

decision when central IT and departmental staff members disagree. My best advice is to try to develop strategic-level expertise around this topic. There are times when central initiatives need to be enforced. But there are also times when exceptions need to be made, and the CSAO needs to be able to make a knowledgeable decision.”

In addition to providing frameworks and principles, CSAOs also need to provide space and processes for feedback mechanisms in order to receive valuable information from users and technology providers. Paine adds, “When there is a conflict, I have found it effective to bring both department and central IT staff together. It takes time and a willingness to push people into multiple conversations. This is where the strategic-level staff member comes in. They need to listen carefully to the issues, and if the different parties cannot reach an agreement, he or she can advise the CSAO on the best decision.”

At the University of California, Santa Barbara (UCSB) Division of Student Affairs, Michael Young, vice chancellor for student affairs, has established formal groups for technology discussions, including a computer policy group, comprising the division’s senior executive management group; a business officers group; and a security and productivity committee, which includes functional and IT representatives. These groups are communication mechanisms driven by “Principles of Information Systems Development” that were created under the leadership of Young and Bill McTague, executive director for resource planning, capital planning, information technology and sustainability for the UCSB Division of Student Affairs. These principles have evolved since 1996 when a central student affairs IT function was created by Young and McTague. “Technology solutions must be purposeful and intentional,” relates Young. Through these principles, the central student affairs computing department, Student Information Systems & Technologies, has evolved to an organization with 70-plus staff members, including developers, business analysts, communications and user interface/user experience designers, help desk and network staff members, and systems administrators.

While not all student affairs organizations have IT units, these types of principles are applicable to all institutions and can be used in partnership with central IT units. Under such principles, IT organizations must keep evolving in response to changing environmental realities and resist the temptation to “stand pat.” IT units must constantly adjust to meet the demands of new challenges. In addition, they must work as decentralized organizations within a centralized and core standards-based structure. This structure is crucial as the business of student affairs departments varies significantly—from child care and health/psychological care to registration and admissions, financial aid, recreation, student life, and more. Each departments’ priorities must align with the division’s business priorities without impediment from the IT service providers.

In one possible structure, IT leaders, while they often work for and report to the central IT department, can be embedded in student affairs departments as part of the senior management team. Each departments’ priorities must align with the division’s business priorities in partnership with IT service providers.

Measuring Effectiveness of Services

Every technology initiative should be intentional with a defined purpose. Assessing the effectiveness of services should start with a review of intended goals and related efficiency, effectiveness, cost-savings, and return on investment objectives. End-user satisfaction is another measure of effectiveness. For assessment of IT service quality, CSAOs may consider the following tools:

- ▶ **TechQual+ Project** (www.techqual.org) “provides IT leaders with the tools to assess, analyze, and report on the effectiveness of technology services at their institutions, while shielding them from the burden and rigors of conducting survey research.”
- ▶ **Center for Transforming Student Services** Online Student Services Audit (www.centss.org) can be used to “provide a systematic, data-driven means to help institutions assess their e-student services by examining 31 core student service areas, covering five student services ‘suites,’ including student communities, communications, administrative, personal services, and academic services.”
- ▶ **EDUCAUSE Core Data Service** (www.educause.edu/research-and-publications/research/core-data-service) is a “benchmarking service used by colleges and universities since 2002 to inform their IT strategic planning and management.” The service comprises three parts: data collection via an annual survey, data access via a self-service reporting tool, and reports and analyses that summarize the submitted data.

Access for All Students

Accessibility, affordability, and availability of online services from anywhere, anytime are factors to consider for institutions when providing online services. Jennison Asuncion, co-director of the Adaptech Research Network (www.adaptech.org) and a professional in the digital accessibility field since 1999, offers the following suggestions for CSAOs to ensure accessibility for all students:

- ▶ Invite stakeholders from the disability community on campus to participate in any decision-making bodies involving selection and/or integration of student affairs campus technology. This early involvement helps assure that when a technology is either developed in house, purchased, or upgraded, it will be available and usable to all students, including those with disabilities.
- ▶ Be diligent with vendors when it comes to accessibility of products. Make sure that requests for proposals include questions about accessibility. Do not just accept a Section 508 Voluntary Product Accessibility Template, a popular and often vague document that many vendors complete to demonstrate the accessibility of their products.
- ▶ Prioritize accessibility training for in-house developers who are developing/supporting your campus technology. Your internal development operation should lead by example.
- ▶ Review any technology policies that govern student affairs technology. Is accessibility mentioned? What language is included about purchasing inaccessible technology? Who ultimately owns that decision?



- ▶ Solicit ongoing feedback from current students with disabilities. Consider, for example, creating a user community that represents students with different disabilities. Regularly invite community members to test more widely used campus technologies and gather feedback.
- ▶ Remember that prospective students with disabilities, like other potential students, will interact with your external-facing websites and other Web and mobile apps to view course calendars, promotional materials about the institution, and more. All of these sites and apps should be accessible. Online services, when appropriate, should be designed to be consumed via mobile devices. Responsive Web design (RWD) uses one set of code intended to display capabilities of devices, including desktops, tablets, and smartphones. The Web Accessibility Initiative (www.w3.org/WAI/mobile/) provides guidelines to make websites and applications more accessible on mobile devices.
- ▶ Institutions must consider the cost students must bear to purchase software and hardware. Some colleges offer free laptops with conditions, such as maintaining a certain grade point average. Some institutions, like UCSB, recognize personal computers as part of students' educational expenses. Financial aid recipients can apply for additional funds to purchase computers, monitors, and printers. In addition, physical campuses offer computer labs for student use.

A Management Mandate

CSAOs must provide leadership and oversight of technology use in student affairs to ensure their organizations are taking full advantage of technology investments while minimizing risks. The planning, implementation, and use of technology in higher education must be approached with an institutionwide holistic perspective that is consistent with the mission and goals of the institution.

CSAOs can provide the framework that drives technology decisions and implement sustainable funding models so services provided via technology, along with the required staffing and resources, keep pace with the evolving needs of students and other users. In addition, CSAOs must consider ways to evaluate the effectiveness of essential services offered via technology. Most importantly, the perspectives of students and other end-users must be considered from the onset of any technology initiative, including accessibility, affordability, and availability from anytime, anywhere. **LE**

Joe Sabado is acting executive director of student information systems and technology at the University of California, Santa Barbara Division of Student Affairs.

Strategies to Guide Technology Services Management



Provide a mechanism for two-way, technology-related discussions and prioritization among end-users including staff, faculty, students, IT staff, and senior student affairs professionals. These discussions could range from informal groups, such as a “student affairs technology committee,” to a more formal governance committee. See Ed Cabellon’s blog post at <http://edcabellon.com/tech/plan> for details on a student affairs technology committee.



Develop a sustainable technology funding model. The funding model could be based on campus culture and organizational structure, but the goal should be a framework that is sustainable, equitable, transparent, and maximizes efficiency. The University of Kentucky Information Technology organization, as part of its 2009–2014 strategic plan, includes a recommendation for a funding model at www.uky.edu/ukit/StrategicPlan/files/fundmodel.pdf.



Represent or delegate a senior technology leader at campus-level technology discussions to advocate student affairs interests. Student affairs technology needs may not be adequately considered at the campus level, so it is important that a student affairs representative be present at campus-level discussions.



If the role does not exist, create a division-level technology leader/manager position(s) to advise/provide technology direction to senior student affairs staff. The staff member(s) in these roles should have knowledge of general student affairs philosophies, business processes, and expert technology management/leadership expertise.



Champion/advocate the use of technologies, such as social media, that may require changes in policies and organizational perspectives or remove obstacles preventing the adoption of new technology. Young was instrumental in providing support for the use of social media by the student affairs division to communicate and conduct business with students and other customers. He created and funded a marketing, design, and social media coordinator position for the student affairs division. Young saw the value of social media a few years ago despite some resistance from campus staff. He notes, “Our strength is our ability to communicate with our students where they are and in their language.”



Provide professional development/training opportunities for staff to effectively and appropriately use technology. Staff and students must be trained to take full advantage of the capabilities of technology while operating within the boundaries of confidentiality, privacy, and ethical guidelines. At the same time, staff and students must have the space to explore and apply new technologies to enhance and transform business processes, communication, and student engagement within acceptable risks to the organization. CSAOs can help provide the organizational structure and support to allow disruptive innovation within the organization.