

By Kevin Zalanowski



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Instant Messenger in Enrollment Management:

Evaluating Use and Effectiveness

Abstract

This study represented a formal quantitative evaluation of the potential for instant messenger (IM) technology as an outreach tool for undergraduate college admission. Conclusions focused on the popularity of IM, and student use in a formal counselor/student relationship.

Technology became an essential tool for enrollment management to meet student outreach and recruitment goals, as higher education entered the 21st Century. Admission professionals turned to the Internet to simultaneously expand recruitment regions, individualize contact with prospective students and personalize the admission funnel. This capitalized on a wave of literature linking the Millennial student to Internet use (Goldberg 2002, Knerr & Woosley 2003, Steele 2002, Whelan 2001, Williams 2000). Online technologies, including email, Web sites, Weblogs, etc. were implemented to help enrollment management professionals reach out to prospective students and help them explore colleges in unique and technologically-savvy ways.

Another of these Internet features, IM technology, allowed for natural, real-time conversations between two individuals, similar to a telephone call; interaction took place through a computer keyboard instead of a telephone receiver. Not limited to words, IM exchanges could also include Web links, music files, pictures, and so on. Distance was of no concern, since users could converse on IM through any Internet connection and the appropriate software. The most popular commercial IM chat clients, America Online, Yahoo, MSN, and ICQ, could be downloaded and used at no cost to users (America Online 2005, Yahoo! Messenger 2005, Microsoft Corporation 2005, ICQ 2005).

IM chat clients represented a popular means of communication among Millennial students (Goldberg 2002, Knerr & Woosley 2003, Whelan 2001). A study at Butler (IN) and Pepperdine (CA) universities indicated that more than 80 percent of enrolled students used IM, with subsequent freshmen classes using it more

frequently than upperclassmen (Hallock & Aiken 2004). Within these numbers, Hallock and Aiken (2004) found that 99 percent of surveyed Millennial students were using IM to communicate with friends, and 30 percent utilized it for academic or studying purposes. Goldberg (2002) referred to Millennial students as the "Instant Messaging Generation," with current projections pointing toward increased activity on all levels, especially as students entered the postsecondary setting (Lageese 2001, Plewes 2003, both as cited in Kindred & Roper 2004).

Critical to the purpose of this experiment was an array of literature, indicating that admission offices could benefit from using IM; prospective high school and transfer students would have the ability to connect with an actual admission counselor or student representative through a preferred technological medium (Hossler 1999, Kindred & Roper 2004, Steele 2002, Williams 2000). With this in mind, Williams (2000) elaborated on the 1:1 marketing theory, which explained that students were funneling colleges and universities just as those institutions were funneling them through the matriculation process. These students would be more attracted to universities that best met their individual needs in personalized ways. Research also stressed employing these new technologies in tandem with other established marketing strategies to facilitate the building of relationships with prospective students (Hossler 1999, Williams 2000).

Existing research pointing towards the popularity of IM and its potential in enrollment management proved to be well-documented; however, hard data and case studies that applied IM in a nonsocial setting were rare or nonexistent. Hallock and

Aiken (2004) represented a recent case study that focused on student-to-student interaction over IM at two private schools, Pepperdine and Butler universities. Though the 30 percent of students who used IM for academic purposes was a low number, it was still a significant amount of activity in a realm other than social contact. Kindred and Roper (2004) concluded that students were more comfortable using IM for social connections and email or in-person contact for formal relationships. Green, et al. (2005) applied IM to the Ersatz Social Engagement Theory. Ersatz interactions were technological substitutes for traditional social engagement. Conclusions indicated that the information shared over IM in a social setting was less credible and less meaningful than in-person contact. IM was not a positive catalyst in social relationships that were sustained solely through IM. No formal case studies were found on postsecondary institutions that employed IM in their outreach efforts, nor in formal settings like a student/counselor relationship.

Building on research that established the popularity of IM with Millennial students, their increased use of IM in the postsecondary setting, and their desire for personalized messages from colleges and universities, this project explored the potential for IM as a popular means of outreach for enrollment management. It also tested the behavioral patterns observed by Green, et al. (2005) and Kindred and Roper (2004) in a formal setting to assess the effectiveness of IM in building relationships between counselor and prospective student. The following represented an initial quantitative case study for the employment of IM at a public, flagship university in the Midwest that did not use IM prior to the start of this project.

Instrument

Determining the proper instrument was essential to the fruition of this project. Due to their characteristics of familiarity and zero-cost factor, commercial IM chat clients were selected as the medium through which conversations would take place. Readers may recognize names like America Online, Yahoo, or MSN, all of which were utilized and were clearly the most popular chat clients at the time; however, the researcher could not assume one chat client would be more effective or popular over another. For the purposes of this project, the appropriate IM chat client, Trillian, allowed the admission counselor to efficiently field questions from users of each major commercial program, because, unlike other commercial chat clients, Trillian acted as a hub for the other major IM chat clients and could communicate with them all (Cerulean Studios 2005).

Procedure

Trillian supported the America Online, Yahoo, MSN, ICQ, and Internet Relay Chat (IRC) clients, but the latter was not utilized due to a lack of familiarity and perceived popularity of the software. Accounts were created with these commercial chat clients using "IowaAdmissions" as the screen name for each. The separate screen names and passwords were then loaded into the

Trillian software; once logged into Trillian, the counselor would simultaneously be online with these four different chat clients through a single program. The hours of counselor availability for instant messaging were advertised as Monday through Thursday, 3:00 p.m.–5:00 p.m., Central Standard Time. This time span was the best choice to balance normal working hours with the assumption that prospective students would most likely use IM once home from school, particularly in the Eastern and Central time zones. The counselor typically logged onto to IM between 11:00 a.m.–5:00 p.m., Monday through Friday, to monitor additional hours of potential activity.

The first promotion for the IM feature was a flyer placed in all folders distributed to prospective students during campus visits, indicating when it could be used and the applicable screen names. A Web page was also created within the undergraduate admission Web site, which mirrored the visit folder flyer in the second promotion; a month later the option was also advertised on the undergraduate admission Web site. The Web page placement had to be appropriately balanced—easy for domestic students to find, but not so prominent as to invite an overwhelming volume of activity for the single admission counselor managing the project—and provided links for users to download chat clients.

The counselor logged onto Trillian each available weekday. Quantitative and qualitative data from each conversation was collected over a 12-month period, June 16, 2005,–June 16, 2006. During each conversation, the counselor answered questions and collected data along 12 variables: time the conversation began, day, date, month, screen name, type of student, new/repeat contact, residency, academic major, IM client, length of conversation, and questions asked. Raw data was converted into a multi-page document of charts and matrices on a monthly basis for the purposes of analyzing emerging trends and compiling reports, which were given to supervisors at the conclusion of each academic semester. Sensitive information was deleted in the interest of student privacy.

In the event of all-day visit programs, regular office appointments, and counselor travel, an Away Message indicated why the counselor was not available, when to expect his or her return and referred students to other methods of contacting the admission office quickly and conveniently. For extended periods of unavailability in October and November due to seasonal travel and recruitment, an undergraduate student intern staffed the IM feature from 2:30 p.m.–4:30 p.m., Monday–Friday. This alternative allowed the feature to remain effectively active during a period of the calendar year when the counselor was not available. As volume increased, a separate spreadsheet listed only the screen names, making easy differentiation between new contacts and those using IM for at least a second time.

Results

IM activity exceeded initial expectations. The large number of contacts from various types of prospective students added to the

credibility of trends and observations. The following discussion of findings has been organized into nine categories: Residency, Type of Student, Day, Month, Time, IM Chat Client, Academic Major, Questions Asked, and Student Activity.

Residency

“Resident” referred to a student living in the same state as the university (Iowa). As seen in Table 1, the overall number of conversations sent by nonresidents was nearly equal to the number sent by residents. Within these totals, the number of individuals using IM was also nearly identical at 151 nonresidents and 145 residents. Finally, 61 residents sent more than one IM and 64 nonresidents sent more than one IM.

Conversation length was consistently longer for nonresidents than for residents among overall conversations, first IM conversations, and conversations with students using IM more than once (see Table 2). In tracking overall conversation length by month, nonresident conversations were significantly longer from September through December, averaging five minutes longer than resident conversations (see Figure 1). During the spring semester months, January through May, average conversation lengths were essentially equal and steadily declining throughout the season. In general, initial conversations with nonresidents lasted longest, while repeat conversations with residents were consistently shortest, averaging as low as 4.71 minutes by June 2006.

In a state-by-state comparison of where students were IMing from, trends emerged that showed parallels with the overall student profile of the associated university. Of the 151 individual nonresidents that used IM, 62 percent (93) were from Illinois, the largest feeder state for this university. The next highest number of individual contacts came from other contiguous states to Iowa, including Wisconsin (7), Missouri (6), and Minnesota (5).

Table 1 Number of Conversations by Residency

Origin	Students (n = 335)		Students (n = 682)	
	Individual Contacts	%	Total Conversations	%
In-State Students	145	43	304	46
Nonresident Students	151	45	299	45
International	24	7	63	9
Unknown				

Table 2 Average Conversation Length by Type of Student

Type of Student	Overall Average (min)		First IM Average (min)	
	Length	Minutes/Contacts	Length	Minutes/Contacts
Overall	12.43	8475/682	14.06	4710/335
Residents	11.33	3443/304	12.96	1879/145
Nonresidents	13.64	4052/297	15.70	2339/149
International	13.86	873/63	17.43	401/23
Graduated Seniors	13.13	302/23	12.41	211/17
Rising Seniors	17.24	431/25	19.89	358/18
Seniors	11.27	2830/251	13.29	1462/110
Juniors	15.58	413/26	18.72	337/18
Sophomores	12.20	61/5	15.67	47/3
Transfers	13.41	3058/228	14.83	1453/98
Current Students	7.73	85/11	7.26	51/7
Parents	14.50	116/8	15.86	111/7

Note: Data for repeat conversations is not shown.

Figure 1 Average Length of Conversations by Month

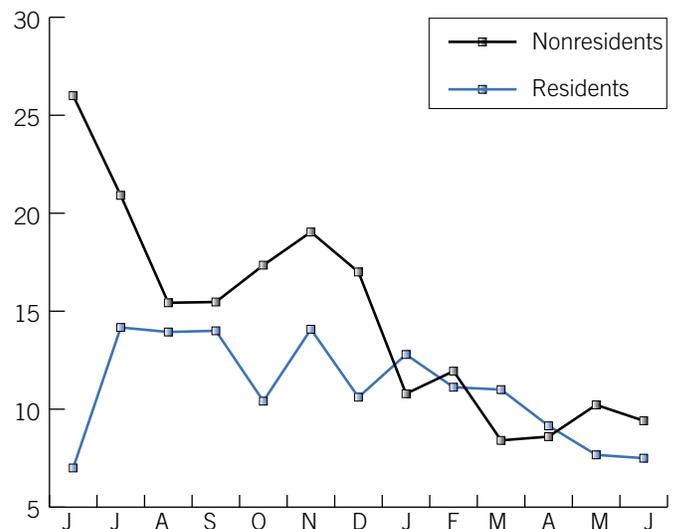
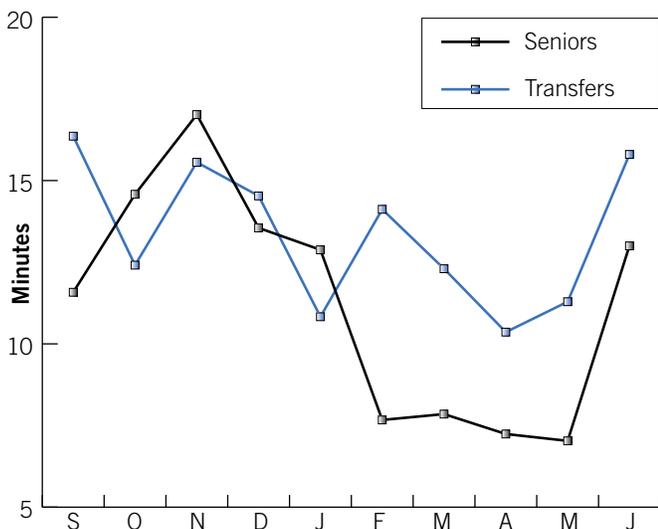


Table 3
Total Conversations by
Type of Student and
Month

Type of Student	Total	J	J	A	S	O	N	D	J	F	M	A	M	J
Graduated Seniors	23	3	3	4	1	2	0	0	1	2	1	1	2	3
Rising Seniors	25	6	8	9	0	0	0	0	0	0	0	0	0	2
Seniors	251	0	0	13	12	19	42	22	34	12	33	21	29	14
Juniors	26	1	2	0	1	1	1	0	1	1	3	3	7	5
Sophomores	5	0	0	0	1	0	0	0	0	0	2	0	2	0
Transfers	228	0	7	11	25	22	32	17	29	18	20	28	14	5
International	63	1	4	12	8	3	1	4	3	6	5	6	6	4
Parents	8	0	1	0	1	1	0	0	2	1	2	0	0	0
Re-Entry	18	0	0	0	0	0	1	1	1	5	3	3	3	1

Contacts from 23 additional states sent IM's, none of which had more than four individual contacts. This pattern continued when looking at total conversations from each state. Residents of Illinois sent 63 percent of all nonresident conversations, followed by those from Missouri (23), Wisconsin (21) and Minnesota (14). No other state had more than five total conversations coming from its contacts. Overall, 81 percent of all conversations came from residents of Iowa or Illinois.

In relation to the 2005 entering freshman class, 90 percent of all matriculating domestic students were from Iowa or Illinois, compared with 75 percent of individual IM contacts. (The University of Iowa, 2005). The contiguous states of Wisconsin, Missouri and Minnesota represented a nearly identical percentage of matriculants (4.8 percent) and IM contacts (5.6 percent). Overall, a strong connection was made between states of origin for IM contacts and matriculating students.

Type of Student

"Type of student" referred to whether a prospective student was a high school senior, junior, transfer, international prospect, etc. Geography and length of conversation dictated trends. In general, high school seniors tended to be nonresidents and transfer students tended to be residents. From the high school senior pool, 109 of 110 students gave their state of origin. Of these, 67 percent (73) were nonresidents and 33 percent (36) were residents. A total of 250 conversations came from seniors; 68 percent (171) were from nonresidents and 32 percent (79) were from residents. With striking similarity, transfer students inversely mirrored the trend of high school seniors. Out of 98 individuals, 96 gave their state of origin. Of these, 69 percent (66) were residents and 31 percent (31) were nonresidents; from a total of 202 conversations with transfer students, 72 percent (144) were from residents and 28 percent (58) were from nonresidents. The similar number of overall and individual contacts between transfers and high school seniors may reflect the tendency for Millennials to use IM more often once in college (Hallock & Aiken, 2004; Kindred & Roper, 2004); however, activity comparisons between these two groups would likely relate to the general student profile of the university.

Other domestic contacts yielded interesting patterns, but their numbers were lower and should be viewed as broad generalizations (see Table 3). Eighteen high school juniors used IM, with only a third sending more than one conversation. Following the trend of high school seniors, 13 of these 18 juniors were nonresidents. The number of contacts increased markedly in the spring months, primarily between March and June. Contrastingly, three sophomores used IM; two of the three sent more than one IM and each was a resident. Ten students used IM that were looking to re-enter the university. Four of the 10 used IM repeatedly and nine of them were residents. Seven current students sent an IM, with three of them being residents and half of them sending more than one. Finally, seven parents sent an IM, but only one repeated. Four were nonresidents, with three of them residing in Illinois (the other from New Jersey). In addition to this variety of contacts were one or two of the following: an admission counselor from another university, Ph.D. students, seventh graders, ninth graders, and alumni.

International prospects made up the final type of student this project recorded. These 24 students hailed from 13 different countries, with 14 of the 24 sending more than one IM (58 percent). Yahoo and MSN chat clients were almost exclusively used. A total of 63 conversations were recorded from international students and their questions were often settled much differently when compared with domestic students; counselor unfamiliarity with pertinent information for international students meant they were often sent contact information for the International Undergraduate Admission Office. This also served to establish a link with the appropriate person with which this type of student should be closely working. International students were extremely receptive to using IM because of its quick responses and no-cost value, and may continue to be a great venue for this technology.

When observed by type of student, conversation length between high school seniors and transfer students yielded definable observations (see Figure 1). Throughout the fall semester, average conversation lengths were virtually identical with matching monthly fluctuations; however, in the spring semester beginning with February, the average conversation length for transfer students averaged 4.50 minutes longer than with high school

seniors. International student activity was more frequent with longer conversation lengths in the summer months and noticeably shorter and less common during the academic year, which inversely mirrored the activity of domestic students.

Day of Week

The third variable considered activity by day of the week. Mondays, Tuesdays and Wednesdays were the most active. These three days collectively represented 484 of the 682 conversations (71 percent), with Mondays and Tuesdays each accounting for nearly a quarter of all IM's and Wednesday another 22 percent. Factoring in time of day, 39 percent of all conversations took place 3:00 p.m.–5:00 p.m., Monday through Wednesday; this represented six hours of the work week. When looking at types of students, high school seniors were most active on Mondays and Wednesdays, with over 70 percent of their conversations occurring Monday through Wednesday; transfers were more active over the course of the calendar week, but 69 percent of their conversations occurred between these three days. No additional patterns were observed when comparing conversation frequency between days of the week, aside from a general lessening of activity on Thursdays and Fridays.

Month

A monthly comparison indicated identifiable trends between seasonal activity and type of student. A consistent increase of use was charted throughout the initial summer months and the fall semester, rising from just 11 conversations in the final two weeks of June 2005 to 80 conversations by November (see Table 4). The spring semester saw a consistent pattern of alternating high and low activity; December, February and April averaged 52 conversations while January, March and May averaged 73 conversations. As the spring semester led into the 2006 summer months, this initially extreme pattern leveled off to a relative consistency between the months of March and June.

When comparing new contacts against conversations with repeat IM-ers, one general pattern emerged. From June through October 2005, the number of conversations with new contacts always outnumbered conversations with repeat users; after October this occurred once, in February. No monthly patterns were observed when considering day of the week or time of day, aside from more activity during normal school hours over the summer months.

Significant patterns emerged when looking at monthly variations compared with type of student and conversation length. With respect to residency, out-of-state student conversations were an average of five minutes longer than resident conversations in the fall, but throughout the spring conversation lengths for both groups were nearly identical and consistently declining (see Figure 1). The number of new nonresident contacts peaked in October and November, and was consistently observed at high levels with the exception of December and

Table 4 Total Conversations by Month and Residency

Month	Total	Resident	Nonresident	International
June 16, 2005	11	3	7	1
July	27	12	11	4
August	49	17	21	11
September	51	25	17	8
October	54	22	26	3
November	80	37	40	1
December	48	23	20	4
January	76	38	33	3
February	43	17	17	6
March	72	36	27	5
April	65	33	25	6
May	71	27	36	6
June 16, 2006	35	14	17	4

Note: Differences between monthly totals and residency sums were due to a small number of contacts where residency was unknown.

February; the number of nonresident repeat IM-ers peaked from November through January. New contacts with residents were also high throughout the year, with the highest number recorded in both January and March; similar to nonresidents, use by resident repeat IM-ers peaked in December and January, but also in March and April.

With respect to monthly comparisons, these trends were at their most extreme in the fall and early spring. Additionally, high school senior (typically nonresidents) conversation lengths between new contacts and repeat users mirrored each other throughout the year, peaking in October and November, then steadily decreasing throughout the spring semester months (see Figure 1). Transfer student (typically residents) conversation lengths showed little pattern between first-time IM-ers and repeat users. High school juniors sparingly used IM over the course of this project, with only four contacts between September and February. As the spring progressed, so did activity among this population with regards to new contacts, though only a third of them used the feature more than one time, most of whom were new contacts made between April and June 2006.

Interpretation of data according to month was useful in determining the overall activity trends of IM (see Table 3). Generally, that activity was highest in the fall, ebbed in December and February, and steadily increased through the spring. Conversations did not drop off to any significant degree among new contacts or repeat IM-ers regardless of month after August 2005, by which time IM was an established communication option for students.

Time of Day

Considering the time of day that conversations were initiated as an independent variable, only one pattern emerged. Referring to Day of Week in this section, the most active hours of instant

messaging were almost exclusively between 3:00 p.m.–5:00 p.m.; the exception was on Friday afternoons, when the 4:00 p.m. hour was overshadowed by the 2:00 p.m. hour. Of 682 total conversations, 53 percent took place between 3:00 p.m.–5:00 p.m., Monday through Friday. As for the other hours of the afternoon, activity for the 12:00 p.m. and 1:00 p.m. hours was nearly equal at 77 conversations and 72 conversations, respectively; 104 conversations were logged in the 2:00 p.m. hour, followed by the large escalation of 175 at 3:00 p.m. and 188 during the 4:00 p.m. hour. This trend was expected as classes for the day finished for both transfer and high school students.

A comparison of activity time in relation to type of student yielded surprising results given the existence of a school day for most students. Considering total conversations, 75 percent of international students, 55 percent of transfer students, 54 percent of high school juniors, and 30 percent of high school seniors used IM to contact undergraduate admission prior to 3:00 p.m., CST. In relation to month, time of day activity was consistently busiest between 3:00 p.m.–5:00 p.m. during the school year, and more uniformed between hours of the day during summer months with the most active times still falling in the 2:00 p.m.–5:00 p.m. range. Nonresidents were most active between 3:00 p.m.–5:00 p.m., but only slightly more than residents, who showed increased activity between 12:00 p.m.–2:00 p.m. Resident activity showed a gradual increase of activity during the 1:00 p.m. and 2:00 p.m. hours throughout the spring semester.

Chat Client

This project was not meant to promote any commercial IM chat clients, however, these computer programs were used because of assumed user familiarity and because they were available at no cost. America Online (AOL), Yahoo, MSN, and ICQ were the advertised chat clients. Domestic students overwhelmingly used AOL, while international students used Yahoo and MSN. Of 682 total conversations, 79 percent were with AOL, 78 percent of all individual contacts used AOL, and 81 percent of all conversations with repeat IM-ers were with AOL. Reviewing by type of student, 15 of 17 graduated seniors used AOL, 16 of 18 juniors followed suit, along with 90 percent of high school seniors and 79 percent of transfer students. The reverse was true for the international student pool, as 95 percent of their conversations took place over MSN or Yahoo, and only one of the 24 international contacts used AOL; this student was from Canada. Though AOL proved the most popular, nearly a quarter of all conversations took place over Yahoo and MSN, combined. No contacts were made with students using ICQ.

Academic Major

Intended major was tracked to see if students with certain academic interests were more likely to use IM. (The reader should bear in mind that every university has different academic strengths which may lead to case-by-case variation, particularly

with this variable.) At this university, the most popular major for first-year students was the open (undecided) major, followed by business, engineering, pre-medicine, and nursing, to round out the top five (M. Barron, personal communication, June 26, 2006). Among IM contacts who were high school seniors, 26 students expressed an interest in business, 14 were unsure, 11 stated nursing, nine mentioned engineering, and five indicated pre-Medicine. Business was also the most popular intended major for international students, transfer students, and rising seniors; graduated seniors and juniors were more likely to be undecided. Overall, 54 (16 percent) contacts stated business as an academic interest, followed by 34 undecided, and 20 that listed engineering; 54 different academic areas were cited in total, with several contacts listing more than one academic interest.

As far as national trends at the time of this project, the Princeton Review (2006) ranked the most popular majors for first-year students in this order (Undecided was not considered): business, psychology, elementary education, biology, nursing, education, English, communication, computer science, and political science. Six of these 10 academic areas fell within the top 10 indicated by matriculating first-year students at this university (M. Barron, personal communication, June 26, 2006). Eight of the most popular majors indicated by IM contacts correlated with the Princeton Review's top 10. From these observations, matriculants and IM contacts were likely to express interest in the most popular majors for their generation, with IM-ers slightly more likely to do so.

Questions Asked

Specific questions asked by IM-ers were tracked according to month to find seasonal patterns of inquiries and to observe what students were most likely to ask over IM. The feature was advertised to prospective students by undergraduate admission and correspondingly half of all questions asked pertained to university admission. This general category was broken into 14 subdivisions that spanned everything from the likelihood of courses transferring to problems with the online admission profile students could use to monitor their enrollment status. The most popular area involved students asking if the university had received certain documents and about the student's admission status. Questions about the admission process and admission criteria were also very popular. Housing and financial questions each pooled approximately 10 percent of all questions asked, especially those about scholarships, award notification letters, and housing assignments. Numerous questions were asked about specific majors and academics in general. The orientation process for incoming students and campus visit options were other popular topics.

Seasonal patterns emerged surrounding some of these categories. Questions about a student's admission and document status, the most popular subject area, did not appear until mid-August

2005, which was when students typically began applying. They steadily increased to a peak of 13 questions in January, then tailed off in a nearly perfect bell curve by May 2006. General housing inquiries came steadily throughout the year at two or three per month, however spikes of eight and nine questions came in November, March and April. Questions about specific majors and Orientation were also steady at three to five per month with a spike of 16 and 12, respectively, in the month of March before dropping back to heightened and consistent numbers in April and May. Areas that saw limited, abrupt activity included registration concerns, orientation, student organizations, and AP test scores, all of which occurred in the spring semester. Focusing on consistency, questions about admission criteria, the admission process, scholarships, residency criteria, honors, and visit options were asked in virtually every month.

Student Activity

The above sections listed the variables tracked in this project and an array of trends associated with them, but they offered little in expressing how effective IM was in building relationships with prospective students and how receptive they may be to such a relationship with a formal contact like an admission representative. No follow-up was done with IM-ers to ask them what they thought of the interaction; but the activity of every contact was tracked, which may lead to inferences about the preference of students to use IM to keep in touch with the admission office of a university in which they are interested.

In total, 42 percent of residents, 42 percent of nonresidents, and 58 percent of international students used IM more than once, amounting to 42 percent of all individuals sending more than one IM. These numbers were encouraging in evaluating the popularity of IM for college admission, but the numbers were less impressive when looking at consistency of use. Only 21 (15 percent) of the 139 individuals that sent more than one IM used the feature for three consecutive months, over half of which were residents. Viewing these consistent IM-ers by type of student, nine were transfer students, seven were high school seniors, four were international students, and one was looking to re-enter the university. No pattern emerged to show that students used IM on a consistent basis by time of year, as an equal number of three-month groupings were found in the fall and spring semesters. Eight (six percent) individuals used IM for any five or more of the 12 months this project encompassed; five of these eight prospective students were residents and an equal number were transfers or high school seniors. Perhaps the most telling statistic was that 47 percent of these repeat IM-ers totaled all of their conversations within one or two months and 58 percent of all individuals that used IM once, never used the feature again.

When determining the effectiveness of IM in enrollment management, this variable took precedence because it alone shed light on the potential of IM in building formal relationships with

prospective students. Since the anonymity factor of IM prohibited the tracking of a ratio between IM users and matriculants, this factor became the next most highly-regarded pool of information.

Limitations

Limitations for this project were organized into six areas. The first related to the employed chat clients. Unfortunately, only one counselor could sign in and actively use each commercial chat client at a time as a privacy protocol. Outside the work place and for personal use, this was ideal; but in a setting where it would be beneficial for more than one person to log-on with the same screen name, it was a significant barrier. Additionally, IM was done amidst normal office responsibilities, which included presentations, appointments, meetings, and so on.

Online advertisement methods were adjusted to regulate the volume of potential activity. At minimum, a prospective user would have to click through three Web pages to view the link advertising the IM feature. The buddy-list feature of IM, which showed when the counselor was online regardless of what Web page the user was browsing, made the Web page location a non-issue for sending additional IM's. Without question, placing the IM Web page closer to the front of the admission homepage would have likely led to a higher level of activity, but limited staffing required this restriction.

A third limitation related to advertising the feature as active during specific times of the day on certain days of the week. IM was advertised as active from 3:00 p.m.–5:00 p.m., Monday through Thursday. This was done for three reasons: first, so the counselor could address other daily office responsibilities; second, so students had a reliable window of time in which to IM the counselor; third, to funnel student activity to an after-school period that correlated with normal workday hours. Friday was not included in this time span because prospective students were not expected to actively look into future colleges at the end of the school week, and the admission counselor often had large visit program responsibilities on those days. This being said, the counselor was actually available from approximately 12:00 p.m.–5:00 p.m., Monday through Friday, nearly everyday for the duration of this project. Though a potential compromise to the integrity of this experiment according to the advertised timeframe, the counselor logged onto IM more often in the interests of customer service and to explore the possibility of significant activity during other hours of the day.

The anonymous nature of IM created another limitation, because students initially shared only a screen name with the counselor. Additional information, and the accuracy of that information, was at the discretion of the individual to share. Asking these students for their names would compromise the anonymity factor, lead to privacy issues or lead to false information. This made tracking students through the admission funnel from prospect to matriculant an impossible task using commercial chat clients.

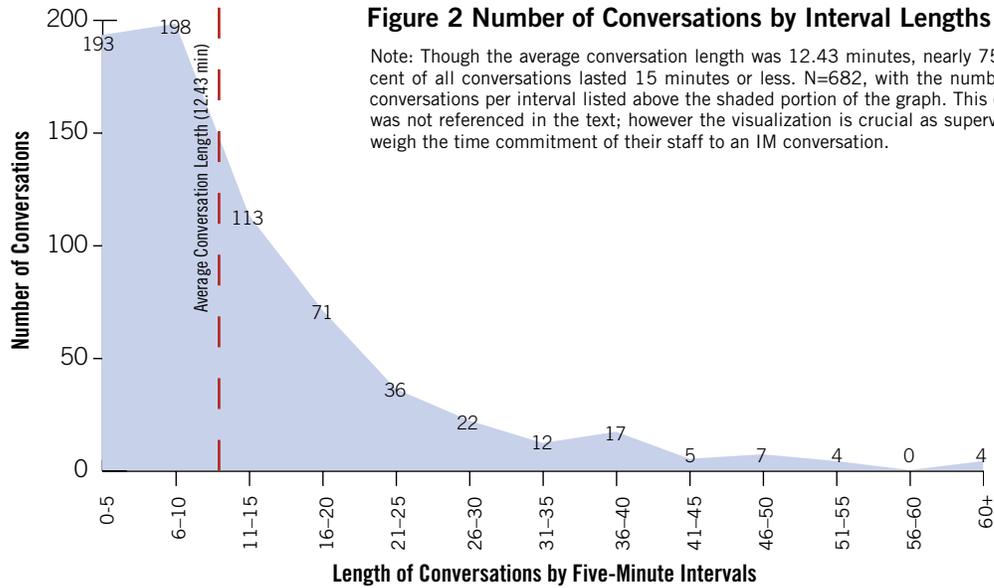


Figure 2 Number of Conversations by Interval Lengths

Note: Though the average conversation length was 12.43 minutes, nearly 75 percent of all conversations lasted 15 minutes or less. N=682, with the number of conversations per interval listed above the shaded portion of the graph. This chart was not referenced in the text; however the visualization is crucial as supervisors weigh the time commitment of their staff to an IM conversation.

Privacy concerns were a significant limitation—the Family Educational Rights and Privacy Act (FERPA) stated that “schools must have written permission from the parent or eligible student in order to release any information from a student’s education record” (34 CFR § 99.31). Higher education offices that worked with the public, such as admission, financial aid and housing, typically had established policies and procedures to comply with FERPA for telephone calls, email, and in-person conversations; however, IM was a new area for FERPA consideration. Throughout this project, students requesting to alter specifics about their academic record, such as change of major or orientation date, were asked to call the university and speak with a specific office or staff member. Referring to Questions Asked, many questions fell under FERPA regulations and could not be shared in any detail. General advice was always given instead of sensitive or private information.

Finally, IM as a conversation tool itself became a limitation to helping students with their questions. Particularly with students looking to transfer, typing out how courses would transfer, how degree audits would be altered, how specific policies would apply, and so on, were better handled via telephone. In these cases, the counselor informed the individual that these details could best be explained over the telephone and gave the toll-free number for admission.

The above limitations shaped the necessary compromises that took this project from concept to one that was practical for implementation. They also made it possible for a single counselor to successfully maintain the IM feature and track its activity for an entire year. Despite them, the level of activity quickly escalated throughout the initial summer months and remained constant for the remainder of the project.

Conclusions

The two main questions at the outset of this project dealt with utilizing IM to maximize its potential as an outreach tool for college admission, and how effective IM would be in a formal relationship for Millennial students. This case study addressed these and provided insight on the popularity and way in which most prospective students may use IM during the college search process. Overall, conclusions on Millennial student use of IM in formal relationships by Green, et al. (2005) and Kindred and Roper (2004) were partially disproved by the unexpected popularity of IM in this formal setting, but also supported by the way in which students utilized the feature.

The popularity observed with IM in this project over the course of a calendar year strongly indicated that Millennial students were willing to use IM as a point of contact in a formalized setting. As expected, initial activity was low and increased with time. Two factors contributed to the dramatic increase observed during the first half of this experiment, specifically with the fall semester months: first, most high school seniors began their college search process and many transfer students began looking at new schools in which to enroll at that time; second, more students were exposed to the IM option as they browsed the Web page and visited campus. This study was unable to separate the impact of one from the other. In looking for consistency of use, two seasonal comparisons best supported the potential for IM. First, the initial two weeks of use, in June 2005, yielded 11 conversations; while 35 conversations were recorded during the final two weeks of this experiment in June 2006. Second, the average number of conversations recorded in the fall semester was 58 per month, while the spring semester averaged 64 per month.

These trends alone were not conclusive enough to disprove Kindred and Roper’s (2004) assertion that Millennials “preferred

to use IM in their social relationships, and e-mail for more formal situations... (p. 51),” but they did not confirm it. Additionally, Green, et al.’s (2005) Ersatz Social Engagement Theory study indicated that students considered information conveyed in an IM conversation to be less-valid and less meaningful than person-to-person contact. Despite these authors’ conclusions, this case study indicated hard data to the contrary; implementation in this formal university setting resulted in contact with over 300 students, 42 percent of which used the feature more than once, and resulted in either increasing or consistent activity for a full calendar year.

Looking at student behavior, or how often IM was used, the same data puts a much different light on Millennial student activity. A majority of prospective students (58 percent) used IM just once and only 15 percent of repeat IM-ers used the feature with any frequency (three or more consecutive months). Assuming that many students saw the Web page or advertisement and decided to try it out, the conclusions by Green, et al. (2005) appeared better supported; if students found IM to be useful and credible, they should use it more often than just once or twice over the course of an entire calendar year. Furthermore, the use of commercial instant messengers meant that prospective students could add the screen name “IowaAdmissions” to their buddy list after the first contact, see when the counselor was online along with all their friends, and send an IM if anything was on their mind. Most students did not use IM in this way with admission.

Relating these findings to the specific nature of the relationship between admission office and prospective student, IM was not employed for an entire year in a vacuum of communication media. That students used IM as an option amidst alternatives like the university Web site, campus mailings, emails, telephone, campus visits, guidance counselors, parents, etc., must be considered a successful utilization of this technology. In the end, if students were just testing

it out or if they were comfortable using it as their primary connection with the university, IM worked in tandem with everything else admissions did to build a relationship with each individual student.

This project was based on a wealth of research that expressed the importance for enrollment management to continually test new technologies and employ them as a complement to other outreach strategies (Hossler 1999, Steele 2002, Whiteside & Mentz 2003, Williams, 2000). With higher than anticipated popularity among individuals using IM but a lower than expected frequency of conversations with them, the suspicion by Kindred and Roper (2004) that Millennial students were curious about using IM in formal academic settings was supported, but enrollment management officials must be cognizant that students would likely view conveyed information as potentially inaccurate. IM has the potential to be a great outreach tool, but the messages shared must correlate with other informational resources in order for it to be a valid and effective feature.

Future Research

IM could be employed in enrollment management offices in a variety of additional ways, all of which should be tested to enrich and explore this body of research. Would IM in admission be as popular or effective at private colleges, or those with a lower volume of activity than a flagship university? Would activity levels be higher if the feature were offered later in the evening? What would be the impact of staffing IM with current students instead of a counselor, and how would those findings fit within the Ersatz Social Engagement Theory as the nature of contact became more social and less formal (Green, et al. 2005)? Finally, what would be the impact on activity if purchased IM chat software was implemented instead of the commercial IM clients used in this project?

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