*student*POLL

PUBLISHER'S NOTE

Internet now pervasive and powerful element in college choice; promises to become decisive factor in near future.

The emergence of the Internet, web pages, online applications and other new forms of communications technology in college admissions marks one of the most profound changes in the college selection process in history. With this issue of *student-*POLL™, we chronicle for the fourth consecutive year the near-geometric growth of these technologies and their uses among college-bound high school students across the country. *student-*POLL™, we are proud to say, has for four years been the only reliable source of comprehensive national data and insights on this critical topic.

The findings reported in this issue demonstrate beyond any doubt that the Internet has become one of the most important communications tools in college choice. It is now equal to paper as the preferred medium for filing an application, a key source of information as application decisions are made, and a major source of influence over final choice.

Equally important, our findings suggest that the much-ballyhooed digital divide (inaccessibility of the Internet to people of color and less affluent populations) nearly has been bridged in the college-bound market. Inferences can also be safely drawn from our findings that presage even greater changes in the years ahead, including the diminishing impact of expensive viewbooks and other print materials, the importance of substantive academic information in online recruitment communications, new roles for guidance counselors, and the promise of new possibilities and efficiencies in enrollment data collection and management.
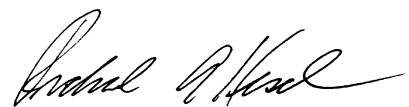
This issue also marks a major milestone for *student*POLL™ itself, one that my colleagues, Ben Edwards and David Strauss, had in mind when we conceived the idea for *student*POLL™ during a late-night discussion six years ago when we were launching our new firm, Art & Science Group. Our hope then was that we could provide *student*POLL™ without cost to the senior leaders of all four-year colleges and universities. But the hard economic realities of conducting top-flight survey research and publishing the results forced us to impose subscription charges.

Our original goal is now a reality. With the support of Embark.com, our new and exclusive corporate sponsor, *student*POLL™ will now be provided without cost to top decision-makers at all four-year colleges and universities. We will, of course, maintain our editorial independence, but Embark.com's generosity will enable us to share our findings with all of higher education. For this we are grateful, and we hope our readers will be as well.

Downloadable files of this and future issues of *student*POLL™, which you can print on your own printer, are available on our web site, *www.artsci.com* and our sponsor's site, *www.embark.com*. We are making these communications tools available so you can share *student*POLL™ findings with staff, alumni, faculty, trustees, and others.

With this issue we also welcome a new National Advisory Board, with representatives of nearly all of higher education's most important national associations. The Board will provide advice about issues to be explored in future issues of *student*POLL™ and offer counsel about the newsletter's editorial direction. Board members are serving as volunteers, so we are especially thankful for their involvement. A list of board members can be found on page 11.

We trust that *student*POLL™ will continue to serve as an important resource for higher education policy makers, and we welcome our new readers.

Richard A. Hesel
Publisher

1 Web access among prospects nearly universal.

Access to the Internet among prospective college students, when we first measured it four years ago, was a kind of digital luxury, afforded by only about 30 percent of those we interviewed. In those four years it has been transformed into a common digital currency, with 94 percent of those interviewed in our latest survey reporting access to the Internet/World Wide Web. (Table 1) At the rates of growth we have observed in that time span, access will reach nearly 100 percent in the next year.

Access to a computer is now universal. Not a single student among the 500 we interviewed said they lacked access to a computer. Fully 93 percent said they had access to a computer both at home and at school. Only five percent said they lacked access at home and a paltry two percent lacked computer access at school. (Table 2) Fully 99 percent of those who share a computer at home or only have access to a computer at school said they were able to use this computer when they needed it for schoolwork, personal use, and other purposes.

TABLE 1

Current and anticipated Internet access

	1996	1997	1998	2000
PLAN TO HAVE ACCESS IN NEXT YEAR	38%	22%	13%	6%
HAVE ACCESS	31%	72%	82%	94%
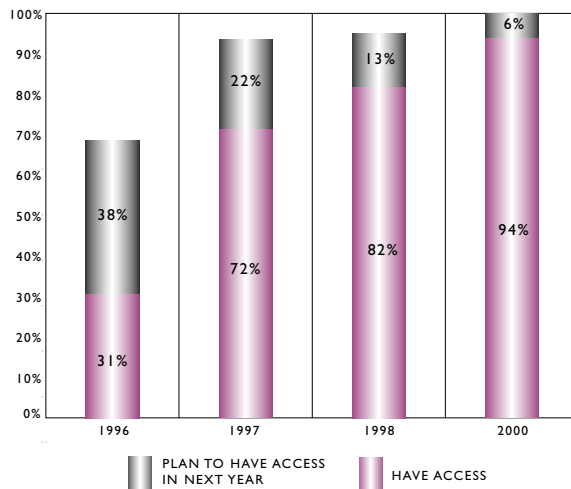
TABLE 2

Access to a computer

JUST SCHOOL 5%
JUST HOME 2%
BOTH 93%
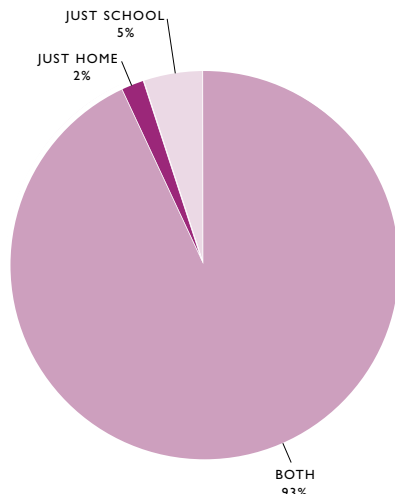
2 The digital divide has nearly closed in the college market.

TABLE 3

Internet access by income

>= $100,000	
$50,000 - <$100,000	
<$50,000	

50% 60% 70% 80% 90% 100%
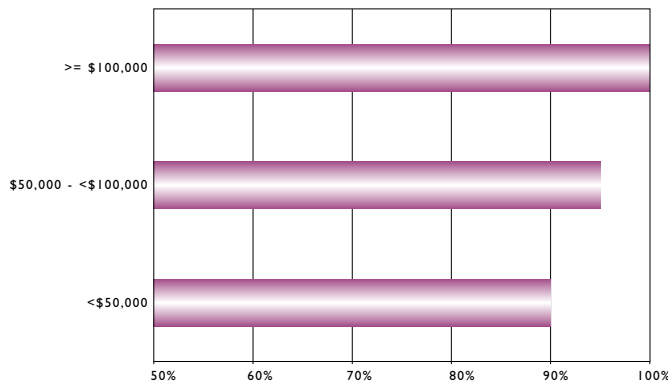
TABLE 4

Computer access at home by income

>= $100,000	
$50,000 - <$100,000	
<$50,000	

50% 60% 70% 80% 90% 100%
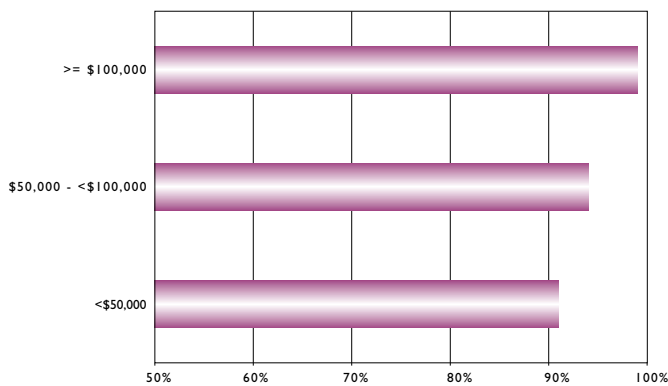
TABLE 5

Computer access by race

BOTH HOME AND SCHOOL — 91% / 93%

JUST SCHOOL — 7% / 5%

JUST HOME — 2% / 2%

0% 20% 40% 60% 80% 100%

■ MINORITY
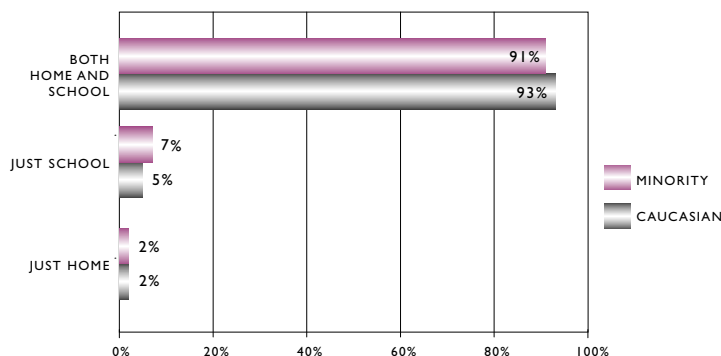■ CAUCASIAN

Our first survey of Internet access in 1996, demonstrated a substantial gap by income, academic ability, and race and ethnicity. Among the general population that gap remains sizeable, as many recent studies have documented. However, among the group we surveyed—high school seniors planning to enroll in four-year colleges and universities—the digital divide has nearly closed.

Our review of subgroup variations by SATI and ACT score, income, region, and race reveals only minor differences, most of them statistically insignificant, and we could find no evidence of a notable digital divide between major segments of the population of students who intend to enroll in four-year institutions.

For example, students from families in the lower income ranges are only marginally less likely to have Internet access than those from families in the highest income ranges (90 percent, 95 percent and 100 percent, respectively). (Table 3) Likewise, there were no significant differences in overall access to a computer across income levels or SAT/ACT scores, although students from families with incomes of more than $100,000 were more likely to have access to a computer at home than those from families with incomes below $50,000 (99 percent and 91 percent, respectively). (Table 4)

The closing of this digital divide is another convincing sign of the ubiquity of the Internet among prospective students of four-year colleges and universities.

When measured by race, computer and Internet access show few differences. In fact, in some cases, minority students appear to be more web-ready than Caucasians. Ninety-three percent of Caucasians and 91 percent of minority respondents reported having access to a computer both at home and school. (Table 5)
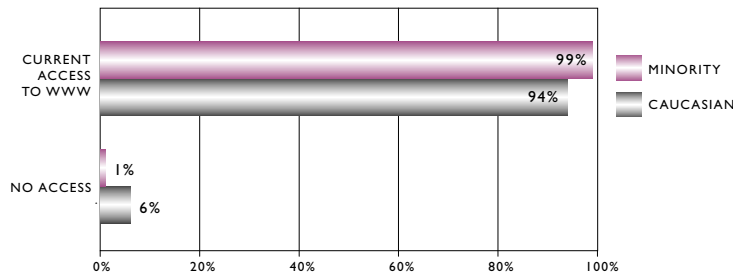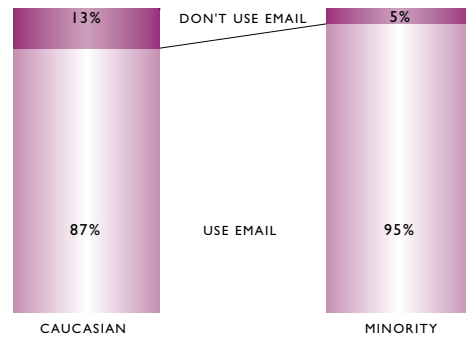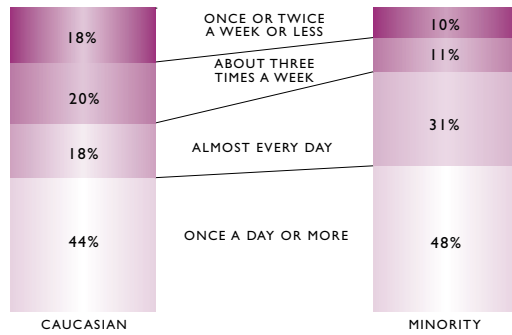
TABLE 6

WWW access by race

CURRENT ACCESS TO WWW		MINORITY 99%
		CAUCASIAN 94%
NO ACCESS	1%	
	6%	

0%   20%   40%   60%   80%   100%

TABLE 7

Email use by race

CAUCASIAN		MINORITY
13%	DON'T USE EMAIL	5%
87%	USE EMAIL	95%

CAUCASIAN   MINORITY

TABLE 8

Frequency of Internet or www use by race

CAUCASIAN		MINORITY
18%	ONCE OR TWICE A WEEK OR LESS	10%
20%	ABOUT THREE TIMES A WEEK	11%
18%	ALMOST EVERY DAY	31%
44%	ONCE A DAY OR MORE	48%

CAUCASIAN   MINORITY

Compared to Caucasian students (94 percent), a statistically-significant higher percentage of minority students (99 percent) has Internet access. (Table 6) Likewise, minority students use email more frequently than their Caucasian counterparts. Overall, 95 percent of minority respondents say they use email, compared to 87 percent of Caucasians. (Table 7) Seventy-nine percent of minority respondents said they use the Internet or World Wide Web "almost every day" or at least once a day compared to only 62 percent of Caucasians. (Table 8)

We should note that our sample of minority students included African-American, Hispanic, Asian American, and Native American students in roughly the same proportions that they are represented in the pool of college-bound high school seniors with the minimum combined SATI/composite ACT scores needed to qualify for participation in the study (800 and 17, respectively).

Due to the sample size, we were not able to analyze each racial group separately, and the findings reported for minority students as a whole may mask differences between specific racial groups. However, given the near-universality of computer and web access within the minority population in our sample, we doubt that the subgroup differences are significant.

3 Internet and email ubiquitous in students' lives; homework and email primary uses of Internet.
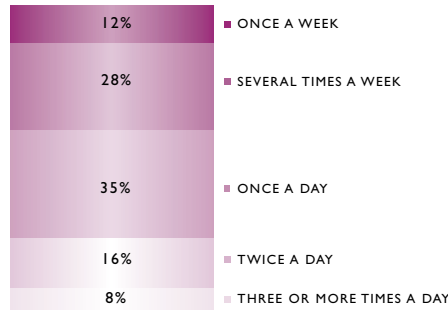
TABLE 9

Frequency of email use

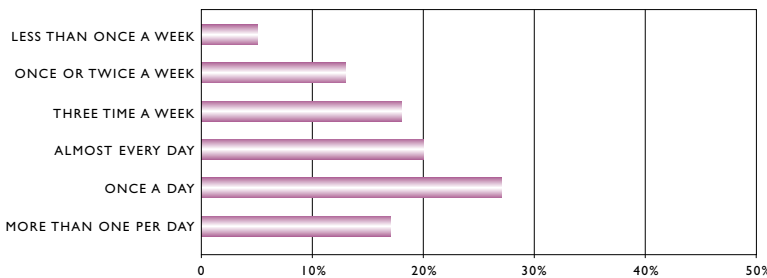|	
12%	ONCE A WEEK
28%	SEVERAL TIMES A WEEK
35%	ONCE A DAY
16%	TWICE A DAY
8%	THREE OR MORE TIMES A DAY

TABLE 10

Frequency of internet use

LESS THAN ONCE A WEEK	
ONCE OR TWICE A WEEK	
THREE TIME A WEEK	
ALMOST EVERY DAY	
ONCE A DAY	
MORE THAN ONE PER DAY	

(0% – 50%)

TABLE 11

Amount of time on Internet

- 5% LESS THAN 1 HOUR
- 21% 1 TO 2 HOURS
- 18% 3 TO 4 HOURS
- 16% 5 TO 6 HOURS
- 27% 7 TO 12 HOURS
- 14% 13 OR MORE HOURS
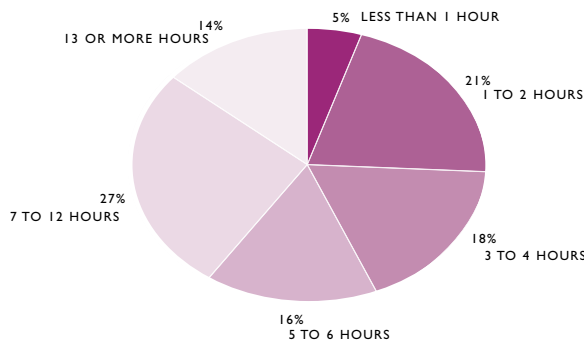
TABLE 12

Primary reasons for using the internet

RESEARCH OR HOMEWORK	
SEND AND RECEIVE EMAIL	
ENTERTAINMENT OR FUN	
ONLINE DISCUSSION OR CHAT	
COLLEGE OR CAREER INFORMATION	
INFORMATION	
TALK WITH FRIENDS/INSTANT MESSAGING	
SHOPPING	
GAMES	
OTHER	

(0% – 80%)
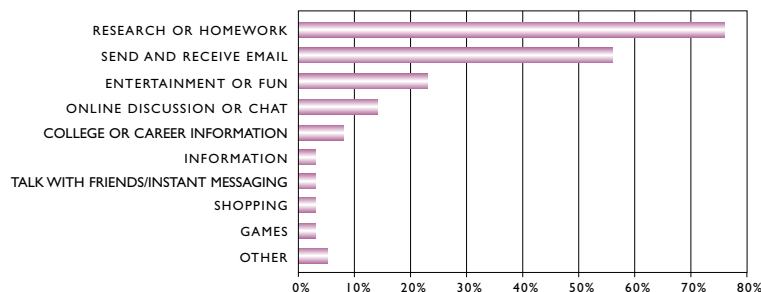
Use of both the Internet and email are now common, everyday occurrences among college-bound high school students. Eighty-seven percent of those we surveyed now use email, up from 60 percent in 1998. Fifty-nine percent of those who use email check their email or send messages at least once per day, and another 28 percent check or send messages several times a week. (Table 9) On average, students say they spend three hours a week using email.

Not surprisingly, Internet use is similarly frequent. Forty-four percent of respondents who use the Internet reported that they log onto the Internet one or more times a day. Another thirty eight percent use the Internet three or more times per week. On the other end of the spectrum, only five percent of those who use the Internet reported using the Internet less than once a week. (Table 10)

On average, respondents with access to the Internet spend more than 7.3 hours a week on it. (Table 11)

Given the frequency with which students access the Internet, we were curious how they put the technology to use. Through an open-ended question we asked respondents to describe their primary reasons for using the Internet. Homework and research were named most often, by three out of four respondents. Email, at 56 percent, was a distant second. No other purpose was mentioned by more than 23 percent. If we combine the totals for email, chat rooms, and instant messaging—all forms of person-to-person digital communication—the total, at 73 percent, approaches that for homework and research. (Table 12)

4 College web sites now a major factor in application decisions and final choice.

We examined the relative influence of the Web on college choice at three levels: information collection, decisions about where to apply, and the final enrollment choice.

At the first stage, the Web is second in importance only to guidance counselors. The question was posed on an open-ended basis: we first asked respondents about the sources of information they used as they considered where they would apply. Forty-eight percent mentioned a high school guidance counselor, followed by 37 percent who cited web sites with information about colleges. Traditional sources of information such as friends (25 percent), guidebooks/books (23 percent), college catalogs (21 percent), direct mail/viewbooks/brochures (19 percent), and parents (14 percent) trailed far behind. (Table 13) Respondents with SAT/ACT scores over 1300/29 were more likely to have mentioned web sites (47 percent) than those with lower SAT/ACT scores (32 percent).

Then we asked respondents about the primary sources of information that influenced their application decisions. Again, guidance counselors were mentioned most often, by 20 percent of respondents. The Web was second, at 15 percent. Other primary sources of information mentioned by more than 5 percent of the respondents included direct mail/viewbooks/brochures (10 percent), college catalogs (9 percent), guidebooks/books (9 percent) and a college visit (8 percent). Those with SAT/ACT scores below 1300/29 were more likely to cite high school guidance counselors as the primary source of information about application decisions (24 percent) than were those with higher scores (11 percent).

Next we examined the sources of information that influenced the final enrollment choice. At this stage, personal sources of information vault to the top of the list. Campus visits stood above all others, and were rated as very influential by 69 percent of respondents. Parents and other family members followed, cited by 46 percent. College web sites, at 31 percent, were clustered together with the college's admission staff, at 31 percent; current students of the school, at 32 percent, catalogs, viewbooks and other print materials, at 30 percent; friends, at 23 percent; and graduates of the school, at 24 percent. (Table 14)

Guidance counselors have a lesser role at this stage, as do rankings and high school teachers. Radio and television advertising appears to have only a miniscule impact (just 1 percent indicated that it was very influential).

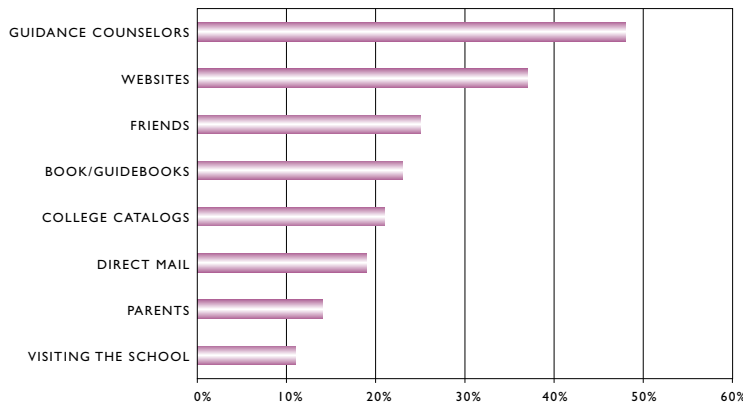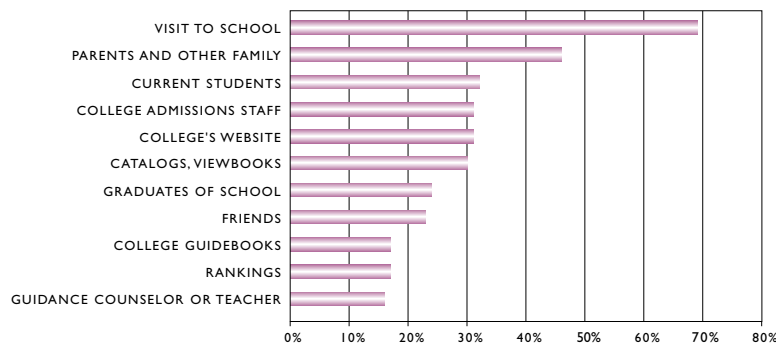**TABLE 13**

Sources of information about where to apply

TABLE 14

Information sources most influential in college choice

5 Academic content and information about costs and the admissions process most important web site elements.

The old adage about the three most important factors in real estate transactions finds new expression in the preferences of students for college web site information: academic content, academic content, and academic content. We asked students to evaluate the kinds of information that they were likely to encounter on a college's web site by rating how important it was to them.

Two of the three types of information most frequently rated as "very important" information concerned academic content: courses and majors and information about academic programs, both of which were seen as very important by more than 60 percent of respondents. (Table 15) Information about costs was also mentioned by more than 60 percent of those we interviewed. Admissions information and catalogs were seen as very important by 56 percent of respondents.

On the other end of the scale, information about faculty and an online campus tour were cited least frequently as very important kinds of web site information (11 percent and 16 percent,

respectively). Online forms, such as applications and financial aid estimators, were also mentioned by fewer respondents (21 percent and 35 percent, respectively). Surprisingly, campus pictures also ranked near the bottom of useful kinds of web site information. The latter finding may have much to do with the generally poor quality of campus photography on college web sites and the comparative disadvantage of computer screens as a medium for showing off a college campus.

What explains the apparent contradiction between the preference for online applications cited below and the relatively low importance of online forms on college web sites? Our hunch is that students expect to find an online application on any decent college web site, much in the same way they would expect to find an application in a viewbook mailing. It's routine, and thus considered less important.

TABLE 15

Importance of specific information on college web sites

Category	Value
COURSES AND MAJORS	
COST BREAKDOWN	
ACADEMIC PROGRAMS	
ADMISSION INFORMATION / CATALOGS	
GENERAL FEEL OF SCHOOL	
REQUEST TO BE MAILED INFO	
HOUSING INFORMATION	
FINANCIAL AID APPLICATION	
CAMPUS LIFE / STUDENT INFO	
FINANCIAL AID ESTIMATOR	
CAMPUS PICTURES	
ONLINE APPLICATION	
ONLINE CAMPUS TOUR	
FACULTY INFORMATION	

0% 10% 20% 30% 40% 50% 60% 70% 80%
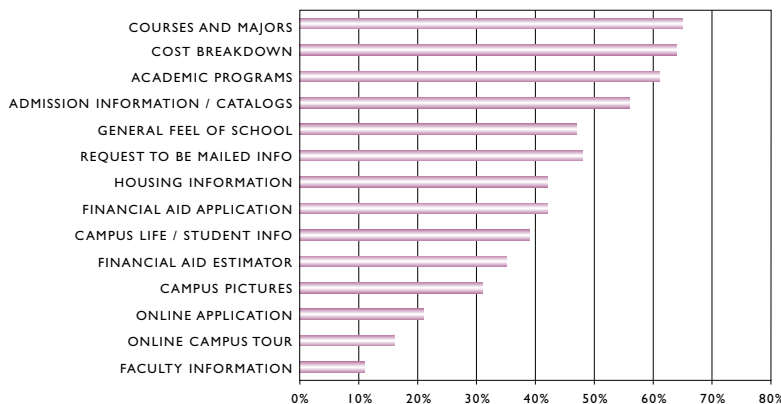
6 Preference for online application now equal to that for paper application; 35 percent applied using some form of online application.

The online application (an application accessed on a web site and submitted via the Internet) has now achieved parity with the paper application as the preferred application method: 43 percent of respondents indicated that if they had a choice they would prefer to file their college applications this way; a nearly equal 44 percent indicated that they preferred the traditional pencil and paper and "snail-mail" method. Another six percent prefer printing the application from the Web and mailing it

in. Only five percent indicated that they prefer to apply by using a computer disk that they complete and mail to the college. (Table 16)

Our analysis shows fairly uniform preferences across all groups for both the traditional application and the online application.

In addition, large numbers of those who actually applied using other methods indicated that, if they had a choice, they would have preferred the online application method: 84 percent of those

who used a disk that they mailed to the college, 47 percent of those who printed an application from the Web and mailed it to the college and 40 percent of those who used a traditional application.

Actual use of online applications has risen dramatically since we last measured it. In 1998, 18 percent of respondents said they used the Internet to complete an application, either through a direct online connection or by completing an application downloaded from the Internet and mailed to a college. In the current survey, 35 percent filed an application using these methods, an increase of almost 100 percent. Only two percent filed an application on a floppy disk, down from six percent in 1998. The percentage filing paper applications also fell, but modestly, from 95 to 93 percent. (Table 17)

TABLE 16

Preferred application method

		PAPER
		ONLINE
		PRINT & MAIL
		DISK
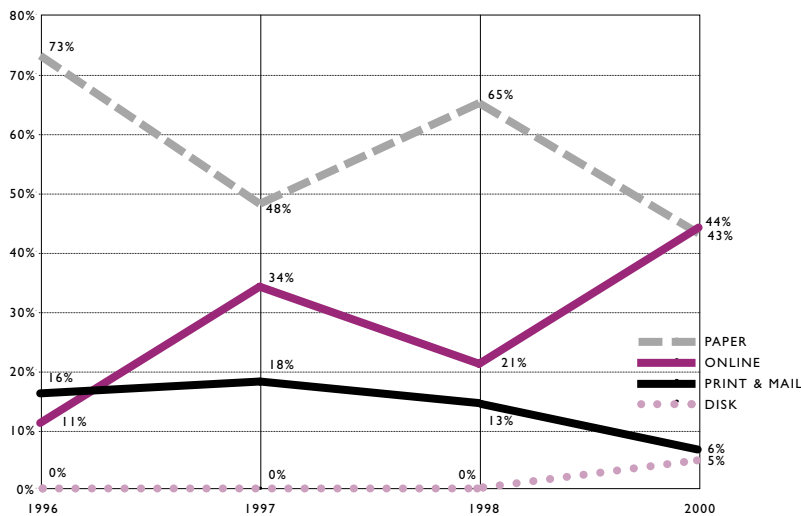
TABLE 17

Application method used
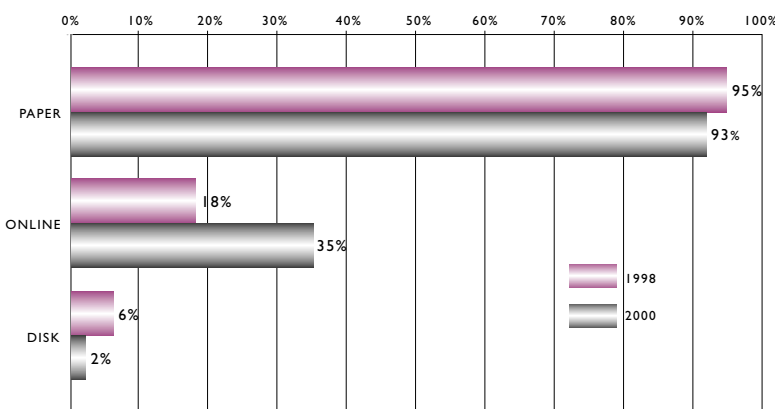
1998
2000

7 Security concerns greatest barrier to online application; immediate confirmation seen as answer.

What prevents students who do not apply online from using this application method? When we asked students who preferred filing by paper to evaluate various possible concerns as being a major factor, a minor factor or not being a factor in their preference, security concerns were predominant. Forty-four percent said that a fear that an online application would not reach its intended institutional recipient was a major concern; 41 percent indicated a major concern about the lack of security for personal information transmitted over the Internet.

Another 40 percent expressed a major concern about the difficulty of saving work on an unfinished application for completion at a later time. Almost one-fourth said they simply didn't like filling out forms on a computer. (Table 18)

Survey respondents were then asked to evaluate whether specific steps that a college could take to encourage them to apply online would make them more likely to do so. All of the proposed methods were received quite favorably. Ninety percent said an immediate online confirmation when the application was received would make them more likely to apply online; 87 percent, a waiver or reduction in the application fee; 83 percent, assurances that online applications are treated the same way as traditional paper applications; and 82 percent, strong security measures to protect the confidentiality of the information provided in the application. (Table 19)

TABLE 18

Concerns about online applications
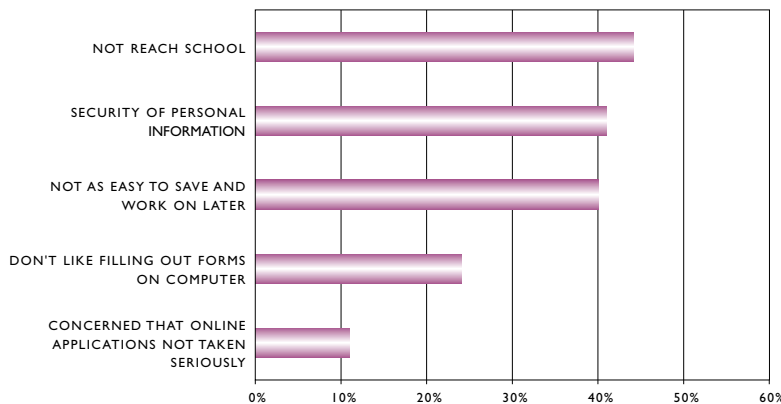
TABLE 19

Steps to encourage online applications

8 Guidance counselors have significant influence over web use in admissions process.

TABLE 20

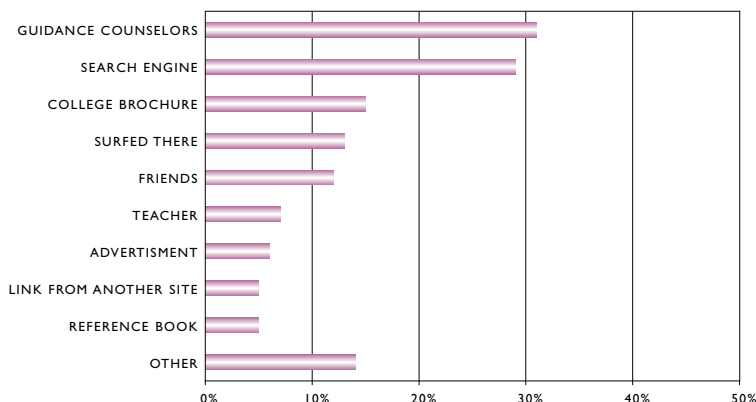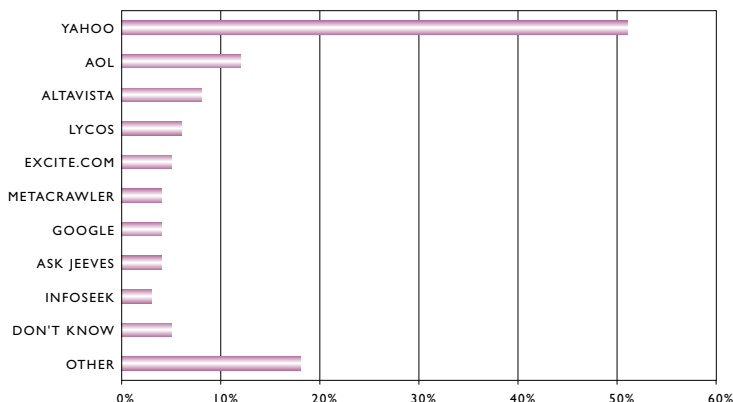### Source leading students to specific college information on the Web

GUIDANCE COUNSELORS	
SEARCH ENGINE	
COLLEGE BROCHURE	
SURFED THERE	
FRIENDS	
TEACHER	
ADVERTISMENT	
LINK FROM ANOTHER SITE	
REFERENCE BOOK	
OTHER	

0%   10%   20%   30%   40%   50%

TABLE 21

Preferred search engine

YAHOO	
AOL	
ALTAVISTA	
LYCOS	
EXCITE.COM	
METACRAWLER	
GOOGLE	
ASK JEEVES	
INFOSEEK	
DON'T KNOW	
OTHER	

0%   10%   20%   30%   40%   50%   60%

Those who predicted that the arrival of the Internet doomed the future of high school guidance counselors should find a new crystal ball. The evidence already cited above demonstrates conclusively that the influence of counselors, especially in the early stages of the college selection process remains strong.

Counselors also have a notable influence over use of the Web in the college search process.

Sixty-eight percent of the students we interviewed who had any discussions with guidance or college counselors at their high school said that the counselor recommended that they use the Web in the college search process. Forty-four percent indicated that their counselor recommended a specific web site for this purpose.

When we asked respondents who or what led them to college information and application web sites such as Embark.com, 31 percent mentioned their high school guidance counselor and 29 percent cited web search engines. These sources far outnumbered the other sources mentioned. (Table 20) The search engine used most often? Yahoo, by a wide margin, cited by 51 percent of respondents. No other search engine was mentioned by more than 12 percent of those we interviewed. (Table 21)

ADVISORY

Ensure that online applications and financial transactions with your institution are conducted over secure sites and strongly emphasize the security of your transaction server on all related web pages.

Since its assessment of the influence of the *US News and World Report* rankings on college choice was published in the fall of 1995, *student***POLL**™ has become the authoritative national source for market intelligence about critical issues in student recruitment and financial aid. It provides reliable answers to questions about student and parent attitudes and behavior that many college administrators could only answer with guesses, anecdotes, and hunches.

Published four times a year, *student***POLL**™ provides in-depth market data, rigorously conducted and analyzed to inform the strategic and tactical decisions institutional leaders and managers make about student recruitment and financial aid.

*student***POLL**™ has been a widely quoted media resource and has been cited in the *New York Times, Los Angeles Times, Chronicle of Higher Education, Christian Science Monitor, Washington Post, Pittsburgh Post-Gazette, US News and World Report,* and many other newspapers and magazines.

Printed copies of each *student***POLL**™ report are mailed free to college and university administrators and faculty, the media, and to others by special request. Current issues, as well as back issues, and an executable, animated presentation file on key findings from each issue, are also available on the Art & Science Group web site, *www.artsci.com*, and the web site of *student***POLL**™'s exclusive corporate sponsor, Embark.com, *www.embark.com*.

SURVEY METHODOLOGY

Findings reported in *student***POLL**™ are based on in-depth telephone interviews with a random national sample of high school seniors who plan to enroll in four-year colleges the following fall. To qualify for an interview respondents must have achieved a combined SAT I score of 800 or higher and/or a composite ACT score of 17 or more. Previously, *student***POLL**™ only surveyed high-ability high school seniors with a minimum SAT score of 1050. The study sample is drawn and/or weighted to represent a national distribution of students with qualifying SAT or ACT scores by geography, gender, intended major, and income. Surveys are conducted in the fall and/or spring of each year, with a sample size of 500 or more. The sampling margin-of-error is plus or minus 4 percent at a 95 percent confidence level.

Findings reported in this issue are based on research fielded in April, 2000. The table below provides an overview of the key demographic characteristics of the students interviewed.

DEMOGRAPHICS OF SAMPLE

Income	<$50,000	$50,000 TO $99,000	$100,000+	DK
	22%	34%	18%	26%

Test Taken	JUST SAT	JUST ACT	BOTH	
	30%	22%	48%	

Race	MINORITY	CAUCASIAN		
	14%	85%		

HS Type	PUBLIC	PRIVATE		
	83%	16%		

HS Size	<500	500 TO 999	1000 TO 1999	2000 TO 4999
	15%	27%	34%	22%

Gender	MALE	FEMALE		
	45%	55%		