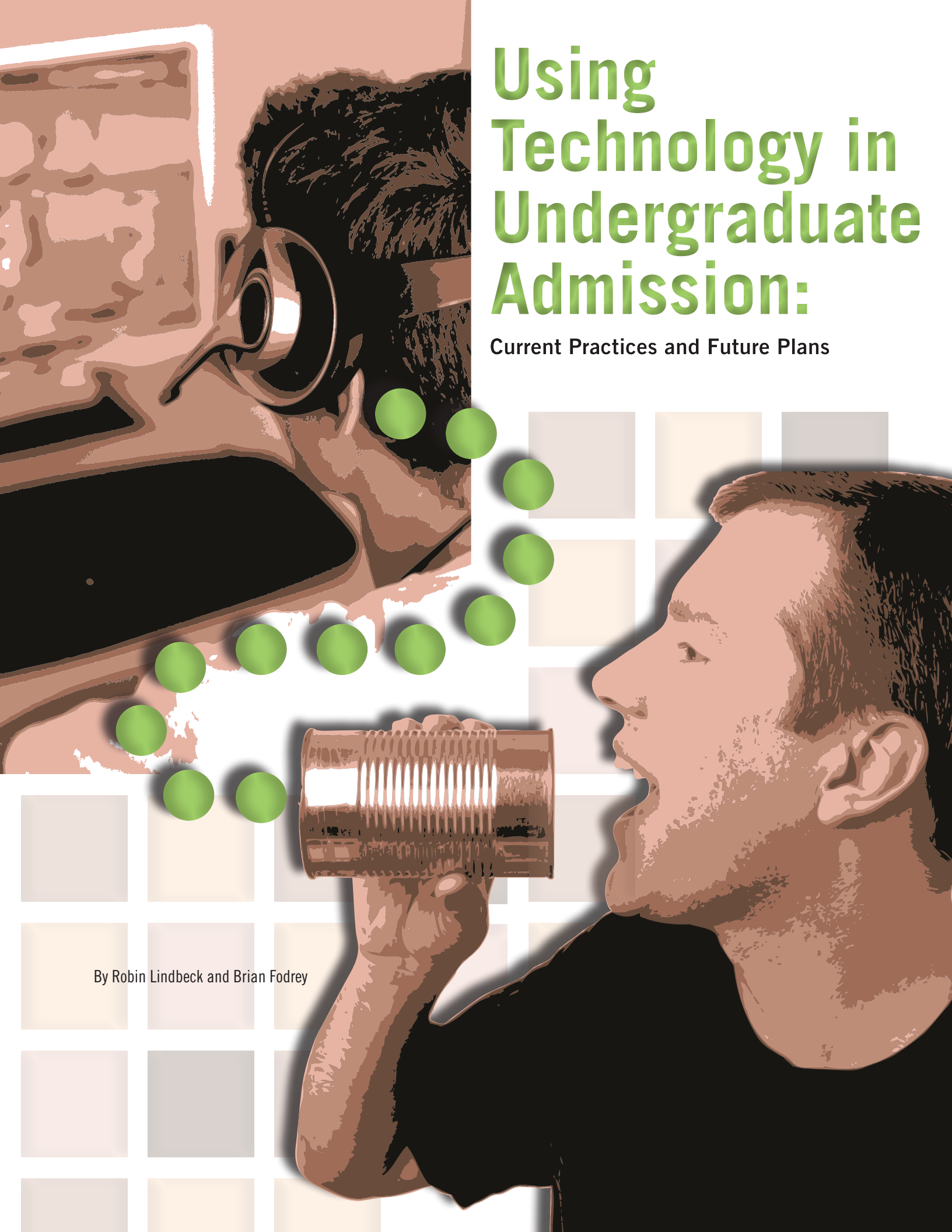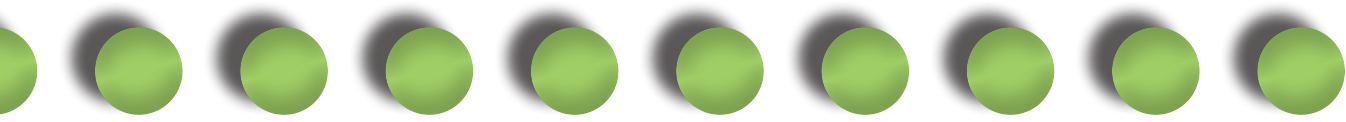# Using Technology in Undergraduate Admission:

Current Practices and Future Plans

By Robin Lindbeck and Brian Fodrey

Introduction

The face of the prospective college student is changing. As part of the Millennial generation and described as "smart, practical, techno-savvy" (Lancaster and Stillman 2002) these students are forcing colleges and universities to adapt and change in a variety of ways in order to draw and appeal to their specific set of interests and expectations. One way institutions are changing to accommodate the Millennial student is by integrating various technologies into admission practices. A recent survey conducted by Noel-Levitz (2008) benchmarking e-recruiting practices at two-and four-year institutions found 50 percent or more of the responding colleges and universities are integrating technologies such as cell phones and Web pages into their recruiting practices. Across institutions, however, little attention is given to identifying other uses for technology or measuring the level of effectiveness these technologies are having in recruiting students (Strauss and Howe 2007).

It is expected that by the 2016-17 academic year there will be an increase of 26 percent in bachelor's degrees conferred within the United States (Hussar and Bailey 2007). This increase depicts a tremendous opportunity for colleges and universities to take advantage of a growing market of incoming students and increase their enrollment—but will current practices be effective in recruiting them? Examining the use and effectiveness of e-recruiting activities will create the data needed for admission departments to make strategic decisions on how they will use various technologies in the recruiting process to meet the goals of their institutions.

Literature Review
Characteristics of the Millennial Generation

Born in 1982, the first of the Millennial generation graduated college in 2004 and will continue to populate the undergraduate ranks of colleges and universities for years to come (Lancaster and Stillman 2002). It is estimated that roughly 70 percent of the Millennial generation will seek higher education opportunities upon their high school graduation (Strauss and Howe 2007). With these record-setting numbers Millennial students will have an enormous influence on how higher education institutions address their admission and recruiting practices well into the future.

It is well documented that the characteristics of the Millennial generation differ from previous generations (Lancaster and Stillman 2002). For example, this generation demonstrates an enhanced commitment to being team-oriented with a desire to collaborate with their peers which creates a need for increased levels of communication and connectedness. Archetypically, Millennials believe what is good for one is often good for all and

frequently look to each other for growth and development opportunities. Their exposure to a variety of media from an early age and their quest for achieving a well-balanced life has contributed to the perception that Millennials have short attention spans and are reluctant to pursue endeavors that provide value to the perceived greater good (Strauss and Howe 2007).

Millennials also seek out information and resources that are easily accessible and in already familiar formats. One common example of this is the world of video and online gaming. Though it can be argued that the popularity of these gaming environments have been detrimental to this generation's face-to-face interpersonal skills, some suggest that these games have opened a door of opportunity for a new method of communication. The world of gaming has become increasingly more online and advanced, as well as designed to maximize the strengths and characteristics of the Millennial student (Squire and Steinkuehler 2005). Players are often stimulated by both exercising and acquiring a variety of critical thinking and literacy skills necessary for competing and communicating in the game, while simultaneously being entertained and engaged (Squire and Steinkuehler 2005). This generation knows little to nothing about life before highly-connected and real-time technologies and information sharing were so widely available, thereby enhancing their inability to focus on one thing at a time. Recognizing this characteristic and placing emphasis on capturing the communal and collaborative avenues in a Millennial's life may prove to be the most beneficial strategy in trying to connect with them on a more personal level. (Elam, Stratton and Gibson 2007).

Another unique characteristic of this generation is the role of their parents. Millennial parents are often highly involved and

influential in the decisions their prospective students are making regarding higher education, as well as throughout their collegiate careers (Coburn 2006). These expectations also have contributed to the association and reputation of being a "helicopter parent." This new role has caused the privacy boundaries and acceptable levels of parental involvement to blur and create new practices in student recruitment (Elam, Stratton and Gibson 2007). As a result, parents are expecting to be informed, recruited and acknowledged by an institution just as their Millennial children would be. However, though parents and Millennials alike expect to be accommodated and acknowledged by an institution, admission departments should still express some level of authority and confidence. This type of behavior displays a sense of fairness, expertise and accountability, all of which are respected by both Millennial parents and their children (Elam, Stratton and Gibson 2007). Though most Millennial families are less focused on class or privilege, and more about personal well-being, institutions must account for these types of variances because each student brings different experiences, knowledge and access to the recruitment process (Elam, Stratton and Gibson 2007).

Admission and Technology

College admission and recruiting practices may continue to change, yet the ideology remains the same: connecting and forging relationships with prospective students. The traditional use of direct mailings and recruitment events, however, is no longer the only or most effective course of action (Chimes and Gordon 2008). As the characteristics of a new generation of students change, admission representatives are using more e-strategies to identify, attract and interact with prospective students than ever before (Chimes and Gordon 2008).

Prospective Millennial students desire building a connection with university representatives in a closely interactive manner that makes the process feel more personalized, focused and on-demand (Chimes and Gordon 2008). This has resulted in the use of various technologies to increase communication through e-practices such as blogging, social networking and instant messaging. The online space most colleges and universities occupy creates a much wider recruitment base without the expense of traveling great distances. This also allows students to communicate differently with colleges and universities and to more easily create relationships with admission representatives on campuses outside their immediate geographical areas, or perhaps without visiting at all. Today's Millennial students have little time for information not related to what matters to them, nor are they willing to give a second chance at a first impression as they scan through potential schools.

According to the e-recruiting survey conducted by Noel-Levitz (2008), higher education institutions are using a variety of technologies throughout the recruitment and admission process, ranging from relationship building to application submission, in order to achieve their enrollment goals. These technologies have the potential to address characteristics of the Millennial student by employing commonly used mediums which provide focused communications and relationship building (cell phone, text messaging, instant messaging and email), information access (Web sites), and the ability to connect with currently enrolled students (blogs, podcasts, discussion boards, virtual campus tours, and social networking). Technologies are also used to support a streamlined and easily completed application process (Web site, online forms, FAQs, and resources).

Of course with each of these, it is not the technology itself that makes an effective recruiting tool, but rather the way it is used. As technologies continue to develop and come into use by the Millennial student, colleges and universities need to better understand the most effective way to use these technologies in the recruiting and admission process.

Methods

The purpose of this study was to identify the current practices and future plans for using technology in admission practices at four-year colleges and universities. This study collected data through an online survey. The survey was largely quantitative but also included several qualitative questions, and focused on 12 broad categories of technology (Table 1). Each technology was further described by a total of 58 specific activities (such as: relationship building, information sharing, notification of acceptance, counseling, virtual campus tours, etc.) in order to get a more detailed understanding of the specific uses within the broad technical categories. These specific activities were derived from existing literature on e-recruiting practices. Participants were admission directors and representatives from a small collection of public and private four-year colleges and universities located throughout the United States whose voluntary participation was recruited through local/regional chapters of the American Association of Collegiate Registrars and Admissions Officers (AACRAO).

Results

Surveys were completed by 36 institutions from 11 states. Just over half of the responding institutions were from the Midwest with 10 institutions responding from Michigan, four each from Kansas and Missouri, and one from Iowa. About 40 percent of the responding institutions were from the West and Southwest with seven schools from Arizona, three from Texas, two each from Colorado and Louisiana and one from Wyoming. Two remaining institutions were from the Southeast with one each participating from North Carolina and Tennessee. Noticeably absent were

institutions from the West, Northwest, and Northeast parts of the US. Approximately one-third of the responding institutions had more than 10,000 students and was a public institution. The remaining two-thirds of the respondents had student populations of less than 10,000 and were evenly split between public and private institutions. Given the small number and limited states represented by the survey respondents, these results can not be assumed to be representative of national trends. However they do present interesting results and potential areas for further study.

On average, the four most commonly used technologies reported by responding institutions are social networking, the school Web site, email and cell phones (Table 1).

Table 1. Technologies Currently Used in Undergraduate Admission (highest to lowest) (n=36)

Technology	Average number institutions currently using across all specific uses	Number of specific activities used to describe this technology use in survey
Social Networking	25.0	1
School Web site	23.5	12
Email	24.9	9
Student cell phones	19.6	5
Blogs	10.5	2
Instant messaging	7.25	4
Vodcasts, streaming video or video files	4.5	6
Text messaging	3.8	5
Podcasts or audio files	3.0	3
Second Life	1.1	7
Flash drives loaded with college information	1.0	3
University-based online game	1.0	1

The 20 most common activities reported (Table 2) also fall into the same four broad categories of social networking, school Web site, email and cell phones. These data were also reinforced by the open-ended responses to the question "what do you consider to be the most effective technology-related practice you use?" with 10 of the 29 answers provided as "email."

Of these activities, the two most common are examples of two-way communication (general communication with prospects) and of one-way communication (inquiry forms). Of the top 20 activities, about one-third represented two-way communications (general communications with prospects, Q & A, relationship building via email and cell phone, and counseling by email or cell phone). The remaining 70 percent of the activities are divided between marketing activities, such as collecting cell phone numbers, and one-way information access such as posting forums on the school Web site.

Table 2. Top 20 Most Commonly Used Specific Technology Activites and Percentages of Institutions Considering the Specific Activity as Having a High ROI (n=36)
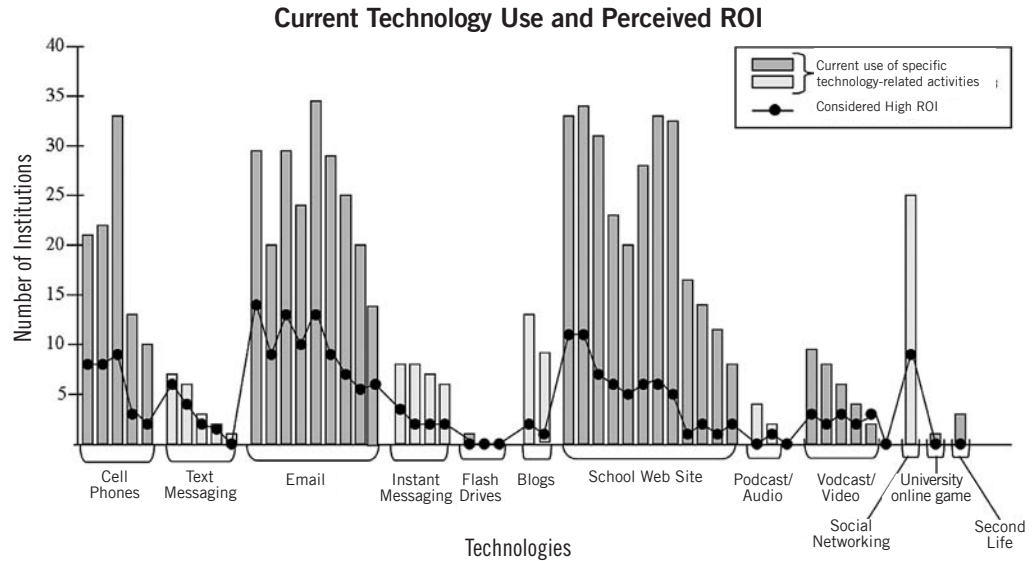
Technology	Specific activity	Respondent currently using this	Current users rating as High ROI
Email	General communications with prospects	94.4%	38.2%
Web site	Inquiry forms	94.4%	32.4%
Web site	Electronic applications	91.7%	33.3%
Cell phones	Collect prospective student cell phone numbers	91.7%	27.3%
Web site	Financial aid forms	88.9%	15.6%
Web site	Electronic catalog	88.9%	12.5%
Web site	Campus visit forms	86.1%	22.6%
Email	Q & A	83.3%	30.0%
Email	Relationship building	80.6%	48.3%
Email	Notification of deadlines	80.6%	44.8%
Web site	Course registration	77.8%	17.9%
Social networking	Online profile for admission office	69.4%	36.0%
Email	Targeted mass marketing	69.4%	28.0%
Email	Buy student email address	63.9%	43.5%
Web site	Housing applications	63.9%	21.7%
Cell phones	Tele-counseling	61.1%	36.4%
Cell phones	Relationship building	58.3%	38.1%
Email	Counseling	55.6%	45.0%
Email	Collect parent email addresses	55.6%	25.0%
Web site	Virtual campus tour	55.6%	20.0%

It is interesting to note that the eight most commonly used activities are perceived to have a high Return on Investment (ROI) by less than one-third of the respondents. This suggests the activities that are used by most institutions are perceived as not providing the return on time, effort and money by two-thirds of the institutions that are using them.

This discrepancy between frequency of use and perceived ROI is made even clearer in Chart 1. All but one of the technologies listed are perceived to have a high ROI by far fewer institutions than are currently using the technology. This may mean that a large number of institutions are using technologies that they do not believe provide them with a high ROI.

In addition to current practices, institutions indicated technology-related activities they are planning to implement in one to two years (Table 3). These same activities are rated as having a high ROI by less than 6 percent of the current users of those technologies.

Current Technology Use and Perceived ROI

Legend:
- Current use of specific technology-related activities
- Considered High ROI

X-axis (Technologies): Cell Phones, Text Messaging, Email, Instant Messaging, Flash Drives, Blogs, School Web Site, Podcast/Audio, Vodcast/Video, Social Networking, University online game, Second Life

Y-axis: Number of Institutions

Table 3. Top Ten Specific Technology Activities Responding Institutions Plan to Start in the Next 1 to 2 Years (n=36)

Technology	Specific activity	Planning to start using in 1-2 years	Current users rating as high ROI
Text message	Notification of deadline information	10	5.6%
Blog	Admission process	9	2.8%
Text message	Notification of acceptance	9	0.0%
Podcast	Guiding students through admission process	8	2.8%
Text message	Counseling	8	5.6%
Web site	Parent contact forms	7	2.8%
Cell phones	Notification of acceptance	7	5.6%
Web site	"Chat now" button (Instant Messaging)	7	5.6%
IM	Collect IM account information	7	5.6%
Podcast	Informational	7	0.0%

Discussion

Several themes are apparent from the results drawn from these 36 schools. First, all responding institutions use some form of technology in recruiting. This may be an indication of the prevalence of technology in recruiting or it may indicate institutions using technology in recruiting were more likely to participate in this study. Second, the highest use of technologies are associated with more established technologies such as school Web sites and email, rather than emerging technologies such as podcasts, vodcasts and virtual worlds. Third, technology is used primar-

ily for one-way communication or information sharing. Finally, although there is a large amount of recruitment activities using technology, there are few institutions that perceive these activities as having a high ROI.

Highest use in established technologies

Though there appears to be institutional commitment in the responding institutions to integrate technology into admission and recruitment practices, the specific activities used do not necessarily align with what today's Millennial students expect or prefer. The most frequently used technologies by institutions are more established and mainstream such as a school Web sites and email. The daily tools of Millennial students continue to be the technologies that are used less frequently (podcasting and vodcasting) or not at all (YouTube, Twitter). This may be because admission offices have made a conscious decision to stay away from these newer technologies. Or, it may indicate a lack of familiarity and understanding of the new technologies in general, and how to integrate them into effective recruitment practices. Regardless, the failure to use these technologies suggests that a disconnect may exist between this and the Millennial student's value for customized correspondence delivered through tools and platforms familiar to them (Strauss and Howe 2007). Survey results show that institutions are not taking advantage of the technologies commonly associated with the Millennial generation, nor do they plan to use them in the future.

Primarily one-way communication

There is also a clear indication from the schools surveyed that most technologies are being used primarily as one-way communication tools such as email and school Web sites. Given the Millennial student's desire for collaboration and connecting with others (Strauss and Howe 2007), and the abundance of

technological options available for this purpose, it is surprising to see so few two-way communication activities used.

The most popular one-way communication tool reported by these institutions continues to be the institution's Web site which is primarily used to provide access to a variety of information, ranging from forms to the electronic course catalog. In contrast to the Millennial generation's preferences for customized and easily accessible information (Strauss and Howe 2007), the unique organizational structure of each institution's Web site may make it difficult for a student to easily navigate and find what they desire.

The one-way communication nature of a Web site also makes this a poor tool for connecting or building relationships with prospective students. The importance of moving the more traditional one-way communication into a two-way format is becoming increasingly high with a generation that values ideals such as teamwork and collaboration (Strauss and Howe 2007). Communication may need to be redesigned so individual students feel it is customized for them and their interests, while maintaining the opportunity to connect with an admission representative if they choose.

High activity, low ROI

The value these institutions place on technology is apparent with their effort to include it in their recruiting practices. However, many of the institutions using these activities and technologies do not perceive them as having a high ROI. So why are admission offices spending precious time and money on these activities? It may be that, although institutions know the current activities are not as effective as they would like them to be, they see no viable alternative.

Implications for Additional Research

This study suggests several opportunities for additional research. First, the small collection of institutions used in this study makes the results interesting, but far from generalizable. Gathering data from a larger number of institutions and from a wider geography will enhance the understanding of the current use of technology in the recruiting and admission process, as well as the perceived ROI of each of these activities. Second, central to this study is an understanding of Millennial students. Future studies focusing on admission, and on higher education and the workplace in general, will benefit from a true empirical study to better understand the Millennial student. Third, this study clearly points to a gap between current technology-related activities and the perceived ROI of these activities with the 36 institutions in this study. Identifying and sharing e-recruiting practices that are perceived or demonstrated to be effective will be a valuable resource for admission offices. Finally, the perceived ROI in this study is from the perspective of the admission director. Admission offices will benefit from understanding the student perspective on various technologies used in e-recruiting and the impact of these

technologies in the prospective student's information gathering and decision making process.

Conclusion

Colleges and universities are integrating technology into the recruiting and admission process in response to the changing preferences of the Millennial prospective student. Although there is headway being made, there is still opportunity to enhance the ways in which technology is being used to maximize the effectiveness of the efforts put into e-recruiting to meet the enrollment goals of the institution. Focusing on the characteristics of the prospective student, the recruiting goals of the institution, as well as identifying and sharing best practices for integrating the best technologies possible are all important steps to finding the e-recruiting practices that maximize results for the time and money spent at each institution.

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Editor's Note: NACAC's report on social networking, Reaching the Wired Generation: How Social Media is Changing College Admission is available at www.nacacnet.org.