

# Roadmap

TOOLS FOR NAVIGATING COMPLEX DECISIONS

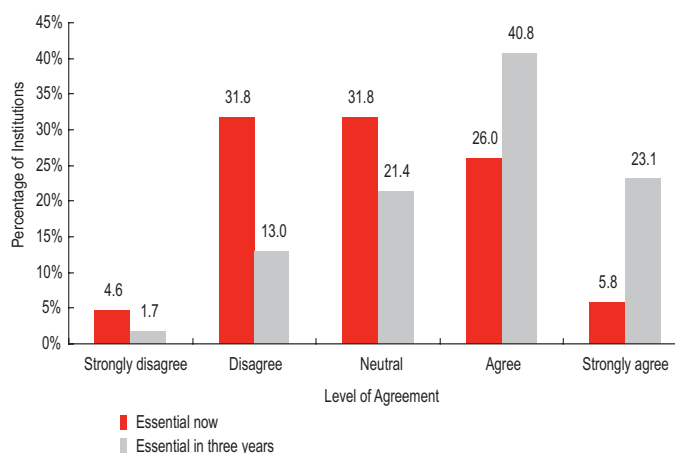
## Spreading the Word: Messaging and Communications in Higher Education

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### KEY FINDINGS

- ▶ Institutions that evaluate positively their understanding of the communication preferences of their constituents also tend to report that they communicate more successfully with those constituents.
- ▶ The student e-mail environment is rapidly being outsourced, with 19.0% of respondents reporting that their primary student e-mail system is hosted by a commercial provider. The story is very different for the primary faculty/staff e-mail system, with only 2.3% reporting that it is hosted commercially.
- ▶ Satisfaction with VoIP telephony is high. Virtually all of the respondents who have completed adopting VoIP for faculty and staff landline telephone service agree or strongly agree that faculty and staff are satisfied with VoIP services.
- ▶ While fewer than a third of respondents agree that web-enabled handheld devices (BlackBerry, Treo, iPhone) are *now* an essential tool for the higher education professional, nearly two-thirds agree they will be in three years.
- ▶ Identifying mobile communications as an important area in the institution's IT strategic plan appears to boost the priority of the institution's projects to adapt preexisting web-based services—and develop new ones—for delivery to handheld devices.
- ▶ Overall confidence that delivery of emergency notifications will be accurate and will be timely is significantly greater where the institution's crisis communication plan is more complete and better integrated with the institution's emergency management plan and where crisis communication systems are tested more frequently.

**Essentialness of the Web-Enabled Handheld Mobile Communication Device Now and in Three Years (N = 346)**



One of the chief functions of information technology (IT) today is to spread the word—whether the word is delivered as e-mail or text message, shared during a telephone conversation, displayed on a web page, or broadcast over a public-address system during an emergency. Several recent developments in communication technology inspired the ECAR study, *Spreading the Word: Messaging and Communications in Higher Education*. Alternatives to institutionally

*This ECAR Roadmap summarizes the 2009 ECAR study, Spreading the Word: Messaging and Communications in Higher Education, by Mark C. Sheehan, with Judith A. Pirani. That study synthesizes 351 responses to a July 2008 online survey of the EDUCAUSE membership and interviews with 37 executives and staff members involved with messaging and communication resources and practices at 29 institutions. To access the study or to learn about other ECAR publications, visit the ECAR website at <http://www.educause.edu/ecar> or contact us at [ecar@educause.edu](mailto:ecar@educause.edu).*

## TERMINOLOGY

As we use the terms in this study, the distinction between *messaging* and *communications* is a fine one and is largely artificial. Messaging is an asynchronous form of communication, in which the initiator of the message does not, in general, expect an immediate response. Examples include e-mail, text messaging, and many forms of emergency notification. Non-messaging communications are synchronous in that the initiator generally expects not just an immediate response but an ongoing exchange of some extent. Telephony is the best example, but a rapid back-and-forth exchange of text or instant messages can have the same effect. Telephony can become a form of asynchronous messaging when the initiator does not reach the intended party, but instead leaves a voicemail message.

We draw a distinction, as well, between *emergency notification* and *crisis communications*. Emergency notification is generally asynchronous. Notifications are sent and a response is not expected (although in some fully featured emergency notification systems, provision is made for responses). Crisis communications is a broader term that includes emergency notification but also embraces communication with first responders via public-safety radio and other media, communication internal to the institution during a crisis, and communication with external constituencies about a crisis.

provided e-mail services, especially for students, are being adopted by many institutions. Voice over Internet Protocol (VoIP) provides options for replacing legacy telephone systems while adding new features and functionality. The cellular telephone has created a sea change in the ways students, in particular, communicate, with implications that spell the demise of institutionally provided residential student telephone services. Further, the use of cell phones for text messaging and, more recently, web browsing has implications for the delivery of key institutional web services. Finally, systems for communicating during a crisis have taken a higher profile in the wake of recent campus tragedies.

At most institutions, central IT is in charge of both the data network, with its many messaging tools, and the telephone system. But the communications that ride on those technologies are managed by diverse constituencies and—as ECAR often finds in its studies of IT resources and practices—central IT appears to be most successful in enabling them where planning is institutionalized and a fabric of policies is in place.

Our investigations revealed that e-mail and telephone technologies are fairly mature and, especially for students, have become commoditized enough to be outsourced (in the case of e-mail) or left to the individual and the wider marketplace (in the case of mobile telephony). Low rates of adaptation of online services for delivery via text messaging or for display on handheld devices such as BlackBerry, Treo, and iPhone indicate that higher education is not, in general, comfortable with those mobile technologies. Crisis communication methods have clearly taken high priority in the past few years, and most institutions are taking a multimodal approach to sounding the alarm in the event of an emergency and to managing communications with concerned constituents during a crisis.

## Communications and the Institution

Survey respondents agree, on average, that their institution's electronically disseminated official information is accurate and timely, but they are less positive about two other aspects of those communications: reaching their intended recipients, and accomplishment of their communication goals. Respondents' opinions about these aspects tend to be more positive when respondents are more positive about institutional communicators' and central IT's understanding of constituents' communication preferences and are earlier adopters of new messaging and communication technologies. While respondents generally feel that their current messaging and communication infrastructure is well positioned to meet current needs, substantially fewer say the existing infrastructure will meet the institution's needs in three years.

## Electronic Mail and Calendaring

E-mail remains preeminent as the medium for official communications, but our study describes a growing divergence in respondent institutions' electronic communications practices as the faculty and staff members' environment evolves in a different direction from the student environment. Almost 2 in 10 respondents report that their primary student e-mail systems are hosted by commercial providers, but only 2.3% report that their faculty/staff e-mail systems are hosted commercially. Confidentiality, control, security, and support are cited frequently as arguments against outsourcing the faculty/staff e-mail environment. We expect positive experiences with outsourcing student e-mail to lead to a lessening of these concerns.

Another divergence between the faculty/staff and student e-mail environments is in the adoption of alternative communication technologies by those two groups. Significant numbers of respondents feel that text messaging and social networking channels will do very little to reduce e-mail use for faculty and

## METHODOLOGY

*Spreading the Word: Messaging and Communications in Higher Education* used the following research approach:

- ▶ A literature search of articles, studies, and postings from journalistic, academic, commercial, nonprofit, and IT practitioner sources.
- ▶ An online survey, designed by ECAR with input from members of the EDUCAUSE Net@EDU Converged Communications Working Group Steering Committee. Invitations sent to 1,694 EDUCAUSE member institutions in the United States and Canada in July 2008 resulted in 351 qualified responses, for a 20.7% response rate.
- ▶ Qualitative interviews with 37 individuals, including higher education CIOs and others involved with messaging and communication resources and practices at 29 U.S. and Canadian institutions to gain deeper insights into findings from the quantitative analysis and to capture ideas and viewpoints.

staff in the next three years, but more than half expect those communication technologies to result in decreased e-mail use among students in that timeframe.

Majorities of respondents agree or strongly agree that faculty, staff, and even students are satisfied with institutional e-mail services. Maintaining an adequate infrastructure for messaging and communications—and one that seems able to meet future needs—is associated with better satisfaction scores, as is the institution's pace of adoption of new messaging and communication technologies. While keeping up with constituent demand for a rich e-mail feature set and robust infrastructure may be costly, it appears to return real benefits in user satisfaction, especially among students.

### Landline Telephony

For faculty and staff, the institutionally provided telephone is likely to remain the standard desktop voice communication tool for the foreseeable future. Students residing on campus, however, are much more likely to obtain telephone service elsewhere. Two-thirds of respondents expect the importance of PBX telephones to decrease for students over the next three years, while only half believe importance will decrease for faculty and staff. As faculty/staff PBX systems are decommissioned, the void will be filled by telephones based on VoIP. That will be true much less often for students, whose telephony needs will likely be met exclusively by their personal cellular telephones.

Three-quarters of respondents say the importance of VoIP phones to faculty and staff will increase over the next three years, while only a third say the importance of those phones to students will increase in that timeframe. About a sixth of respondents, overall, report that they have now completed their adoption of faculty/staff VoIP, and another third report that they have that work under way; not quite a fourth of the 288 respondent institutions that have residential students say they have student VoIP projects completed or under way. Just 1 institution in 10 reports no

plans to adopt VoIP technology for faculty and staff, while 6 in 10 report no plans to adopt it for students.

### Mobile Communications

Mobile communication devices are becoming ubiquitous among faculty and staff, as well as students. Most respondents anticipate demand for institutional financial support of faculty/staff mobile communication services to increase in the next three years. Although fewer than a third of respondents agree or strongly agree that web-enabled handheld devices such as BlackBerry, iPhone, and Treo are now an essential tool for the higher education professional, twice as many say they will be in three years. Three-quarters of respondent institutions agree at some level that the ubiquity of those devices will cause their institution to make significant changes to online services in that timeframe.

Nevertheless, our research reveals a troubling lack of preparation by higher education to handle growing demand for mobile services. Relatively few faculty and staff receive financial support from the institution for their mobile communication needs. Most institutions report that they provide financial support for mobile communications to less than 10% of faculty and 25% of staff.

Despite the popularity of text messaging among students, respondent institutions have been slow to use that technology for official, non-emergency communications. Only 1 in 7 reports using text messaging to communicate with students; slightly fewer use it to communicate with faculty and staff.

Despite the growing use of handheld devices to access web resources, only half of respondent institutions have adapted any preexisting web-based services for them, and 6 in 10 say they have developed no new ones. Factors associated with greater progress in this area include early adoption of new messaging and communication technologies, having a strategy for providing web services to handhelds, having executive leadership engagement in that issue, and including mobile communications in the IT strategic plan.

## RECOMMENDATIONS

Based on its findings in *Spreading the Word: Messaging and Communications in Higher Education*, ECAR offers a trio of recommendations to enhance institutional effectiveness in this important area:

### 1. Consider outsourcing student e-mail.

While it is still early days in the phenomenon of outsourcing student e-mail by adopting Google's Gmail, Microsoft's Live@edu, or a similar service, precedent is clearly being set. Early adopters are taking the plunge now, and this will be a good time for mainstream and late adopters to monitor their colleagues' experience in aid of their future decision making. Outsourcing of faculty/staff e-mail is a knottier issue, but a small cadre of early adopters is already experimenting with it.

### 2. Plan to adapt key institutional web services for mobile platforms.

Although they disagree a little on the timing, most respondents agree that web-enabled, handheld mobile communication devices have an essential role to play among higher education professionals; their role among students is sure to develop in parallel. A key to success in this area will be web content that is attractively formatted and fully functional on handheld devices.

### 3. Make crisis communications an enterprise-level service.

A well-planned and well-organized emergency notification system has clear advantages for the safety and welfare of faculty, staff, and students. It may also have advantages in the recruitment of students and in satisfying the concerns of governance bodies. But crisis communications goes beyond the scope of emergency notification, embracing all the communication needs of the institution, from communicating with first responders to reassuring concerned parents and meeting the demands of the news media. Emulating institutions whose crisis communication efforts are more successful will include engaging executive leaders in placing high priority on crisis communications; codifying crisis communication processes in formal, written plans; and frequently testing a multimodal set of emergency notification channels.

## Crisis Communications

Recent natural and man-made emergencies have made crisis communications a priority at most institutions. Three-quarters of our respondent institutions say they have risen to the challenge of planning to communicate in a crisis either by developing a stand-alone crisis communication plan or, more commonly, by including crisis communication planning in their overall emergency response plans. Three-quarters of respondents agree or strongly agree that their executive leadership places a high priority on crisis communication planning, and nearly all respondents report that their institution has a crisis communication team and an officer to lead it.

We asked our respondents about their confidence in each of 11 emergency notification channels and about the performance of those channels in their most recent test. For each channel, we found that at least two-thirds of its users test it at least occasionally. The average respondent's level of confidence in peak-load performance is "neither low nor high" for most channels; it is "high" only for the e-mail channel. For 7 of the 11 channels, however, actual performance during the channel's most recent test averaged "good" or better. Most institutions say they use 4 to 7 of the channels we asked about.

Just over 4 in 10 of the institutions we surveyed have an *integrated* emergency notification system (IENS) that allows management of multiple channels with a single interface. Those who have an IENS are more confident that delivery of notifications will be accurate and timely and are more positive about their institution's overall preparedness to communicate with various constituencies during a crisis.

Overall confidence that the delivery of emergency notifications will be accurate and timely is higher where respondents agree that the institution's messaging and communication infrastructure meets the institution's needs, where a written crisis communication plan is in place, where more ENS channels are in use, where the ENS is tested more frequently, and where executive leadership places high priority on crisis communications.

When asked how confident they are that crisis communication procedures would function effectively in the face of various infrastructure outages, respondents seem least worried about the effects of an outage in the campus telephone service and most worried about unavailability of local mobile telephone service. Mirroring a frequent ECAR finding, confidence that the institution could weather outages in all four infrastructure elements is higher where executive leadership places high priority on the issue.