimes you just need help to do that."

A third option for managing expectations is to set up the portal so that users can manage the bulk of the content themselves. This is the strategy at the **State University of New York at New Paltz**, where technologists use a portal platform that operates on the Luminus system from SunGard SCT, and recently unveiled their new myFirstYear mini-portal. The miniportal is designed to provide first-year students with information about everything from coursework prerequisites to student activities on campus. As such, the site content changes regularly.

In the past, updating this kind of content was laborious: a handful of people in the school's IT department were responsible for the daunting task of keying in all updates. Under the new approach, however, through the school's OmniUpdate access-control API, technologists have empowered a small group of super-users to modify existing content themselves. Most of these super-users represent campus departments that include the Disability Resource Center and the Student Activities Office. Rachel Reuben, director of web communication and strategic projects, says the new approach enables these people to update calendar items and other items to communicate with students on a regular basis.

Whether you're fixing a name or uploading a paragraph summary, offloading content management to users eases the burden on those of us making sure the portal is working the way it is supposed to," she says, noting that one of her staff members still keeps tabs on all updates to make sure none of the users are publishing objectionable material. "These kinds of luxuries enable us to better manage user expectations and keep the portal relevant."

5) Innovate!

Perhaps the most important step in the strategy for building better portals is to constantly innovate. This step-- this commitment to excellence-- extends and amplifies the portal's relevance. It also demonstrates to users that the school *cares* about how the portal works for them.

At Southern Adventist, for instance, that Feedback button isn't going anywhere; it provides users with ongoing opportunities to tell technologists how they feel about the portal. Moniyung

says that recent suggestions have included everything from requests for more blogging capabilities to a change in background colors. Technologists keep and publish what they call a "change log," so users can read about specific changes other users have requested, then map those requests to actual changes that have occurred. "It's all about letting people see that we're taking their feedback seriously," Moniyung explains.

At the University of Wisconsin-Madison, the open-source-platform myUWMadison portal implementation has been **driven and supported by the school's academic technology group**, working in cooperation with faculty and student groups on campus.

Other schools are innovating in different ways. At Grand View, technologists recently turned to SharePoint to add collaboration and team sites to the myGVC portal, enabling users in individual departments to use the platform to share information about time off, upcoming events, and documentation about programs of particular importance to the community as a whole. IT Director Wheeldon says these APIs provide services similar to those available through Google Apps Education Edition-- webbased collaboration technologies that epitomize Web 2.0. "Our users wanted new ways to collaborate, and this is what we came up with," he says. The technology is expected to be fully operational this month.

At the University of Wisconsin-Madison, Dalquist and colleague Jim Helwig are working with myUWMadison to increase both personalization and the ability for users to customize their own portal experiences. One byproduct of this effort will be a comprehensive course catalog for students. The catalog will contain detailed information about the courses, including information about instructors and course sections. While the system is still in development, Helwig, the portal project manager, says that eventually, students can use it to learn more about classes they might want to take. For example, he says, students who are interested in taking Biology 101 can log on to this catalog through the portal, look at all the different sections, and see how each instructor has been reviewed in the past.

"We anticipate students will want to create lists of courses that they're interested in," he says. "Down the road, when it comes time to register, we hope to have some sort of alert system that will tell them if there's space for them, and if they're eligible to enroll."

At other schools, innovation simply means expanding the audience. Take **Hodges University** (FL), where technologists recently rolled out a new portal platform for 2,000 users spread across two different campuses. The rollout went so well that Wendy Gehring, the school's director of information technology, says this year the school plans to expand portal credentials to more than 3,000 alumni-- essentially increasing the user base by 150 percent.

"Our original implementation goal was to meet our students' needs," she says. "Now that we've done that, we're expanding the portal and moving forward."

Matt Villano is senior contributing editor of this publication.

Open Source Fanatics Embrace uPortal 3

WHEN JA-SIG, the nonprofit organization devoted to the promotion of Java architectures, released uPortal 3.0 earlier this year, open source fanatics at colleges and universities across the country ballyhooed what they called a "revolutionary step" in the lifespan of open source portals.

Generally speaking, the plaudits were well-deserved. Eric Dalquist, the lead developer and release engineer for uPortal 3.0, says uPortal 3.0 builds upon the flexibility and reliability of uPortal 2.x by using improved JavaScript libraries, robust portlet support, a modern build environment, use of leading Java frameworks such as Spring, and additional enhancements.

Dalquist notes that with all of these features, the newest iteration brings the technology within easier reach of more potential uPortal adopters. "Our previous technology forced open source portal developers to adhere largely to the same basic look and feel," says Dalquist. "With this, portal deployers will have a much easier time making their portals fit whatever individual and customized look and feel they desire."

Specifically, the new platform offers:

- *A new theme and skin* to provide a fresh and attractive look out of the box. With these new features, it's now far easier for implementers to customize the look of uPortal. Skinning can be done entirely with CSS.
- *Default content that has been changed* to better demonstrate the portal's features.
- *A comprehensive set of import/export scripts* that makes it easier to upgrade to the latest version of uPortal.
- *Portlet support using the Pluto 1.1 container*, which will allow uPortal portals to more readily support portlet standard JSR 286, once it has been finalized.
- *A standard Maven-based project structure and build process*, which provide robust build, reporting, and packaging tools.
- *Core components of the framework* on the Spring Java Development Framework, making it simpler for developers to work with uPortal. The migration to Spring has also served to significantly reduce the amount of underlying code.
- *CAS as the default authentication system*.
- *A unified caching framework* that provides multiple cache implementation options, including clusterable and distributable caches.
- *Remote management using JMX*, which makes it easier to monitor performance and troubleshoot problems.

For a look at all of the features of uPortal 3.0, or to learn more about the new offering itself, visit here [www.uportal.org/]