Academic institutions' electronic-recruitment efforts on academic diversity: A comparative analysis of websites of US, UK, and South Korean universities

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Abstract

This study explores the extent to which universities utilise the benefits of the web to reach one of their major public relations goals to increase international student recruitment. This study compares the content of the websites of the US, the UK, and South Korean universities in terms of information quality and system quality. A total of 261 websites were content-analysed in this study. Most of the three countries' universities use their websites as an effective tool to utilise various public relations performances such as information providers. But, they are not effectively using the web to connect with their publics in terms of two-way communication and interactivities.

Introduction

The increased demand on diversity in the current society has been significantly reflected in academic institutions. As a crucial centre of information and advanced technology, for example, the United States (US) has been constantly attracting many students and scholars worldwide. The size of the international student population in US universities has been steadily growing (Mori, 2000). According to Open Doors (2008b), an annual report on international education, in the 2006/2007 academic year, the number of international students attending US universities increased by 7 percent to a total of 582,984 and this total number is the largest ever. Open Doors reports that Asian students comprise over half (56 percent) of all international enrolments, followed by students from the Middle East (25 percent), Europe (10 percent) and Latin America (8 percent) (Open Doors, 2008b).

On the other hand, US students are also rushing to study abroad, eager to gain a sense of globalisation with improving foreign language skills and learning about different countries and cultures. The number of US study abroad participants increased by 8.5 percent to a total of 223,534 (Open Doors, 2008a) in the 2006/7 academic year. These increased numbers indicate a growing recognition by students and educators that an international experience is important to students' future careers. There has been an increasing interest in studying in more diverse destinations. The United Kingdom (UK) is the leading destination (32,705), followed by Italy (27,831), Spain (24,005), France (17,233), and China (11,064) in the 2006/07 year (Open Doors, 2008a).

In the process of recruitment, especially among non-profit organisations, reaching target publics and appealing to them to join the organisations is one of the major public relations activities (Esrock & Leichty, 2000; Liu, Arnett, Capella & Taylor, 2001; Hill & White, 2001). Every university, as a non-profit organisation, also shares the same goal: reaching its important publics, prospective students and their parents, and attracting them to enrol into the institution.

Media technology such as the World Wide Web (the web) may provide universities with a more effective strategy for their recruitment effort within a limited financial resource (Kang & Norton, 2006; Liu, 2007). The web serves universities in many ways. For the external

publics, the websites provide general information about missions, goal statements, policies, and services. Departmental home pages also expand information about academic majors and promote university recruitment. Professors and enrolled students use the web pages to enrich the instructional process. Faculty and staff members communicate with one another and collaborate together through the websites. The usage of university websites is expanded to enhance the reputation of the schools and to communicate with international students and their parents across the nations (Chapin & Fitzgerald, 2002; Kang & Norton, 2006; Liu, 2007; Mentz & Whiteside, 2003).

Today's young generation is more likely to use the Internet to research schools and communicate with them via online chat, email, etc. (Mentz & Whiteside, 2003). While prospective international students research and virtually visit universities far away from their homes, many enjoy the comfort of searching online, using the online application system, and receiving instant messages from admission staff (Kang & Norton, 2006; Mentz & Whiteside, 2003).

While the usefulness of the web has been examined in various areas of public relations such as corporate relations (Esrock & Leichty, 2000; Park & Reber, 2008), financial relations (Jun & Cai, 2001; Loonam & O' Loughlin, 2008; Ozdemir & Trott, 2009), governmental relations (Taylor & Kent, 2004), organisational relations (Liu et al., 2001; Taylor, Kent, & White, 2001, 2003), media relations (Callison, 2003; Hallahan, 2001; Hill & White, 2001), little research has attempted to investigate universities' public relations efforts on academic diversity by recruiting international students. The purpose of this study is to answer this question: How can the websites be a relevant public relations tool for universities to enhance international student recruitment? Specifically, this study explores the US, the UK, and South Korean universities' websites to determine the extent to which the institutions utilise the websites to accomplish one of their major goals; to bring academic diversity to the campus. This study is to compare the content of the websites of the three countries' universities in terms of their usability, information utility, and interaction with their international perspectives.

Literature review

Target publics of a website evaluate the site based on the content of information and their impression of it. From a public's perspective, an essential function of the web reflects that a public is goal-directed to achieve personal needs of information, communication, and entertainment (Callison, 2003; Kent & Taylor, 2002; Park & Reber, 2008; Taylor & Kent, 2004; Taylor, Kent, & White, 2001, 2003). Whether a websites matches with a public's goal is an essential communication key while the public evaluates the site. And, it, in turn, provides a great impact on that impression (Chapin & Fitzgerald, 2002; Kang & Norton, 2006; Kent & Taylor, 2002; Mentz & Whiteside, 2003; Taylor & White, 2004). For academic institutions, their websites exist as a primary information-seeking source for prospective students by providing the relevant information they are looking for (Chapin & Fitzgerald, 2002; Kang & Norton, 2006; Liu, 2007). As a result, the publics have a better chance to become well acquainted with the institutions the more often they visit the websites (Callahan, 2005; Mentz & Whiteside, 2003).

University electronic-recruitment (E-recruitment) is defined as a method of increasing college recruitment and enrolment; conducted by the academic institutions performing an electronic communication effort toward prospective students through computer networks such as the web (Callahan, 2005; Liu et al., 2001). As the widespread use and dependency on the media technology increases, so does the need to assess key dimensions associated with a website's quality, especially its information quality (Callahan, 2005; Chapin & Fitzgerald, 2002; Kang & Norton, 2006; Liu, 2007; Mentz & Whiteside, 2003) and system quality (Hallahan, 2001; Liu et al., 2001; Nielsen, 2000; Taylor, Kent, & White, 2001, 2003).

Information quality

Previous research has stressed the importance of information quality for a successful E-recruitment (Chapin & Fitzgerald, 2002; Kang & Norton, 2006; Liu et al., 2001; Mentz & Whiteside, 2003). For academic institutions, it is crucial that the information about themselves should be from their publics' perspective. In other words, E-recruitment should incorporate necessary information targeting international students to increase their enrolment. A strategically well-designed university website may reflect higher information quality.

There are several key dimensions of information quality for a well-designed E-recruitment website of universities; a) general information about the institution, b) application information, c) information about tuition costs and financial aid, and d) academic information targeting international students (Chapin & Fitzgerald, 2002; Kang & Norton, 2006; Liu et al., 2001; Mentz & Whiteside, 2003).

General information about institutions for international students

Providing general information about the institution is fundamental in E-recruitment. Today universities act much like corporations while marketing such products as academic programmes, majors and services. Thus, a better recruitment approach to attract more international students is to help them to understand the connection between the educational process and the institution's services. The website of a university should identify the university's history, location, goal and mission statements, and tie in the school's academic programmes and other supplemental centres such as the library, dormitory, transportation, gymnasium, athletic fields, etc. (Chapin & Fitzgerald, 2002; Liu et al., 2001; Mentz & Whiteside, 2003).

Additional information that academic institutions should address is to identify their unique academic circumstances. University websites often address average class sizes with language like, "the average class size for lower division courses is 30 and the size for upper division ones is 20," or "our average instructor/student ratio is 1 to 30." A website's message might be "our average class sizes of 20 to 30 makes it possible for faculty to work closely with individual students, conduct substantive in-class discussions and coach students in their areas of interest." Presenting data and explaining their associated advantages provide international students with information they use to determine the benefits of these average class sizes. Overall, a university's website should articulate benefits and clearly link connections for international students unfamiliar with the academy (Kang & Norton, 2006; Mentz & Whiteside, 2003).

Application information for international students

After the international students become familiar with an institution, they may seek to find information about the application process. The publics' satisfaction in finding the application form, filling it out, submitting it online, and receiving a response, confirmation or feedback is fundamental to the success of the university's E-recruitment. Thus, university websites should contain clear application information and the process via Frequently Asked Questions (FAQs). Additionally, a well designed website may include a check-list which reminds a prospective international student to check the status of an application and schedule a visit to the campus (Chapin & Fitzgerald, 2002; Liu, 2007).

Application information should also let the international students know how to contact the admission office staff. Many academic institutions now identify to whom the students correspond with over the phone, via email, and in person, along with the phone numbers, email addresses and the physical mailing address to mail the application and supporting materials (Chapin & Fitzgerald, 2002; Mentz & Whiteside, 2003). On the other hand, the website should have standard responses ready to be emailed or mailed to the publics. Some universities may use auto responders to send specific information to the publics who submit an email with certain questions checked. All of

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this contact information needs to be updated quickly on the website so that the publics have current information (Chapin & Fitzgerald, 2002; Mentz & Whiteside, 2003; Taylor, Kent, & White, 2001, 2003).

Information about tuition costs and financial aid for international students

In order to appeal to international students and their parents, university websites must clearly explain the possibility of financial assistance with links like scholarship opportunities and finding a job on campus. The website should present information on typical financial aid and net cost scenarios on the same data displays as published price, so the students and their parents will not prematurely select a university based on the full cost (Chapin & Fitzgerald, 2002; Mentz & Whiteside, 2003).

Academic information for international students

The university website should be tailored toward both domestic and international students. One of the problems most academic institutions have is that their websites lay out information mainly for domestic students (Liu, 2007). Such information confuses a prospective international student examining many institutions in a short period of time (Callahan, 2005; Chapin & Fitzgerald, 2002; Liu, 2007; Mentz & Whiteside, 2003).

Visiting publics not only search relevant information about an institution, but its website also directs the publics to a college or department site if they indicate their likely majors. The features on the site can be quickly tailored to the public's interests. Academic institutions therefore should persuade professors and administrators to participate in this recruitment process. Prospective international students may want to learn about available majors or courses they intend to study by contacting and discussing the different programmes with the faculty. A well organised university website mentions these professors, their areas of interest, and their current research (Mentz & Whiteside, 2003). Prospective international

students should also receive email messages encouraging them to inquire further about academic programmes and to communicate with faculty members and department chairs.

Overall, based on the literature review, two research questions are made;

RQ1: What information is supplied on the US, the UK, and South Korean universities' websites in the process of E-recruitment?

RQ2: How does the information differ from one another?

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System quality

Another key for a well designed website is system quality. This quality is characterised by the two concepts: usability and accessibility. Usability measures the quality of a visitor's experience when interacting with a website, a software application, mobile technology, or any user-operated device (Hallahan, 2001). Accessibility as defined by the World Wide Web Consortium (W3C) refers to the content being obtainable by user (W3C, 2004). Usability and accessibility share several systematic dimensions for an effective E-recruitment website of universities; a) foreign language version (Liu, 2007), b) ease of use/interface (Hallahan, 2001; Taylor, Kent, & White, 2001, 2003), c) simplicity of design (Hallahan, 2001; Liu et al., 2001; Nielsen, 2000), d) interactive function (Liu et al., 2001; Park & Reber, 2008; Taylor, Kent, & White, 2001, 2003), and e) entertainment (Chapin & Fitzgerald, 2002; Kang & Norton, 2006; Mentz & Whiteside, 2003).

Foreign language version

The most important system quality factor to attract international students is a matter of whether or not the university website has foreign language versions (Callahan, 2005; Liu, 2007). For example, a US or a UK student wants to study abroad in South Korea and is not able to read Korean. If there is only a South Korean version available on the website of the university the person is initially interested in

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enrolling, the student may lose his/her interest in studying abroad in the institution or in that country (Liu, 2007).

Ease of surfing websites and simplicity of design

Ease of web use and accessibility based on simplicity of web design is an important key factor for a visitor-friendly website (Hallahan, 2001; Kang & Norton, 2006; Nielsen, 2000; Liu et al., 2001; Mentz & Whiteside, 2003; Park & Reber, 2008; Taylor, Kent, & White, 2001, 2003). Convenient web navigation and easier information retrieval on a website can generate more revisiting behavior and further information-seeking and -gathering processes. As a result, the ease of web use and accessibility (i.e., ease of navigation, presence of site maps, incorporating a search engine box and minimal graphic reliance) attract a larger number of international students and enhance their positive attitude to the website (Hallahan, 2001; Kang & Norton, 2006; Kent & Taylor, 2002; Nielsen, 2000; Park & Reber, 2008). Providing a shorter loading time is also part of system quality. If it takes a long time to download an institution's website or home page, there exists a higher possibility that the publics would leave the website and would not return or revisit the website (Hallahan, 2001; Nielsen, 2000; Taylor, Kent, & White, 2001, 2003).

Interactive function with international students

Another important characteristic of E-recruitment is an interactive dialogic function between academic institutions and international students (Park & Reber, 2008; Taylor, Kent, & White, 2001, 2003). This two-way online communication between them will not only facilitate relationship-building, but also increase the publics' ability to learn how to browse and to find relevant information on the website (Kent & Taylor, 2002; Park & Reber, 2008; Taylor & Kent, 2004). The publics can gain more knowledge by freely asking questions about the academics, activities, and services available. For many students and their parents, using

web technology is still a new experience, so providing interactive learning tools helps them to develop and apply their abilities (Kang & Norton, 2006; Mentz & Whiteside, 2003).

Effective tools that university websites can use are an immediate email response, a chat room and an instant message board (Hallahan, 2001; Liu et al., 2001; Mentz & Whiteside, 2003; Taylor, Kent, & White, 2001, 2003). For example, when prospective international students chat with current students, administrators, or faculty members to ask about the school, this interactive online system may generate interest both to attract the students and to persuade admitted students to enrol.

Entertainment materials targeting international students

Web designers have emphasised the importance of providing entertainment materials on the web. An important factor to determine the likelihood of a revisit to a website is whether the visitors found the visit enjoyable. A revisit not only comes from satisfied information-gaining (Hallahan, 2001; Liu et al., 2001; Nielsen, 2000; Park & Reber, 2008; Taylor, Kent, & White, 2001) but also gains a more intrinsic, personal, and emotional reward derived from entertainment materials such as online games, funny video clips, etc. (Chapin & Fitzgerald, 2002; Kang & Norton, 2006; Mentz & Whiteside, 2003; Nielsen, 2000).

Overall, based on the literature review, the third and fourth research questions follow;

RQ3: What systematic function is supplied on the US, the UK, and South Korean universities' websites in the process of E-recruitment?

RQ4: How does the systematic function differ from one another?

Method

Sampling

A content analysis was conducted for this study, where the unit of analysis was a website of the US, the UK, and South Korean universities. The reason for choosing these three countries for this comparison is that there

is no doubt that the US is the leading country where international students come to study, while the UK is the leading destination where US students choose for their study abroad, and there have been noteworthy increases in foreign students studying in South Korea (1,267, up 32 percent) (Open Doors, 2008a; 2008b).

An educational search engine (www.college.edu) provided the sampling frames for the US and the UK samples of this study. For example, from the list of a total of 4,146 US universities shown on the search engine, 103 US universities' websites were systematically selected in the order they appeared (every 40th school website was picked from the population). Of the 103 sites, three sites of two-year institutions and technical schools were later eliminated, because this study compared four-year institutions among the three countries. Selecting 100 sites as the US sample was reasonable for a fair comparison with the UK and South Korean samples, while there are far fewer schools in both countries.

Like the US sample selection, a total of 407 UK universities' websites were shown on the search engine. Based on a systematic sample selection (every fourth school website was picked from the population), a total of 101 UK universities' websites were selected initially. Of them, one website was dropped later because it was under construction. Finally, a total of 100 websites were compiled as the UK sample.

A South Korean search engine (www.naver.com) was used to select the South Korean sample. Following the UK sampling procedure, among a total of 245 South Korean universities shown on the search engine, 61 websites were selected as the South Korean sample.

In sum, a total of 261 schools' websites were content-analysed in this study (100 from the US, 100 from the UK, and 61 from South Korea).

Procedures

A homepage has been defined by previous studies as the front door, or entry point, to the site (Chapin & Fitzgerald, 2002; Kang & Norton, 2006; Liu, et al., 2001; Mentz & Whiteside, 2003). With this definition, this study assumed that the home page of a university's website would contain the majority of content that its publics expect to find. Moreover, this study investigated hyperlinked pages from the front page because the linked pages would provide key information to content categories. Therefore, this comparative study examined the websites of the universities sampled including first-page and a variety of relevant sub-pages.

Two graduate students participated in this study as coders. Prior to the coding, they met with the authors to review the operational definitions and address any questions. A pilot content analysis on 10 additional university websites was done and the results were discussed to ensure intercoder reliability. The percentage of intercoder agreement for the quantitative analysis was measured. The final intercoder reliabilities of coding procedures for these two samples averaged 88 percent for the US sample, 85 percent for the UK sample, and 82 percent for the South Korean sample, using Holsti's (1969) intercoder reliability coefficient calculation formula. After content analyses were conducted, the properties and frequencies were compared among the three samples.

Operationalisation

The coders accessed the websites of the whole samples and identified all types of information and systematic functions based on the content categories constructed for this study. Then, the coders checked links to sub-pages to confirm the presence or absence of the content categories. Each site was coded for the presence or coders' agreement of 30 items in the 'Information Quality' categories (See Table 1) and that of 20 items in the 'System Quality' categories (See Table 2).

Information quality

Information quality was operationalised as the presence or absence of the following content categories: a) general information about institution (general information, promotional content, and population and diversity); b)

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application information (enrolment process, application documents and forms, contact information for the admission office, online application, payment method, information for exchange programme, application FAQs, and housing information); c) information about tuition costs and financial aid available to international students (documents and forms, financial aid information, contact information, and online applications); and d) academic information (degree options, colleges, and extracurricular activities) (Callahan, 2005; Chapin & Fitzgerald, 2002; Liu, 2007; Mentz & Whiteside, 2003).

A total of 30 items were measured in two-point options (1 = yes, 0 = no) and coders were asked to record presence or absence of each item (See Table 1).

Table 1. Operational definitions of information quality of a university's website

Information quality	Definitions
A. General information about institution for international students	
1) General information	The presence or agreement of driving directions or links to directions, links to satellite campuses, size and organisation of the campus, history, logos, university ranking
2) Promotional content	The presence of a clear statement about the university's statements on the philosophy and mission, of the university, community service information and promotional ads about the university
3) Population and diversity	The presence of campus population statistics, diversity information, and class size.
B. Application information for international students	
1) Enrolment process	The presence of enrolment procedures online
2) Documents and forms	The presence of downloadable forms and documents, coding of similar classes of information, enrolment score requirements such as SAT/ACT/TOEFL/GRE in the case of the US application
3) Contact information for admissions	The presence of a phone number and email address to contact admissions
4) Online application forms	The presence or ability to complete an online application
5) Payment method	The presence or ability to pay the application fee with a credit card
6) Additional information	The presence of a clear link to information for international students, the availability of enrolment information in additional languages, FAQ's, and housing
C. Information about tuition and financial aid for international students	
1) Documents and forms	The presence of downloadable forms and documents
2) Financial aid information	The presence of financial aid information such as loans, grants, and scholarships
3) Contact information	The presence of a means to contact financial aid representatives (email, phone)
4) Online applications	The presence or ability to complete an online application
D. Academic information for international students	
1) Degree options	The presence of a comprehensive list of degree programes offered by the university
2) Colleges	The presence of a list of colleges and Deans and a means to contact the key personal
3) Extracurricular activities	The presence of a list of clubs and organisations and a description of each

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System quality

System quality was operationalised as the presence or absence of the following content categories: a) foreign language version (existence of different language versions), b) ease of use/interface (easily identifiable URL, short scrolls of text, minimal unwanted or intrusive ads, minimal loading time, glossary of terms, and back-links to top of page and main page), c) simplicity of design (simplified menus, minimal graphic reliance, and minimal animation with high tech sound), d) interactive function (search feature or link to search engine, online help, participation in online survey, and discussion forum/chat room), and e) entertainment (using entertainment materials to appeal to visitors statements inviting them to return and to encourage visitors to bookmark the site) (Chapin & Fitzgerald, 2002; Hallahan, 2001; Kang & Norton, 2006; Liu, 2007; Liu et al., 2001; Mentz & Whiteside, 2003; Nielsen, 2000; Taylor, Kent, & White, 2001, 2003).

A total of 20 items were analysed in two-point options (1 = yes, 0 = no) and coders were asked to record presence or absence of each item (See Table 2).

Table 2. Operational definitions of system quality of a university's website

System quality	Definitions
A. Usability and accessibility	
1) Foreign language version	The presence of foreign language versions
2) Ease of use	The presence or agreement of an easily identifiable URL, short scrolls of text, minimal navigation menus, minimal pop-ups, minimal unwanted or intrusive ads, and minimal loading time, and a glossary of terms
3) Simplicity of design	The presence or agreement of providing simplified menus, minimal graphic reliance, and minimal animation with sound
4) Interactive function	The presence or agreement of providing a site map, a search feature or a link to a search engine, online help, participation in online survey and discussion forum/chat room
5) Entertainment	The presence or agreement of providing entertainment materials on the web to appeal to visitors and encourage them to bookmark the site

Findings

The first and second research questions asked what information is supplied on university websites in the process of E-recruitment and how the information is different among the US, the UK, and South Korean universities. A list of the frequencies and percentages of presence of the content categories is shown in Table 3. In order to see differences among the three samples, Chi-square ($X2$) statistics was used because all sample data were systematically selected from a fixed distribution or population.

General information about institutions for international students

Most of the US, the UK, and South Korean universities are good information providers for prospective international students via their websites. Most of the countries' schools provide general information about themselves for the students; location (the US=99%, the UK=98% and Korea=100%); size and organisation of campus (the US=87%, the UK=82% and Korea=83.6%); university history (the US=93%, the UK =89% and Korea=88.5%); logos and icons to create a sense of identification (the US=80%, the UK=75% and Korea= 70.5%); mission statement (the US=70%, the UK=69% and Korea=73.8%); and promotional ads about the university (the US=77%, the UK=74% and Korea=63.9%).

There are, however, significant differences among the three samples in the categories of general information such as driving directions/link to directions (the US=92%, the UK=89% and Korea = 1.6%, $X2$ (2)=85.7,

p<.01); links to satellite campuses (the US=38%, the UK=17% and Korea= 49.2%, X2 (2)= 15.9, p<.01); community service information (the US=83%, the UK=72%, and Korea=24.6%, X2 (2)=31.6, p<.01); diversity of campus population (the US=87%, the UK=63% and Korea=21.3%, X2 (2) =39.2, p<.01); and annual report (the US=58%, the UK=23% and Korea= 0%, X2 (2)= 63.2, p<.01).

On the three samples' websites, there is a lack of general information like average size of classes (the US=25%, the UK=21% and Korea=18%); clear policy statement (the US=37%, the UK=43% and Korea=41%); and philosophy (the US=45%, the UK=44% and Korea=41%).

Overall, universities predominantly use their websites to provide prospective international students with general school information in a highly consistent manner. This is especially true for the US, and the UK schools.

Application information for international students

Significant differences among the three samples are found, as the Korean schools provide a lack of application information on their websites; enrolment details (the US=94%, the UK=88%, and Korea = 18%, X2(2)=51.9, p<.01); test score requirements (the US=81%, the UK=70%, and Korea=37.7%, X2(2)=15.8, p<.01); information for exchange programmes (the US=97%, the UK=82%, and Korea=21.3%, X2(2)=47, p<.01); housing information for international students (the US=34%, the UK=41% and Korea=11.5%, X2(2)=16, p<.01); financial aid information for international students (the US=50%, the UK=23% and Korea=18%, X2(2)=20.6, p<.01); and online payment for international students (the US=91%, the UK=82% and Korea= 8.2%, X2 (2)= 68.4, p<.01).

In comparison, although the US and the UK universities rarely provide housing information and FAQs for international students, they use their websites for the E-recruitment by providing much more appropriate application information than Korean schools (See Table 3).

Information about tuition costs and financial aid for international students

The majority of the US and the UK universities use their websites to provide important information about tuition costs and financial aid like federal assistance, financial aid information, contact information, and online applications. On the other hand, only some of the information is shown on the websites of Korean universities. Thus, significant differences between the three samples are found in these categories; downloadable financial aid documents/forms (the US=100%, the UK=43% and Korea=8.2%, X2(2)=86.6, p<.01); information about financial aid (the US=99%, the UK=81% and Korea=8.2%, X2(2)=72, p<.01); contact information for financial aid (the US=99%, the UK=82% and Korea=8.2%, X2 (2)=72, p<.01); and online applications for financial aid (the U.S=96%, the UK=84% and Korea=3.3%, X2(2)=83.9, p<.01).

Academic information for international students

Academic information like degree options, college directory and description, and extracurricular activities, is shown on the three sampled universities. All of the schools presented the list of available degree programmes. And, most of the universities provide a directory of colleges and Deans (the US=97 %, the UK=99% and Korea= 96.7%). However, there is a significant difference among the countries in information about clubs and extracurricular activities available to international students (the US= 84%, the UK=78% and Korea=16.4%, X2(2) =49.5, p<.01).

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Table 3. Information quality of universities' websites (continued)

Information quality	The US	The UK	S. Korea	
	Frequency (%)	Frequency (%)	Frequency (%)	Chi-square (X^2, df=2)
C. Information about tuition costs and financial aid for international students				
1. Downloadable financial aid documents/forms	100 (100%)	43 (43%)	5 (8.2%)	86.6**
2. Information about financial aid	99 (99%)	81 (81%)	5 (8.2%)	72**
3. Contact information for financial aid	99 (99%)	82 (82%)	5 (8.2%)	72**
4. Online applications	96 (96%)	84 (84%)	2 (3.3%)	83.9**
D. Academic information for international students				
1. List of available degree programmes	100 (100%)	99 (99%)	61 (100%)	n.s.
2. Directory of colleges and Deans	97 (97%)	99 (99%)	59 (96.7%)	n.s.
3. Clubs and organisations	84 (84%)	78 (78%)	10 (16.4%)	49.5**

** indicates a significant difference among the three samples at p<.01.

The third and fourth research questions considered system quality of universities' websites. A completed list of the frequencies and percentages of presence of the content categories and Chi-square (X2) statistics are shown in Table 4.

Foreign language version
The major difference among the three countries' websites is that more than 60 percent of Korean sites have at least one foreign language version to attract diverse international students, while 14 percent of the US sites and only 2 percent of the UK ones have a foreign language version, mostly Spanish version (X2(2)=77.5, p<.01). Of the South Korean sites (N=40) that have at least one foreign language version, an English version (43.3%, N=39) is the one most frequently used on the websites, followed by Chinese (27.8%, N=25), Japanese (18.9%, N=17), and Spanish (10%, N=9).

Ease of use
The three countries' websites are not as graphically or textually intricate as commercial websites, because they seem to recognise the importance of ease of surfing their websites. While all of the sites took minimal loading time with simplified main menus, most of them place easily identifiable URL links (the US=80%, the UK=79% and Korea=72.1%); short scrolls of text (the US=96%, the UK=95% and Korea=95.1%); minimal navigation menus (the US=91%, the UK=94% and Korea=88.5%); navigation bars on majority of pages (the US =99%, the UK=98% and Korea=100%); back-links to top of page and main page (the US=95%, the UK=99% and Korea=93.4%); minimal pop-up windows (the US=99 %, the UK=92% and Korea=88.5%); and minimal unwanted or intrusive ads (the US=99%, the UK=93% and Korea=95.1%).

However, only a few of the schools provided the publics with a glossary of terms on their sites (the US=6%, the UK=2% and Korea=0%).

Simplicity of design

University sites, compared to commercial sites, are relatively simple in design. This interpretation is supported by the use of simplified menus on the three countries' school sites (the US=91%, the UK=94%, and Korea=90.2%); minimal graphic reliance (the US=88%, the UK=93% and South Korea=90.2%); and minimal animation with high tech sound (the US=92%, the UK=89% and Korea=93.4%).

Interactive function targeting international students

Fewer than 10 percent of the three countries' websites include interactive functions like online help (the US=5%, the UK=4% and Korea=9.8%); participation in online surveys (the US=7%, the UK=3% and Korea=13.1%); and discussion forum/chat room (the US=5%, the UK=10% and Korea=4.9%). The schools' simple site design is likely a factor for the low number of bulletin boards or chat rooms, which generally require an intricate technical construction process. Instead, a fairly high number of the websites provide a search feature or link to search engine (the US=94%, the UK=93% and Korea=93.4%) and presence of site map on the sites (the US=80%, the UK=82% and Korea= 65.6%).

Entertainment materials for international students

The three countries' universities seem to be less active in providing entertainment materials for attracting and retaining their publics and site visitors. Few schools provided entertainment materials and statements encouraging visitors to bookmark the sites (the US= 15%, the UK=19% and Korea=27.9%) and appealing to visitors to return (the US=30%, the UK=11% and Korea=31%).

Table 4. System quality of universities' websites

System quality	The US	The UK	S. Korea	
	Frequency (%)	Frequency (%)	Frequency (%)	Chi-square (X^2, df=2)
A. Foreign language version	14 (14%)	2 (2%)	40 (62.5%)	77.5**
B. Ease of use				
1. Easily identifiable URL	80 (80%)	79 (79%)	44 (72.1%)	n.s.
2. Short scrolls of text	96 (96%)	95 (95%)	58 (95.1%)	n.s.
3. Minimal navigation menus	91 (91%)	94 (94%)	54 (88.5%)	n.s.
4. Minimal pop-up windows	99 (99%)	92 (92%)	54 (88.5%)	n.s.
5. Minimal unwanted or intrusive ads	99 (99%)	93 (93%)	58 (95.1%)	n.s.
6. Minimal loading time	100 (100%)	98 (98%)	61 (100%)	n.s.
7. Glossary of terms	6 (6%)	2 (2%)	0 (0%)	n.s.
8. Navigation bars on majority of pages	99 (99%)	98 (98%)	61 (100%)	n.s.
9. Back-links to top of page and main page	95 (95%)	99 (99%)	57 (93.4%)	n.s.

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System quality	The US	The UK	S. Korea	
C. Simplicity of design	91 (91%)	94 (94%)	55 (90.2%)	n.s.
1. Simplified menus	88 (88%)	93 (93%)	55 (90.2%)	n.s.
2. Minimal graphic reliance	92 (92%)	89 (89%)	57 (93.4%)	n.s.
3. Minimal animation with high tech sound				
D. Interactive function	80 (80%)	82 (82%)	40 (65.6%)	n.s.
1. Site map	94 (94%)	93 (93%)	57 (93.4%)	n.s.
2. Search feature or link to search engine	5 (5%)	4 (4%)	6 (9.8%)	n.s.
3. Online help	7 (7%)	3 (3%)	8 (13.1%)	n.s.
4. Participation in online survey	5 (5%)	10 (10%)	3 (4.9%)	n.s.
5. Discussion forum/chat room				
E. Entertainment	15 (15%)	19 (19%)	17 (27.9%)	n.s.
1. Entertaining visitors to encourage them to bookmark the site	30 (30%)	21 (21%)	31 (19%)	n.s.
2. Entertaining visitors to return				

** indicates a significant difference among the three at p<.01.

Discussion

This study explored the extent to which universities utilise the benefits of the web, such as information provider functions, ease of use, and relational communication, to reach their major public relations goal, which is to increase recruitment targeting international students and their enrolment. Several salient findings contribute toward the current status of academic institutions' E-recruitment efforts on academic diversity.

First, the US and the UK universities are excellent as information providers for international students. The schools seem to comprehend the web's power in providing general information about the schools, like school location, school history, and mission statement. Furthermore, they effectively inform their publics about application and financial aid. However, South Korean universities' less aggressive nature on E-recruitment is manifested in the analysis of information provider functions as well. Only a few Korean schools provide information related to FAQs

for international applicants (29.5 percent), housing information for international students (11.5 percent), extracurricular activities (16.4 percent) and financial aid (18 percent). And, Korean websites are not aggressive at all in connecting with international students to explain the application process. For example, only a few of Korean universities' websites contained certain important functions like online applications (8.2 percent) and payment (8.2 percent).

Second, in terms of websites' system quality, South Korean universities' websites contain at least one version of foreign languages for prospective international students (62.5 percent), while only a few US and UK universities have a foreign language version (the US 14 percent, the UK 2 percent). It seems that Korean schools are more likely to show multi-linguistic concerns than the other countries.

All countries' universities do well in performing usability of the websites with easily identifiable URLs, short scrolls of text, minimal navigation menus, minimal loading time, a

search feature or link to a search engine, site map and navigation bars on a majority of the web pages. These results satisfy what the current college students expect from a website. Visitors to university sites place a high priority with respect to the ease of information access.

Only a few universities of all the countries had online help, participation in online surveys, discussion forum/chat room, and a glossary of terms. These findings demonstrate that they are unsuccessful in two-way communication with publics on the web. They are not effectively using the web to connect with their publics via polls, surveys, chats, bulletin boards, and other technological advances which the web can provide.

Furthermore, regarding relational functionality, few schools of the countries appeal to visitors with statements inviting them to return and encouraging them to bookmark. They are not yet utilising the benefits of the web, such as better quality design to attract more international visitors in terms of entertainment. Although their websites look uncomplicated in design, the authors envisage that the design of many sites actually proves to be of low quality. In this sense, the universities of the three countries need to adopt active strategies to more effectively utilise their websites and develop better quality design to appeal to international students for E-recruitment. Furthermore, interactive functions require more advanced skills in developing web pages for the universities. With more skilled technical staff involved in the web construction and maintenance, the interactivity level can be improved.

The limitation of the study is that it focused only on analysing universities' websites. Research into other factors such as academic reputation and geographic location will provide more insights into the E-recruitment effort via the websites. Additionally, further studies surveying the perception and experiences of international students who are already enrolled in a foreign university about their use of institutions' websites will be interesting to conduct from the public's perspective.

Overall, the indepth analysis of content structure and computer-mediated functionality reveal several interesting trends among the US, the UK, and South Korean universities' websites, demonstrating the potential power and significance of these sites as an E-recruitment tool for the universities.

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