7-1-2011

Sustainable Leadership: Creating Foundations for Lasting Change

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Academic Leadership Journal

The change in the United States population and the pace of Internet technology-perhaps more dramatic than most universities may have forecasted-translates into more diverse prospective students with changing needs and interests in university education (Wilson & Meyer, 2009). Immigration and U.S. population growth patterns have converged into a new prospective student profile (Banks, 2008), such that between now and the year 2050, one in three U.S. residents will be Hispanic (U.S. Census, 2009). Similarly, African Americans and Black immigrants will increase to 15% of the U.S. population, and the Asian population will grow from 5.1% to 9.2%. People of two or more cultures will more than triple between now and the year 2050, and minority children will constitute 62% of U.S. children, up from 44% today. The new challenge of recruiting new techno-savvy diverse prospective students is impacting many dimensions of higher education, particularly the historic euro-centric focus (Eckel & King, 2009).

In the last two decades, key regulatory boards as well as educational and professional organizations have established standards and provided resources to encourage the infusion of multicultural and international competency into higher education learning outcomes. For example, Criteria 1.5 under the Western Association of Schools and Colleges (WASC) Standard 1: Defining Institutional Purposes and Ensuring Educational Objectives states: "Consistent with its purposes and character, the institution demonstrates an appropriate response to the increasing diversity in society through its policies, its educational and co-curricular programs, and its administrative and organizational practices" (WASC, 2008, p 12). Among the many associations that support institutions of higher education are the American Council on Education (ACE) and American Association of Colleges and Universities (AACU). These institutions offer conferences and databanks of contemporary resources for universities seeking to increase the breadth and depth of diversity infusion for more contemporary student learning outcomes (AACU, 2010; ACE, 2010; also see Olson, Evans, & Shoenberg, 2007; Olson, Green, & Hill, 2006). New accreditation standards are increasing the pace of change in higher education and the availability of written guidance and conferences by national associations (see for example, Ryu, 2010; Williams, Berger, & McClendon, 2005).

As universities progress in their multicultural and international transformation, the question follows of how to showcase this progress through public windows, such as web sites, marketing brochures, job announcements, and student admissions materials (Noel-Levitz, 2010; Pegoraro, 2007; Sevier, n.d.-a). Web sites in particular have become important in marketing, communication, and student recruiting in the last 20 years (Kwan, Bock, & Vathanophas, 2008; Noel-Levitz, 2009, 2010; Sevier, n.d.-b). Studies now show that increasing numbers of prospective students use web sites as a primary source of information in making decisions on post-secondary education, even when compared to social media information sources (Noel-Levitz, 2010; Pegoraro, 2007; PEW, 2006; Sevier, n.d.-b; Wilson & Meyer, 2009). Common web site communication tools consist of strategic plans with new mission and vision statements, institutional values and professional competencies, and goals and objectives (Palmer & Short, 2008), often revised to include multicultural and international commitment (Rankin & Reason, 2008; Williams, Berger, & McClendon, 2005; for example see: *Strategic plan*, n.d.). In addition,

university web sites feature new styles of welcome letters and photos suggesting diverse student bodies (see Brunner & Brown, 2007; Heppner, n.d.; *Multiculturalism*, n.d.), some with more success than others (Butterman, 2007). These steps are good beginnings, but there is an open question on the degree to which universities have integrated this new strategic commitment beyond the main web pages for the various disciplines that constitute the entire university education portfolio (Angelo, 2005; Bidell, Broach, Carillo, & Ragen, 2007; Brunner & Brown, 2007; Hunter, Delgado-Romero, & Stewart, 2009; Pegaro, 2007; Wilson & Meyer, 2009).

It is reasonable to think that universities would be interested in evaluating the effectiveness of their web sites in this respect, yet web site evaluation is an underdeveloped research area in education and psychology. The fields of marketing and human-computer interaction (HCI) have been more active in web site studies but have two significant limitations: (a) the studies fall short in the integration of educational and psychological constructs when evaluating user experience (e.g., perception, cognitive processing, and knowledge building strategies); and (b) have yet to provide user-friendly and affordable analytical tools for systematic web site evaluation. New robust and user-friendly web site evaluation strategies may be useful to universities in understanding how to redesign their web sites to communicate optimally their strengths and progress to prospective students. The purpose of this exploratory qualitative study was to evaluate current and prospective students' perceptions of how well one university web site projected its commitment to multicultural and international transformation. It is hoped that the results from this study will catalyze more web site evaluation research.

Multiculturalism and Internationalism

Definitions of *multiculturalism* are general by nature and vary by disciplinary perspectives (Fellin, 2000). In the field of psychology, the 2002 American Psychological Association's *Guidelines on Multicultural Education, Training, Research, Practice, and Organizational Change for Psychologists* offered that multiculturalism and diversity have been used interchangeably to include aspects of identity stemming from gender, sexual orientation, disability, socioeconomic status, or age. "Multiculturalism, in an absolute sense, recognizes the broad scope of dimensions of race, ethnicity, language, sexual orientation, gender, age, disability, class status, education, religious/spiritual orientation, and other cultural dimensions (APA, 2002, pp. 9-10)." In *Diversity and Citizenship Education: Global Perspectives*, Banks (2003) offered a different view on multiculturalism focused in part on equality of cultural groups and how that translates to citizenship education, emphasizing local to global identity. Perhaps responding to these cross-disciplinary perspectives, White & Henderson (2008) envisioned a future with full participation of all peoples.

According to Olson, et al. (2007), *internationalism* "focuses on knowledge of cultures outside the United States, on relationships between nation-states, and on global trends and systems (p. v)." Internationalism has traditionally focused on education abroad programs and is now expanding to universities with campuses abroad, local to global community service initiatives, collaboration with other professionals across continents on teaching, research and scholarship, and more (Horn, Hendel, & Fry, 2007). Olson, et al. (2006) offered, *A Handbook for Advancing Comprehensive Internationalization: What Institutions Can Do and What Students Should Learn*, as a practical guide. These initiatives have grown out of the push to expand American students' knowledge, understanding, and experience of the world and their roles as global citizens in addition to their national and cultural identities (Banks, 2003, 2008).

Web Site Evaluation

What is the state of the art knowledge on evaluating web site effectiveness, especially as it relates to communicating progress in multicultural and international transformation? The information on this question is scattered across disciplines. In the 1980s-2000s, psychology researchers used *content analysis* to examine multicultural content first in print materials, admissions materials, and later web sites (see Bernal & Padilla, 1982; Bernal et al., 1983; Bidell et al., 2002; Bidell et al., 2007; Pegoraro, 2007; Ponterotto, Burkard, Yoshida, Cancelli, Mendez, Wasilewski, & Sussman, 1995; Yoshida, Cancelli, Sowinski, & Bernhardt, 1989). Outside of psychology, studies in marketing and e-commerce examined what web site factors are most effective in attracting the interest of consumers (Cox & Dale 2002; Moustakis, Tsironis, & Litos, et al. 2006; Shchiglik & Barnes 2004; Wakefield et al. 2004). Marketing researchers have established criteria against which visual and navigation features and content of web sites can be measured and analytical methods to study these established criteria (Cox & Dale 2002; Moustakis et al, 2006; Shchiglik & Barnes 2004; Wakefield, Stocks, & Wilder, 2004). The education literature provides perspectives on how universities can accomplish multicultural and international transformation (see ACE, 1995; Banks, 2003, 2008; Kreber, 2009; Green & Olson, 2003; Olson et al, 2006). A blend of perspectives from the psychology, education, and marketing literatures can offer a novel perspective on web site evaluation as it pertains to showcasing multicultural and international competency.

Content Analyses

Content analysis is a research method to analyze the frequency of particular content in particular interest areas, such as paper and electronic media (Strauss & Corbin, 1994). Through this method, researchers have identified particular multicultural themes in university marketing materials. For example, Ponterotto et al.'s (1995) qualitative study used a think-aloud procedure and semi-structured interview approach with Black and Hispanic American prospective students to identify themes salient when evaluating paper admission packets for psychology programs. Results indicated that these participants identified four major diversity-based themes in the application materials (financial aid, program requirements, course descriptions, and student body demographics), and two minor themes (faculty demographics and multicultural research interests). Such studies make it possible for other universities to replicate the study methods on their own paper and electronic admissions materials to see how they compare to those universities under study.

Subsequent content analysis studies revealed additional themes in marketing materials and web sites. For example, Bidell et al. (2002) evaluated paper application materials from professional psychology programs against the presence or absence of six multi-cultural themes in (antidiscrimination policy, minority based financial aid, commitment to diversity training, recruitment for diversity, a diversity minor, and multicultural faculty research). Later, Bidell et al. (2007) used the same method to assess web site content. The 2007 study revealed content scale scores for web sites were considerably lower than those found in the 2002 content analysis of paper application materials. When taken together, Ponterotto et al.'s 1995 qualitative study and Bidell et al.'s 2002 and 2007 diversity index scale studies have suggested low levels of diversity content in paper application materials and even less in web sites of psychology program web pages, indicating room to grow in how universities integrate multicultural and international content into their public windows.

Marketing and Human-Computer Interaction (HCI)

Literature on web site design abounds, as is evident when one wanders the technology section of large bookstores. A search on Amazon.com with the keywords "web site design" generates an e-listing of over 1,500 books. The keywords, "web site evaluation" or "web site effectiveness" however attracts a fraction of that amount. Journal searches for research on web site effectiveness from the perspective of the user yields even less again. The web site evaluation studies that do exist have provided user ratings on web sites' information structure as well as readability, ease of navigation (links), and effective appearance (fonts, color, and graphics) (see Pegoraro, 2007). In addition to evaluating site quality and readability, web site evaluations have addressed information quality, content presentation, navigation/ease of use, and credibility. With regard to the latter, the Cox & Dale (2002), Moustakis et al, (2006), and Shchiglik & Barnes (2004) studies evaluated web site design through user ratings on particular outcomes, such as whether the web site under study projected competency, credibility, and engendered trust. Wakefield et al., 2004′s structural model suggested that initial impressions of credibility in the web site will tend to mediate the user experience of other web site attributes. The study results suggested that if credibility was established at the outset, then other web site features could be influential in the purchase intention. For universities, these results of these studies are informative but perhaps difficult to translate to the complexity of most university web sites, which market the service of education that could not be more different from consumer products.

An integrated understanding of content analysis and user experience evaluations may help researchers to design studies that can evaluate more profoundly how prospective students experience a university web site. This particular study explored with current and prospective students how effectively one university's web site projected the institution's commitment to multicultural and international transformation. In particular, the aim was to understand, from the web site user perspective, how effectively one element of one university's strategic plan-the mission statement-was operationalized throughout the web site. No published study that we know of has evaluated university web sites from this integrated perspective. The guiding research question of this study was: What dimensions of a web site might enhance or hinder a university's ability to project to prospective and current students its commitment to multicultural and international transformation?

Method

Participants

Three participants (2 women, 1 man) were recruited for "test" interviews during the initial stage, during which a range of perspectives was gathered from one staff member, one faculty member, and one current student.

For the actual study, seven participants were recruited by word-of-mouth with the following demographic profile: three current psychology doctoral students recruited from a the first principal investigator's (PI) Research Methods class; and four individuals with Master's degrees in Counseling Psychology personally known to the PIs who had once considered doctoral study at the university. The actual study participants were six women and one man, between the ages of 24 and 58. Among the participants, there were three cultures represented: European-American (4), Asian (1), and Latino (2). Also, one participant identified as a U.S. veteran, three with lesbian, bisexual, or transgender orientation, and one identified as having a learning disability.

Instrumentation

Interview protocol. After consents were signed, the first PI conducted the interviews according to a semi-structured interview guide using a combination of individual and group interviews (see Appendix A). This technique was inspired by two studies: a) Robinson (1993) who compared the strengths of individual interview and focus group techniques in gathering different levels of information, and Lambert & Loiselle (2009) whose study supported the approach of combining individual and group methods to enhance the depth and breadth of participant perspectives. The first PI also took notes during each interview.

University web site. The web site under study represented a non-profit, private university with a mid-tier reputation located in Western United States with five schools of study and a mission statement that expressed a strong commitment to multiculturalism, internationalism, and commitment to global education.

Procedure

The interviews were conducted in two phases, the first being "test" interviews with individuals with varying perspectives on the web site (1 student, 1 staff, and 1 faculty member), and the second being the actual study interviews.

1st phase. The three "test" interviews allowed the PIs to refine the interview protocol and evaluate the recording equipment. As a result, the PIs revised the interview protocol, bought new digital recording equipment, and moved on to the formal study interviews with confidence. Notes from the first PI's three "test" interviews were used not used in the data analysis and results, but rather as a "check" on the data analysis of the 2nd phase study participant interviews (discussed below under "member checks").

2nd phase. Three individual interviews and 2 two-person group interviews were conducted in a conference room at the university for the duration of the interviews, during which each participant was loaned a university library laptop with Internet access. Once online, each participant was shown the university mission statement and the supporting mission statement of the university's diversity office (hereafter referred to as a singular mission statement), which together express a strong commitment to multicultural and international education.

Participants were asked to keep the above mission statement in mind as they navigated the university web site. The PI directed each participant to a sequence of university web pages, starting first with the university's Home Page and then followed by main web pages for the university's five academic disciplines. Once directed to a specific web page, the participants were free to navigate as inclined. Open-ended questions prompted participants to offer their thoughts on the content, quality, and the "look and feel" of the web site as well as their emotional reactions. Interviews lasted anywhere from 1.5 to 2 hours.

Data Analysis

The ensuing written transcripts were analyzed according to a sequential analysis method

recommended by Miles & Huberman (1994), where the first and second PIs separately read each transcript three times to ensure adequate understanding of the content. The first time was a quick read to familiarize with the interview content, filling out a summary form adapted from Miles & Huberman (1994). Upon second read, the PIs underlined key terms. For the third read, the PIs read the transcripts online and "cut and pasted" phrases with significant content into separate cells of a MS Word table. After printing the tables generated by both PIs, the first PI cut out the completed squares from the MS Word tables and pasted them up on a large paper canvas display. The first and second PI then viewed the paper canvas display and proceeded with a manual clustering exercise, moving the squares into different emerging topical spaces. This process continued until enough clusters were generated to capture all phrases into groups that were sufficiently different from each other in content but similar in size. Then the PIs circled back to their summary forms and the first PIs handwritten notes from the interviews and compared the content to that of the cluster analysis. The first and second PI then wrote a first draft of the results using this clustered data.

"Member checks": Consistent with the member checks procedure recommended by Miles & Huberman (2004), the first and second PI shared the first draft of the results section by email with each participant asking if the draft results seemed consistent with their experience of the web site during the study. The email responses unanimously confirmed agreement with the draft write up of the results. The first PI's notes from the three "test" interviews were included in this member check procedure, by comparing these notes to the results from actual participant interviews and to the draft write up. No significant differences were found.

Results

Overall

Consistent with the marketing and HCI studies described above, every participant reacted first to the web site's "look and feel." In the case of this particular web site under study, the first impressions were significantly negative. Instead of enjoying browsing the web site, they expressed frustration and boredom. These initial appraisals seemed to change how the participants experienced other aspects of the web site. Since they were asked to consider the mission statement and whether or not it was reflected in university operations, the participants did continue despite the initial appraisal but seemed to change role from prospective or current student to design consultants by offering advice on what design features could offer more credibility and better reflect the spirit of the mission statement. Consistent with Pepper, Tredennick, & Reyes (2010), the participants demonstrated themselves to be discerning web site users in that the majority of participants were not impressed by superficial indications of multicultural and international commitment. Instead, the participants expressed genuine concern that the mission statement was not adequately operationalized into the university's educational offerings across the five schools and advised on how to actively engage the user to provide more evidence in this respect.

First Impressions: Design Features of the Web Site

The participants' responses, reflecting primarily first impressions, were clustered around design features of the web site, namely visual appeal, readability, and information structure.

Visual appeal: The "look and feel" of the web pages seemed to influence the participants' experience

of the university's web site. The most common feelings and observations expressed were "bored," "blah," "very clinical," "cut and dry," "overwhelming," and "burdensome." The web site color scheme received mixed reviews. Some participants felt the colors were "boring." Occasionally, a participant stood out as describing their momentary experience as "fun" and "interesting" or that the colors were "warm"; these more positive emotions appeared to arise when viewing the newly upgraded main page and front page of the psychology program. There, in contrast to most other web pages on the site, the colors were more vibrant and had more photos. Interestingly, when one participant passed the main page, noted the importance of the color, wishing that the colors would more consistently "carry through to all of the pages."

Readability: Consistent with Sevier's (n.d.-a) observations, the majority of participants also expressed that they experienced an overload of information while viewing the web site, stating that there were "too many words" displayed in each web page. In addition to noting the volume of words on the web pages, many participants indicated that the words appeared "cluttered." One current student participant who self-identified as an being an avid reader explained that "Given that I love to read, I am a total reader and will read anything you put in front of me, and I feel like if I am a dedicated reader and I look at it this way, I wonder how somebody who is less inclined to read looks at this." One of the prospective student participants stated that the web site looks "burdensome, like I am going to have to do a lot of reading to get something out of this page." Others described the web pages as "busy" and "disorganized." Other reactions were that the size of the font was difficult with one participant articulating that the words were "too small."

Information structure: It seemed that the participants were yearning for some kind of structure to the written information on some of the web pages. One participant stated, "I don't really want to weed through a page that is not titled." That participant and others suggested utilizing more headlines, bolded sections, and dimensionality that would direct the reader to areas of interest "such as words or phrases that direct you to additional pages." This desire for structure seemed to carry over to their impression of the web site links. One participant expressed feeling *"frustrated"* when feeling lost among the web pages while following links. Another participant advised that, "Links are [a] really easy [way to] quickly decide [where to go next]."

Participants appeared to want an information structure that was "more practical". Participants suggested providing on the Home Page specific information about "campus location, tuition," and "resources to point me in the right direction." Another participant expressed wanting immediate access to proof that the investment into doctoral training will pay off "in terms of that bridge between getting a doctorate and going out into the community… are there resources here that help you connect? I don't see that written here anyplace…"

Projected Competency: Is the Web Site Credible?

Beyond the basics of web site design, particular web page attributes (or lack thereof) were brought up by most participants as having an impact on their impression of the university and its credibility to maintain the spirit of the mission statement.

Genuineness: Generic photography. The lack of perceived genuineness in the pictures displayed in the web site was one of the first things most participants noted. When asked, "What do you see on the page?" many participants noted that they saw pictures they felt were "meaningless," stating that they

looked "static and posed," and "a lot like an ad, an advertisement for clothes." According to the participants, it is important that "person sees him or herself reflected in the picture." One said, "If you don't see yourself in pictures, then you feel like this is a place that is not welcoming."

Comprehensiveness: Diversity not portrayed as all-inclusive. The participants demonstrated a discerning evaluation of the way campus diversity was displayed on the web site. Consistent with the participants' reports of generic photography, participants expressed appreciation for "diverse faces," but felt that the expression of diversity appeared narrow and "surfacey." Several participants also scrutinized an icon of the Mexican flag used to signal where web site users could "click" to access the web site information in Spanish, suggesting that the icon should simply state, "'Spanish,' because not all Spanish speakers are Mexican."

One participant observed that the photographic depiction of diversity seemed narrow by saying, "It seems that the focus is really on ethnic, perhaps even cultural differences…or racial differences. But that is rather limited, considering ways in which people are diverse." For example, the majority of participants objected to the lack of clear signals and information relating to "people with disabilities," "accessibility for people with dyslexia," or "capability for the deaf." Some of these same participants commented on age as an important diversity dimension, observing that people portrayed on the web site appeared "very young." Another noted with displeasure on the front page of a different school that "everybody here is attractive." The participants also suggested portraying commitment to diversity in ways other than phenotype variation in the photography.

The Mission Statement

Placement: Most participants had a hard time placing where the mission statement was located within the web pages, making it seem as if the mission statement was "less important" to the university. With regard to the mission statement one participant stated that "words need to appear on the page somewhere." Although some participants stated that the mission statement was "embedded in the words" (meaning implied in the web site content), most participants had a difficult time finding the actual mission statement per se. One participant who did find the actual mission statement on the web site reported, "The only reason I knew it was the mission statement is because we read it first. There was nothing there that said mission statement. So it was just another paragraph I was reading." Additionally the participants appeared confused about the philosophy of the individual schools within the university, describing their individual charters as "unclear" and that "powerful ideas don't emerge from the page."

The spirit of the mission statement: Most participants were curious as to how the mission statement would be operationalized through the university system. They indicated that they wanted to get a sense of how the programs implement the mission statement, and what the process looks like. One participant stated, "I am not sure how that is going to manifest," referring to how the spirit of the mission statement was projected throughout the web site. Some participants remarked that the pictures did not reflect the part of the mission statement that emphasizes service. "[There are] no pictures of service," exclaimed one participant. With the university's mission statement in mind, participants suggested adding pictures of people in service to their local communities and around the world that would reflect "how…[the university] is connected to the rest of the world" and "globally responsive." One participant reflected on the importance of "context" and a "personal piece" in seeing how the spirit of the mission was carried throughout the university.

University Life

Active engagement: Most participants expressed the desire to feel more engaged by the web site, especially in terms of seeing how the mission statement might be reflected in actual university life-the wanted to see evidence of connectedness, to understand how learning actually happens, to observe dimensions of university life, and to have windows on their future careers. The participants suggested that the university accomplish this by incorporating more active links, suggesting the use of "side bars," "picture links," and "YouTube-like clips" in order to make the web site "engaging and interactive" and provide users with more control over the flow of information. One participant with a learning disability explained that for her, the "interactive piece help[ed]…with comprehension."

Connectedness: Geographical and physical orientation of campus. One participant expressed wanting a "connection with the ground, the earth" that could "orient you geographically." Without a "picture of the place", the participant is left "not having that feeling of being connected with its location." One participant felt the web site "need[ed] to do more to give users a groundedness about the site they are looking at." Additionally, another participant suggested including more "pictures and links of the different campuses."

How does learning happen? Participants expressed that they wanted the web site to be more reflective of the university experience, and "examples of work people are doing" and to "see the impact of the education on students as well as on the community." Participants also identified a need for photography that depicts students having experiences with faculty and interacting with staff, stating that they were interested in seeing "how learning will occur." Participants felt that the mission statement would better be reflected if they were presented with case studies or testimonials from university students and alumni that would serve as "some kind of documentation from a student." Others wanted to know "how is…[the university] going to prepare me to make a difference in the world?" One prospective participant felt that a case study or testimonial would provide "validation that I am headed in the right direction."

Interactions among faculty, staff, and students: Many participants were interested in how the university would apply the mission statement, in terms of "what the faculty does," and "how learning occurs." One current student said it was important to "show what students actually do and maybe even what our faculty does too." Another participant expressed the importance of the "pictures … representing something," such as what students, faculty, staff, and alumni actually do on a day-to-day basis. As one participant indicated, showing interactions between students and staff, and students and faculty on the web site "contextualizes the experience." One current student participant felt that a lack of portrayals of student-staff interactions was an "invalidation of staff and their impact on the students." Another participant expressed that she would like to see these particular interactions to know that "there will be someone, a system in place" at the university.

Discussion

Reports on how students research their educational options suggest that the new prospective student is more technologically savvy than in past generations and will actively explore web sites and social media to find out more about university offerings (Wolf, 2007). Even with increasing use of social media, web sites seem to be the most prominent tool that prospective students use to evaluate

universities (Noel-Levitz, 2009, 2010; PEW, 2007). New increasingly diverse generations of prospective students are interested in how universities integrate multiculturalism and internationalism in their programs (Bruner & Brown, 2007; Patel, 2008; Stoner, 2004), particularly in terms of personal fit with the institution (Lewison & Hawes, 2007; Mottley, 2008). Since many universities may be revising their web sites to better showcase their multicultural and international transformation, this study explored current and prospective students' perceptions of how well one university web site projected its commitment to multicultural and international transformation.

In this study, participants appeared to have high expectations for the quality of the university web site experience. The participants first noted the "look and feel" of the web site, in a manner that was consistent with the literature on web site quality factors. When encouraged to consider the web site in more depth, the participants reported wanting evidence of competency in all aspects of the web site, in program content, as well as in the aesthetic, emotional, and cognitive experience. For example, the participants reported wanting a window into university life, the learning process, and career outcomes of the degree, and they offered specific advice on how the university could demonstrate this with changes to the web site functionality. They wanted action and interaction in terms of links that displayed written or audio stories, action vs. posed photography, and testimonial-style podcasts of students and alumni talking about their experiences. Also consistent with Brunner & Brown's (2007) insights, the participants expressed wanting to see themselves in the web site depictions, in whatever constellation of identities they might carry, as evidence that they would fit in to the university milieu.

Limitations

Limitations include a small sample of convenience with participants recruited by word-of-mouth and who were personally known to either the first or second PI. In this respect, it is especially important that these results be interpreted as ideas for future study rather than conclusive, generalizable results. For example, while the participant sample was relatively diverse culturally, most of the participants were prospective students or current students in the field of psychology. Prospective students in other disciplines, such as medicine or engineering, may have a different set of expectations for the web site experience. Also, all participants had already had an experience with the university web site prior to the study, in their searches for graduate study, which could have influenced the depth and breadth of their expectations.

Conclusion

As a result of this study and the above literature review, we hope to catalyze future research, from a perspective that integrates marketing, HCI, and psychology knowledge, into understanding how prospective students' expectations for a high-quality web site experience is best satisfied in terms of "look and feel", institutional credibility, and actions and interaction features that provide a window to university life, learning, and future careers. Other research questions might explore what type and style of evidence is most convincing and relevant to prospective students in terms of university credibility, progress in multicultural and international transformation, whether or not this evidence would lead to a greater likelihood of enrollment. How can university life, program offerings, education process, and career outcomes be most effectively portrayed on a web site? Would more expensive web site options pay off in terms of increased enrollments (such as, action-oriented, inclusive photography and links to written stories and live podcasts of individuals attesting to the quality of the learning experience and subsequent career success)? In what way do prospective students consider the university's strategic

plan? How do prospective students determine whether university intentions are being accomplished? New, interesting mixed-method research designs could address these questions.

Given the importance of web sites to university recruitment, advancements in web site evaluation that integrate knowledge from the marketing, HCI, and psychology fields, could open new research and consultancy opportunities for professionals from a variety of disciplines.

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Appendix A: Interview introduction and open-ended interview questions

Interview introduction

Thank you for agreeing to this study. First we need to cover issues of informed consent. Today we are going to look at (insert university name) web sites. I will be asking you some questions about your perception of the schools and programs while you keep (insert university mission and university diversity mission statement) mission in mind. Now, I would like to ask you to look over two core documents: The mission statement for (insert university name) and the mission statement for (insert university diversity mission statement). Feel free read the mission statements at any time during this interview.

Considering what you have just read, please look at each web site and give me your perceptions of how effectively the mission statements are reflected in the web site. There is one home page and [insert #] schools and programs. We will be going through the web site in the following order: [Insert names of schools]. As you navigate through the web site for each school, make sure to verbalize your direction, thoughts and feelings as much as possible. If you get lost in the web site, I will direct you to

the main page of the school.

Do you have any questions at this time? Ok, we will begin with the home page.

Open-ended Interview Questions

- Taking words, pictures, layout, and graphics into consideration, what do you see on this page?

- When you look at this page, how do you feel emotionally? How do you feel in your body?

- How well do you think this reflects the university mission? Please state why.

- What would you suggest adding or changing to this page so that it better reflects university mission?

- How well do you feel this reflects the university diversity mission? Please state why.

- What would you suggest adding or changing to this page so that it better reflects the university diversity mission?

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