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Surfing for International Opportunities:

How the Internet Shapes Student Choices

Prospective and enrolled college students are becoming more proficient at using the Internet to explore educational options at home and abroad. Universities with foresight have been quick to capitalize on enthusiasm for this medium, which has the power to capture and hold one's attention long enough to sustain interest in the institution. The ".net" is fast becoming a preferred tool for marketing to and recruiting new students. This description of a fictional student's first experiences with the Internet in searching for an opportunity to spend junior year abroad demonstrates the power of the Internet in shaping student choices.

David Forman was getting restless. As he began the second semester of his sophomore year, David knew he wanted to spend his junior year abroad. One part scholar and two parts romantic, he longed for an opportunity to broaden his perspective while learning to appreciate the history and culture of another nation. The one thing David knew with certainty was the country in which he would study. A few years earlier his family had vacationed in England and David had fallen in love with everything English. He loved breakfasting on scones and tea with cream, hopping aboard double-decker buses in London and scurrying to the upper level, hiking through the picturesque fields and byways of the Lake District, and criss-crossing the country via British rail. Why couldn't American trains be so comfortable and on time?

David thought the hard part was behind him—picking a school would be easy. But after countless hours pouring through the various college guides and catalogues, David began to have second thoughts about his forthcoming adventure. The books he researched, while presenting some descriptive information on each of the numerous institutions of higher education, allo-

cated too much space to bland numbers and figures—the cost of tuition and room and board, minimum entrance score requirements, and even the population of neighboring cities. The books he read did not capture the unique characteristics of the schools located in England, especially the lesser known colleges and universities. Discovering information about these types of schools was important since David had no desire to apply to the better known, elite institutions like Oxford or Cambridge. The catalogs also ignored other desired information, such as types of student organizations, availability and quality of undergraduate housing, or even courses offered at the respective institutions. At best, these publications devoted a sentence here or there to such areas; they certainly did not provide the needed material on which to base such an important decision.

David was fast becoming discouraged about the prospects of ever catching a show at London's West End or downing a lager and lime at some quaint English pub. How would he obtain the necessary information in order to make his choice? Time was working against him, and he began to dread the idea of relying on time-consuming postal exchanges.

A New Awakening

David began another seemingly fruitless day of catalog research at the Office of International Student Affairs. He had been periodically quizzing Hannah Thierfeld, an adviser in the office, about her knowledge of the British Isles. She was extremely helpful, but it wasn't until the day she introduced David to the Internet that he thought she began to earn her salary.

Hannah explained that the Internet was a global linkage of computer networks, allowing almost instantaneous hookups around the world. Unimaginable amounts of information were available at the click of a computer's mouse or through a series of keyboard commands. Entire documents could be easily downloaded from one computer to another. Messages could be sent and received between individuals through the use of electronic mail, or among dozens of people at once through discussion groups known as Listservs. David became fidgety in his seat as Hannah enlightened him on this thing she occasionally referred to as "cyberspace." He was excited, but still not entirely sure how the Internet would help him in his quest. Was she going to give him the addresses of English students, sort of like college-aged pen pals? Or was she going to access files that would seem like a rehash of the catalogs he had spent days searching through? To his surprise, the informa-

tion Hannah provided included these attributes but tapped a far more potent resource.

Seating herself at the terminal, Hannah logged onto her mainframe computer account in order to access the WorldWide Web. She explained that the "Web" is a series of protocols that enable the user to access information on the Internet and that its main feature is its "hypertext" orientation. This allows Web documents to be linked up with other documents stored in repositories throughout the Internet. By simply accessing these hyperlinks, a user can easily criss-cross cyberspace, unearthing a plethora of material. Not only could text be accessed, but, as David was soon to learn, graphics, and even audio could be viewed and heard through the computer.

The first stop on David's journey on the WorldWide Web was the educational link on the Yahoo Home Page (a Home Page is the term for the initial linkage destination of any WorldWide Web connection). Yahoo has dozens of general categories to assist any exploration of the Internet. Within each category are thousands of linkages to information all over the globe. Through the educational link Hannah showed David how to connect to the subcategory of universities. The Web address for that connection is listed as *http://www.yahoo.com:80/Education/Universities/*. Information is posted on scores of universities from around the world, from Argentina to Latvia to Zambia. Scrolling through the main menu, David came across the listing for schools from the United Kingdom. Entering this area he was delighted to discover postings for almost 100 universities, many of them in England. Enthusiastically, he began to delve into the information provided for the selected schools. He thanked Hannah for her assistance and started on his adventure in "surfing" the Internet.

After an hour or so spent ricocheting from menu to submenu, David was a bit weary and suffering from a mild case of information overload. He could not believe the extent of the descriptions and facts he was uncovering for the institutions. He was particularly enthused by descriptions of Exeter University, located just three hours north of London by car. The university described itself as being "recognized as amongst the most attractive of any British university...combining all the advantages of a modern city with the charm of one with a long and colourful history. The medieval cathedral, with its beautiful close, and the Guildhall, which is the oldest working civic building in the country, are in the City Centre. Extensive Roman remains, medieval churches, Tudor homes and Georgian terraces all track the City's past."

Virtual Attachment

The electronic connection with Exeter had drawn David in, with its talk about the "wide range of rare, interesting and beautiful plants [that] have been used throughout the Estate exploiting the micro-climates created by the buildings and the natural features of the site. These plant collections not only create an attractive landscape, but are also used in teaching and research." Having recently selected a major in horticulture, David flushed with excitement as he continued poring through the university's Web page.

Under the menu heading of "Tour of Grounds" he found the following description: "The soil is a heavy clay loam on the acid side of neutral which is quite fertile but in which it is sometimes difficult to establish young plants. The underlying rocks are culm measures of Carboniferous age locally called 'shillet'." He hadn't discovered information like that in any of those stale catalogs!

As he continued his exploration of Exeter, David was astonished to be able to view flattering photographs of the campus. By merely clicking on certain points of the school's Home Page, he was able to look at colorful reproductions of the campus.

Not only were aerial views included in this display, but there was an option to tour the campus through an image map. This feature allows individuals to more fully appreciate the attributes of a campus in a graphical representation. When he pointed the cursor and clicked on individual buildings on the "image" map, information popped up on the screen describing the type of activity that took place in that particular structure. The image map, along with a multipage and heavily detailed textual tour of the campus, provided David with an exhaustive look at Exeter University. In some respects he felt he had actually visited the institution. The information and pictures had presented him with a multidimensional overview and answered most of his questions in "real time."

In addition to the deluxe tour, the posting contained a concise history of the University, a listing of pertinent facts and figures (over 9,000 students, for example) and even a mention about the aged old problems with campus parking—"There is pressure on car-parking space on both campuses and in the City. Students are therefore discouraged from bringing a car to Exeter." There were directions to the campus by road, rail or plane; a discussion of the weather conditions a student might face; detailed major requirements; and an exhaustive listing of course offerings. He even found information on per-

sonal counseling, academic assistance, and pastoral care.

After more than two hours of browsing, David had to sit back in his chair and reflect on all the information he had gathered. Clearly, he was engaged in a decision about Exeter, and he was beginning to feel a strange attachment to a place he had never actually visited—or had he?

The next day he was back at the Office of International Student Affairs to continue his journey through the Internet. He felt his mind was made up about applying to Exeter University, but he wanted to make absolutely sure of his choice. He had scoured the university's Web page for general information about the school and its academic offerings, but he was also interested in the cocurricular activities. The category of "Student Life" was a well-spring of information on nonacademic interests. There was the Guild, which acts like the programming board at a U.S. institution's Student Center. The Guild sponsors live entertainment from noted performers and finances more than 100 student societies. New students, he learned, are introduced to these opportunities during the first week of the term at the "Freshers Squash."

Intercollegiate athletics have a governing body known as the University Athletic Union (AU). Forty-nine clubs are affiliated with the AU including major sports like rugby, rowing, and tennis. They also sponsor noncompetitive outdoor sports. Playing fields and athletic facilities are plentiful, David discovered, including gymnasia, tennis courts, and rugby, football, and cricket fields.

By lunch he was satisfied that he would apply to Exeter for his junior year abroad. Before he logged off he clicked on the area for admissions information and carefully wrote down the electronic mail address sending away for an application. On the way out of the office he thanked Hannah for her assistance and guidance with his search.

Famished, he headed for the dining hall, but stopped when he was half-way there. Pausing momentarily, he decided to take a detour to the campus Computer Center to apply for his own account. With it, he could surf the Internet and the WorldWide Web on his own.

The Power of Internet Applications

While David Forman's exploration of schools abroad might still be atypical, the resources on the Internet, and primarily on the WorldWide Web, offer computer users a vast array of information—textual, graphic, and audio. As his search demonstrated, an institution's catalog, available courses, major

requirements, faculty listings, and general rules can be accessed immediately (in real time). Numerous photographs that offer flattering vignettes of campus life, as well as interactive maps, can be accessed at the mere click of a computer's mouse.

The resources of the Internet, with special emphasis on the WorldWide Web's ability for hyperlinking documents on site or at more distant locations, afford colleges and universities a very inexpensive, yet powerful tool for promoting their campuses to the international student community. Creative enrollment management administrators, attempting to attract a more international clientele to their campuses, have begun to exploit this linkage to the world at large by staking out a presence on the Internet. For most institutions, the expertise needed to create a truly remarkable display of information and images is already in place within their campus computer center.

As our fictional David Forman discovered, available information about a college or university is not limited to text. Color photographs, costly to reproduce and distribute through normal channels, can be accessed by multitudes of prospective undergraduates without duplicating and mailing expenses. Audio, while not yet widely used, can offer interested students the sounds of the campus, too, or enable them to hear messages by faculty, the chancellor, or other students.

Technology for improving the access and interactiveness of information on the Web is continually evolving. A few tools that are just now gaining wider acceptance are 3-D imaging of graphics; embedded animation applets that can provide animation to WorldWide Web pages, and; online virtuality, which allows for an interactive, 3-D based simulation. For example, a static picture of the student union could become a thing of the past as browsers take a stroll through a graphical representation of the building, all the while taking in the sights and sounds.

The most common application on the Internet is also the simplest to use—electronic mail (e-mail). David Forman had the e-mail addresses of the entire Admissions office staff of Exeter University at his disposal if he needed a more "humanized" answer to a question. By circulating electronic mail addresses on institutional publications, the communication capabilities and the sharing of advice and information with international students can be substantially improved. Since e-mail affords almost instantaneous linkages around the world, its impact as an effective information management link should not be underestimated.

Recent measurements of the growth of the Internet here and overseas have shown its use growing at an accelerating rate. In the United States, estimates of total users ranges from 20-40 million. In the United Kingdom, the number of "cybernauts" has more than doubled in a year to 500,000. According to International Data Corporation another 200 million people will log on to the Internet by the turn of the century.

Much of this growth, at least within America, is within the ranks of undergraduate students who have easy access to institutional mainframe accounts. In addition, residence halls are being wired so that personal computers brought from home can be readily hooked up to a student's account. With this accessibility students are increasingly exploring the great expanse of the Internet, searching out information at home and abroad.

While the WorldWide Web is currently the resource of choice on the Internet, listservs are another utility available to those interested in international students and in the subject of international education. These are a kind of discussion group. Users subscribe to a list and then automatically receive in their e-mail "in-basket" all the electronic mail sent by participating individuals in the Listserv.

To subscribe to a Listserv, electronic mail is sent to the Listserv address. Within the body of the message, users subscribe to the specific list and include their full names. For example, if John Doe were to subscribe to the INTER-L described below, within the body of his e-mail to the Listserv address he would type: subscribe INTER-L John Doe. Within moments, a return message would be automatically sent from the Listserv software, either welcoming John to the Listserv or instructing him on what to do next.

Traffic on these groups can be extremely low, from less than a few messages per month, or very high, as on the INTER-L Listserv, where over 80 pieces of electronic mail are sent to subscribers each week.

There are currently four Listservs that deal with the subject of international students and international education. The most widely utilized is INTER-L (subscription address: Listserv@vtvm1.cc.vt.edu). With almost 3000 subscribers, the INTER-L Listserv concentrates on technical issues that include policies and procedures and academic issues in dealing with international students.

Other Listservs that can provide information and ideas on the topic of international students and education are SECUSS-L (subscription address: Listserv@ubvm.cc.buffalo.edu), which focuses on the sharing of knowledge,

information, and perspectives for overseas educational opportunities with professionals in the field of international education; ACPACOMX (subscription address: Listserv@mitvma.mit.edu), which is a discussion list of the American College Personnel Association's Commission X on international students; and INTED-L (subscription address: Listserv@uwwvax.uww.edu), which is an outlet for the International Education Network of the National Association of Student Personnel Administrators.

Ethical Issues and Problems

When David Forman completed his journey through cyberspace, he was naturally excited—not only because of the richness of the information he was able to unearth, but also because of the novelty of spanning the Internet. He almost felt like a kid in a candy store.

But like a child let loose in a store full of tempting wares, David did not fully consider some of the potentially negative ramifications of his choices. Although the Internet is a powerful information search vehicle that is becoming increasingly popular by the day, students, faculty, and administrators should be aware of its limitations and its potential to seduce. As a medium where users still seem to value free, uncensored expression above all else, the Internet attracts information that sometimes borders on the unbelievable. Although Exeter is a well-known and highly respectable university, other institutions presenting themselves to students in a favorable light may not be what they seem. In David's bedazzlement over the sights, sounds, and convenience of the medium, has he taken care to temper his enthusiasm with concern for issues like accreditation, transferability of coursework, and the likelihood of his acceptance? David treated the descriptions and listings under the exeter University Home Page as a forthright representation of the British institution. While there would be little reason to doubt information provided by as old and well established a university as Exeter, there might be some bending of the truth or even some outright misrepresentation by a newer and less known institution. One noted cybernaut has pointed out that, perhaps because the medium is so new, it is hard to discern quality presentation from quality content. We are still "vowed" by the fact that we can get the information at all and pay less attention to whether it is factual.

Anyone with access to Internet and the WorldWide Web can post scads of information for the world to see. Unfortunately there is little way of verifying the accuracy of the posted information, What safeguards are there against

David being duped into applying or sending money to another institution that exaggerates its virtues or even one that might exist only in cyberspace?

Instead of relying solely on Exeter University's Home Page for a discussion of the school's merits, David should also have resorted to more mundane, tried and true sources of information. He might have requested campus publications directly from Exeter and checked the information with third party sources. That might have given him a more complete picture of the institution and its offerings. In addition, and probably most importantly, he should have utilized the professional staff person, Hannah Thierfeld, more thoroughly—and conversely, she should have provided more up-front guidance. When an overabundance of information is presented to an Internet novice, the assistance of a trained counselor can help make sense of the sometimes bewildering and perhaps deceptive mass of facts and figures generated by the flight into cyberspace. As more and more undergraduates begin to access the Internet for academic as well as nonacademic purposes, student affairs professionals need to fill or at least to contribute to the rapidly developing role of Internet mentor. Professional staff can bring the skills and experiences they have utilized in their traditional roles of counselors, mentors, advisors, and advocates to assist students when they navigate this new technology.

Another potential problem for David is similar to the possible misrepresentation of information on a home page, but with farther-reaching ramifications. An institution of higher education may be a bit overzealous in representing itself to the world on its home page (as so many do in their view books,) but the school's adinistration usually authorizes what information is provided. Thus there is accountability within the institution. But what if a college or university permitted student groups or commercial vendors to list information on its home page that the school has not verified? Who would be responsible for any grossly inaccurate statements, illicit graphics, stolen materials, or even financial scams? Suppose, while David was pursuing the Exeter Home Page, he came across an offer to purchase a coupon booklet with discounts from area merchants, with a short-term deadline for procuring the booklet. Excited about the possibilities, he might have quickly processed and sent off a money order—only to find out later that the offer had disappeared from the home page, along with his money. The old adage, *caveat emptor*, is highly applicable to the Internet.

One other area requiring caution is in the transmission of sensitive data

via e-mail. Although commerce via electronic mail and the WorldWide Web has been growing at astronomical rates, the issue of security must still be considered when transmitting items such as, a university application form. Currently available encryption methodology may not be adequate. At this stage of Internet technological development, giving financial information and credit card or social security numbers via cyberspace may be a risky proposition. David would do better to request and return an application form through "snail-mail," and limit his conversations over the Internet to more innocuous topics.

Conclusion

Utilization of the Internet will continue to grow as an attractive avenue for informing international students about collegiate life in the United States and beyond. Through the use of such resources as electronic mail, Listservs, and the WorldWide Web, institutional administrators can easily promote their campuses in innovative and creative terms, as well as sharing information on international education.

As more prospective and current students become users of the Internet, providing online information about college and university campuses via cyberspace will become as routine and natural as publishing the standard glossy brochures and booklets now favored by institutions of higher education. However, the seductiveness of the medium requires caution in its use. Professional counseling continues to be needed.

Suggested Readings

Baier, J. L., and Strong, T.S., (eds.) *Technology in Student Affairs: Issues, Applications, and Trends.* Lanham, MD: University of America Press, 1994.

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