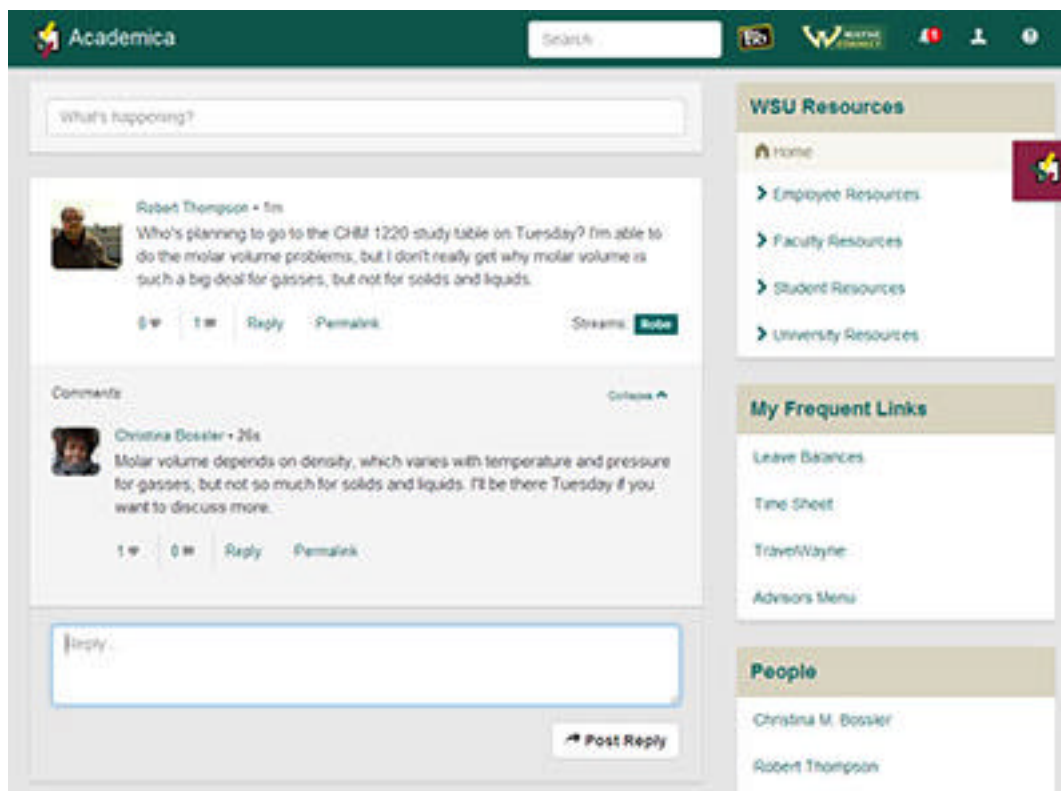


Rethinking the Campus Web Portal

Wayne State University is rolling out a homegrown portal focused on real-time, two-way communication and better anticipating users' needs.

By David Rath • 08/14/14



Wayne State's Academica portal

When the IT leaders at Wayne State University in Detroit talk about the limitations of their legacy campus portal, they reach for analogies to describe their dissatisfaction. "Our old campus portal looked like the classified section of your daily newspaper," said Rob Thompson, director of academic and core applications. "There was very little design cohesiveness."

Or as Daren Hubbard, senior director of enterprise applications, put it: Universities have designed portals as "parcels of real estate like it was some kind of a shopping mall. If you got a storefront, meaning a link or a tab, then you got some eyeballs coming your way. That was your goal, instead of adding value for the users coming to the site."

A Portal for Collaboration

Two years ago, Wayne State executives started thinking about how their Web portal might serve the campus community in new ways. Students had been complaining that the existing portal, called Pipeline, did not support mobile devices well, and that university messaging was not well targeted — resulting in what they perceived as internal "spam" being sent out. "We didn't have any way to stop administrators from over-communicating in a one-way fashion," explained Thompson.

Yet as they surveyed the landscape of commercial offerings, Wayne State's team was underwhelmed. "They were no better than what we already had," recalled Hubbard. "For the basic design they had a screen with three to five columns of stagnant information. We didn't see anything revolutionary or that used newer Web 2.0 technologies."

Thompson agreed, noting, "They were rehashes of old-school Web design, and there really wasn't anything innovative, especially in the higher ed space."

So Wayne State decided to build its own portal solution, focused particularly on fostering real-time, two-way communication and better anticipating users' needs. Called Academica, the new portal offers single sign-on as an authenticated front door to applications, and is designed from the ground up to work on any mobile device. But first and foremost it is a social networking platform that enhances and enables collaboration.

"This is what we thought had the most potential for improvement," Thompson said, explaining that traditionally students go to a portal to look at announcements and campus events, but have no way to interact with that information. "How crazy is that? We expect this to be the meeting spot for our campus and we have only one-way communications," he said. "This is what the marketplace hasn't thought about yet: the portal as a vehicle for true two-way, real-time communication, which is what an essential function of a portal should be."

How It Works

At the core of the social networking piece is what Wayne State calls "message streams," which operate like a Facebook wall or a Twitter hashtag. Streams can be created by anybody and can be subscribed to by anybody, although there are permission levels. For instance, a user could create a stream for chess and invite people to subscribe. There is a stream discovery tool that allows users to search all the public streams, or ask to join private streams.

"One of the major things we are doing to bring cohorts of people together at the university is that you are automatically subscribed to streams fed from our Banner ERP system," Thompson said. "Students and instructors are enrolled in a stream for each of their courses. We think that is a main innovation of what we are doing. We know via studies that the more students are engaged with peers, faculty and the institution, the better they do."

"We are extending that to our freshmen orientation sessions as well," added Hubbard. "Folks who come into orientation have a stream and they carry that into the first semester."

That same concept extends beyond courses. If you are an administrator, you are automatically connected via streams to the rest of your college or division. Employees can also create streams in ad-hoc ways when they want to create smaller groups.

The streams concept has many features you would expect from any social networking platform, Thompson said. "We did not want to rewrite the rules on user interface here. Facebook, Twitter

and Google got it right. We wanted to use the same sort of mechanisms and make it as intuitive as possible to use."

Another new approach involves links. With the old portal, students reported having difficulty finding the links they needed among the dozens on the site. "Most people do only between five and 10 things on the portal," Thompson pointed out. "We are now keeping track of what you do on the portal and what people like you do, and are automatically populating that in a sidebar," he said. "So the first time you log in, the portal knows things that will likely interest you based on what other users like you are typically doing."

The Academica development team is also working on a way to deal with administrative announcements that people view as spam: a concept of virtual currency called "Academicoin." Administrators are charged a number of Academicoin to post announcements; the more people a message is sent to, the more it costs. If an announcement gets a good response from recipients, the sender gets more currency, but if not, the sender runs out of Academicoin to make announcements with. "We are creating a virtual economy that incentivizes people to target their messages well," Thompson said, "and it is fun."

The same level of innovation extends to the portal's infrastructure. Wayne State made a strategic decision to leverage Amazon Web Services' elastic cloud, which allows the system to expand as necessary to accommodate high traffic. Portals often see the most traffic in a one-hour period after registration opens in the fall, pointed out Thompson — the usage might be 10 times more than any other time of year. "By using the cloud, we can expand very cheaply to any size we want to," he said.

Expanding Beyond the Institution

Wayne State is in the middle of its Academica rollout, with approximately 4,000 users having switched from Pipeline. The plan is to have the whole campus of close to 30,000 students switch over for the fall 2014 semester.

The institution also hopes other schools will be interested in Academica. "We know other universities need an option for a new portal. We wrote it in a way that is portable," Thompson said. "We are lucky to have a bunch of very professional people on the development team with experience creating commercial solutions," he added. "We took the approach that this is not meant for one customer. If this can benefit Wayne State, I am sure others will be interested."

Thompson and Hubbard said the university has not yet developed a plan for how to share the system with other institutions. "As a university, we are not out to become a software development company, but we do want to position ourselves where we could help somebody else implement this," Thompson said. "We are still talking about what that might look like."

That expansion may include federating with other instances of Academica at other institutions. If other campuses were using Academica, for example, they could unify their message streams by topic. Thompson imagines a stream about atomic physics, populated by community colleges, universities and K-12 schools: With 10,000 people subscribed, a high school senior could post a question and receive an answer from a Harvard (MA) student. "This could not only enhance collaboration on one campus," he said, "but among institutions."

About the Author

David Raths is a Philadelphia-based freelance writer focused on information technology. He writes regularly for several IT publications, including Healthcare Informatics and Government Technology