

University of Michigan unifies 19 schools under a culture of collaboration with Google Apps for Education



About University of Michigan

- www.umich.edu/
- Ann Arbor, Michigan
- 43,525 students

Goals

- Improve collaboration by introducing an all-in-one solution for mail, calendaring, and documents

Approach

- Adopted Google Apps for Education campus-wide

Results

- Facilitated a culture of sharing among faculty, students, and staff
- Encouraged collaborative, team-oriented learning
- Empowered faculty, students, and staff to work remotely more easily and effectively

"Students have already voted with their feet for Gmail."

— Sean DeMonner, executive director of teaching, learning, and knowledge at the University of Michigan

About the University of Michigan

Located in Ann Arbor and founded in 1817, the University of Michigan (known simply as "Michigan") is the top public research institution in the country according to the 2014/15 QS World University Rankings®. Michigan offers 260 degree programs at 19 schools and colleges; educates more than 43,000 undergraduate, graduate, and professional students; and employs 6,800 faculty members. With an emphasis on student diversity, Michigan is known for providing "an uncommon education for the common man," a reputation that James Angell, Michigan's longest-serving president, established in the 1880s.

Challenge

Michigan's schools and colleges operated as autonomous academic units with decentralized infrastructure. Multiple disparate technology systems posed a problem for the IT team, which faced complicated management challenges across the different academic units.

In 2010, Michigan conducted an IT study and learned that the schools were using a variety of mail and calendaring systems that provided similar services. These systems were not just redundant — many of them were incompatible with one another.

"At a decentralized place like Michigan, it's not uncommon for academic units, particularly those with more resources, to pursue new technologies first," says Sean DeMonner, executive director of teaching, learning and knowledge at Michigan. "Over the years, that tendency had produced a heterogeneous infrastructure."

The IT team at Michigan saw an opportunity to streamline its technology services and introduce a mail, calendar, and documents solution that allowed for improved collaboration.

Solution

When Michigan initially looked into switching solutions, the IT team learned that 40 to 50 percent of email sent to the Michigan domain was forwarded to Gmail. After soliciting input from a large cross-section of faculty, students, and staff, Michigan decided in the fall of 2011 to adopt Google Apps for Education across all schools (except the medical campus) for mail, calendar, and documents.

Despite having hundreds of thousands of accounts, the IT team was pleased with the speed and accuracy of the data migration process. The IT team first adopted Apps, and within a year, the entire campus was up and running. For the many students and faculty members who used Google Calendar and Google Docs in their personal lives, adapting was relatively simple.

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— Christian Rourk, student, University of Michigan

Students and professors like that Apps helps them work more efficiently.

"When Google Apps for Education was introduced, there was a huge sigh of relief," says Jeff Ringenberg, a faculty member in the Electrical Engineering and Computer Science department. "Previously, it was very difficult for students and professors to keep their information synchronized. I have yet to come across a toolset that is as feature-rich as Google Apps."

Benefits

Collaboration

Students use Google Docs to collaborate on group projects, Hangouts to share ideas face-to-face from different locations, and Calendar to schedule study groups. Web-based learning makes academic life more collaborative and team-oriented. Christian Rourk, a junior studying physics, says he uploads assignments to Drive not only so he can work on them from any device, but also so he can share his work with teachers and other students.

Many faculty, researchers, and staff have integrated Google Apps into their teaching and workflows. The IT department uses Google Docs for real-time editing, collaboration, and note taking during staff meetings and brainstorm sessions. Ringenberg, one of three faculty members who teaches the nearly 700 students in Engineering 101 classes, uses Docs to collaborate with other teachers about the syllabus, exams, and other course-wide documents. "The real-time document collaboration and commenting tool eliminate the need to send thousands of versions back and forth," he says. "With Google Docs, we've streamlined the process of writing an exam, which frees me up to focus on communicating with students as opposed to generating content."

Professors use Google Sheets to keep track of student requests for a re-grade on a project or alternate exam times, as well as to calculate grades. In the past, one person would be responsible for managing the entry of more than 2,000 grading data points for Engineering 101. With shared access to a spreadsheet, nine graduate students now handle the grading for the class and are held accountable for their work. "If someone accidentally erases an entire column of grades, we can see who made that mistakes and revise it back," Ringenberg says.

Learning as a process

In the past, students turned in assignments and received a grade.

"Pedagogically, we know that the learning actually happens in the process, not in the final artifact and evaluation," says Laura Patterson, CIO at Michigan. With GAFE, professors are able to provide feedback faster and students are able to learn from the process, not just the outcome.

"Google streamlines feedback and makes it easier to collaborate when editing a document," Rourk says. "If another student is helping me revise a paper in Google Docs, I can see the edits he's making as he goes. It results in a more productive learning system."

Technology freedom

The IT team no longer plays the role of gatekeeper for professors and students; rather, they help people choose what services align with their needs. "It's about giving people materials, support, and training that encourages them toward a preferred behavior, rather than mandating it," DeMonner says.

Professors choose the permission levels for Google Drive folders. For example, Ringenberg shares the folder that has project specs, slides, and course information only with the students in his engineering 101 class.

Flexibility

Hangouts, Docs, and Drive enable DeMonner and his team to adopt more flexible remote work options to increase employee retention and work satisfaction. More than half of DeMonner's team works from home at least one day a week. "With video conferencing, chat, and more, the physical place is becoming less central to work," DeMonner said. "It's much more about the work itself."

Professors also use Hangouts to communicate through chat and video calls. When Ringenberg isn't at his desk, he can respond to questions in real time. Some professors offer virtual office hours via Hangouts to accommodate students in different locations.

Next Steps

The IT team is looking to create a customer platform that combines different online tools and integrates other software-based solutions using Google APIs. The most advanced research institutions emphasize the future of research, science, and the arts. At Michigan, technology is helping professors and researchers innovate and collaborate across the same system.

About the Google Apps Education

Google Apps Education Edition is a free suite of hosted communication and collaboration applications designed for schools and universities. Google Apps includes Gmail (webmail services), Google Calendar (shared calendaring), Google Docs (online document, spreadsheet, presentation, and form creation and sharing), Google Video (secure and private video sharing — 10GB free) and Google Sites (team website creation with videos, images, gadgets and documents integration), as well as administrative tools, customer support, and access to APIs to integrate Google Apps with existing IT systems.

