

Examining Ethnic Minority Representation in Higher Education Website Imagery

Joe Del Vecchio

*Strategic Communications and Marketing
Elon University*

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Abstract

Websites play a critical role in the marketing of colleges and universities, providing pertinent information while allowing prospective students to picture themselves on campus. This study tried to contextualize how institutions of higher education use diversity as a marketing tool by looking at ethnic diversity in website imagery. Images from school websites in the University of North Carolina System and Pennsylvania State System of Higher Education were analyzed, and representation of non-White students in those images was compared to actual representation on campus. Of the 22 schools examined, 16 overrepresented non-White students in their website imagery, and webpages most accessible to prospective students often highlighted non-White individuals.

I. Introduction

According to the National Center for Education Statistics (NCES), from 1976 to 2013, the percentage of American college students who identify as White fell from 84% to 59%. Over that same time period, the percentage of Black students rose by 5% and the percentage of Hispanic students rose 12% (NCES, 2014). As the student base for higher education institutions becomes increasingly non-White, institutions will need to adjust marketing tactics to entice non-White students in order to stay competitive in enrollment. In order to win their share of the non-White demographic, universities will have to convince prospective students in this category that they will be valued and well-represented in the student body and campus life. An important marketing tool for this purpose is a campus website. University websites not only provide prospective students pertinent financial and academic information, but they are an important touchpoint to give students an idea of how they might fit on a certain campus. Thus, it would make sense that webmasters and marketing staff members include sufficient images of non-White students in imagery to ensure that non-White prospective students can envision themselves at a campus when looking for a higher education institution.

This study tried to contextualize how universities use diversity as a marketing tool by looking at ethnic diversity in website imagery. A comparison of non-White students in website imagery to true student body numbers may show how much colleges use concepts of diversity to market to ethnic minorities.

II. Literature Review

Before examining relationships between a university's ethnic diversity and images of diversity on their websites, it is important to understand how diversity topics are used in the marketing of universities, how websites are used as marketing tools, how imagery on websites affects prospective students' perceptions of an institution, and how websites reflect the real campus situation.

Diversity as a Recruitment Priority

Diversity has become such an important selling point for colleges that most have made a concerted effort to showcase diversity in marketing efforts (Ming, 2007). It is first important to consider that the term "diversity" is not solely related to ethnicity. Diversity in geography, language, and cultural background of students are other areas of interest for schools (Espinosa et al., 2015). Rubin (2011) examined how Amherst College made a targeted effort to tailor marketing tactics toward attracting more socioeconomically diverse students, which led to higher enrollment figures from this group. However, ethnic diversity is the top segment for targeted marketing in higher education. A report by the American Council on Education cited that 78% of schools surveyed use specific recruitment strategies aimed at getting ethnic minorities to apply, and that improving ethnic diversity was the second highest enrollment goal for most schools, only behind improving the institution's academic profile (Espinosa et al., 2015).

Specific ways minority populations are recruited for colleges include articulation agreements, targeted application recruitment, additional recruitment, and consideration from college transfers (Espinosa, Gaertner, & Orfield, 2015). Other significant factors that will help recruit diverse student bodies include broadening the traditional definition of "merit" as examined by enrollment officials and having a president who actively and vocally supports attracting diversity (Rubin 2011).

Diversity is considered an important asset for higher education institutions and enhances their institutional offerings. Maruyama and Moreno (2000) surveyed several hundred university professors and found faculty felt more diverse classes, and classes focused on diversity improved students' ability and willingness to think critically. Umbach and Kuh's study (2006) of students' experiences with diversity revealed that students felt their interpersonal skills improved more in diverse environments, and diverse environments encouraged more engagement from students than those not in diverse environments.

Websites and Imagery as Marketing Tools

Websites present a unique opportunity to marketers, as they combine interactivity, creative flexibility, and a dynamic design. They are especially important for the marketing of universities; as many students interested in a school may not have the funds or schedule flexibility for a campus visit, a website may be the first or only point of contact between the school and the prospective student (Wang, 2008). Saichaie and Morphew (2014) studied 12 college websites and found 6 common informational themes: academics, campus aesthetics, fine arts, intercollegiate athletics, student life, and values.

Research by Ford (2011) revealed that functionality is the top priority for high school students when examining a college website, just ahead of readability and distinctiveness from other schools' websites. What students specifically looked for on websites is content that provides an idea of student life (Ford, 2011). Another important functional piece of college websites is the ability to form two-way conversations between the school and site visitors. After examining 215 community college websites, Shadinger (2013) found that 89% provided six or more opportunities to communicate directly to the school from the website. Pippert, Essenburg, and Matchett (2013) explained that prospective students attempt to visualize themselves on a campus through marketing materials, and Saichaie and Morphew (2014) found that student life sections most often incorporate themes of tradition, shared experiences, and building an "institutional family" to communicate campus personality.

While functionality allows users to access the most relevant information on a website, imagery on a site contributes to their overall satisfaction (Cyr, Head, Larios, & Pan, 2009). In particular, "human images," or pictures with a human or humanoid figure, most influence how a user experiences a website. Research conducted by Cyr et al. (2009) found that human images in website imagery evoke a greater feeling of social presence, and users focus on images with human images longer than those without.

Higher Education Marketing and Ethnic Diversity

As colleges push a recruitment agenda of encouraging diversity, some students feel that there is a discrepancy between what is being depicted in institutional marketing efforts and actual minority representation on campus. Through extensive focus group interviews, Brunner (2006) found students at one Southeastern school opined, “Diversity efforts can be seen but not felt.” Students also felt that there was a notable difference between diversity statistics reported in marketing materials and what was actually the case on campus, and African American students in particular, felt that using the word diversity in general was a “smokescreen” (Brunner, 2006).

Ming (2007) showed that imagery is important to marketing diversity, finding that more than half of all websites with a section for international students feature ethnically diverse students in a picture on the section’s homepage. This use of imagery, however, may contribute to negative perceptions of diversity recruitment. Pippert et al. (2013) examined physical viewbooks from over a hundred colleges and compared the presence of ethnic minorities in viewbooks with ethnic diversity on campus. They found that 81% of schools over-represented African Americans in viewbook imagery, and that the more non-White a college campus is, the more likely it is to overrepresent minorities (Black and Asian students in particular). The researchers concluded, “The consistency at which institutions of higher education presented misleading depictions of racial diversity leads us to the understanding that it is intentional and near universal.”

Another point of controversy, along with alleged misrepresentations, is how ethnic minorities are portrayed in college marketing. While examining viewbooks from colleges recruiting for STEM fields, Osei-Kofi and Torres (2015) found that racial minorities are most often portrayed in passive positions, either taking orders from White figures or not being the focus of pictures. They concluded that the whole of the images they examined “suggests that the appropriate and most skilled current and future scientists are White males.” Wang (2008) also found that Asians were rarely the visual focus in website imagery as compared to non-Asians, and that Asian women in particular seemed to be only put in focus to provide a sort of “exotic” quality.

For this study, the author asked two research questions:

RQ1: Do universities provide accurate student-body representations of ethnic diversity in their website imagery?

RQ2: On which webpages are ethnic minorities most likely to be shown?

III. Methods

This paper examined the efforts of higher education institutions targeting diverse populations through the use of imagery on campus websites, and compare institutional sites with actual numbers of diverse populations on campuses. To accomplish these purposes, the author examined websites of schools in the University of North Carolina System (UNCS) and the Pennsylvania State System of Higher Education (PSSHE). These schools were selected as they are in a clear, organized university system, range in size, are all public, and have clear non-discrimination policies. Of the 31 schools in these systems, six (Elizabeth City State, Fayetteville State, North Carolina A&T State, North Carolina Central, Winston-Salem State, and Cheyney University) were excluded since they are historically Black colleges, and UNC Pembroke was not included because it is a historically Native American university. These schools were excluded as they would have a higher than average non-White population. Additionally, two schools (NC School of Science and Mathematics and UNC School of Arts) were excluded as they include high school students while this study sought to examine only college students. In the end, 22 university websites were included in this study.

For each website, only the full-desktop view of each website was examined.¹ While most schools use responsive website design, and high school students are increasingly accessing websites on mobile devices when students look for the most in-depth information and best sense of campus personality, desktop computers are the most important access point (Howard, 2013). On each site, six common high-level college webpages were studied: pages for “the home,” “admissions,” “about,” “academics,” “campus life,” and “visitors.” All

¹ Modern responsive websites may offer different versions of web content, depending on the type of device that accesses the websites.

pages could be accessed through one click-in from the home page. Pages that did not exist on a university's site, or were not one click-in from the home page, were excluded from this study. Images in slideshows that automatically rotate images were all included, as were slideshows that needed a manual click to rotate, since one does not leave the specified page while performing this action, one click-in rule.

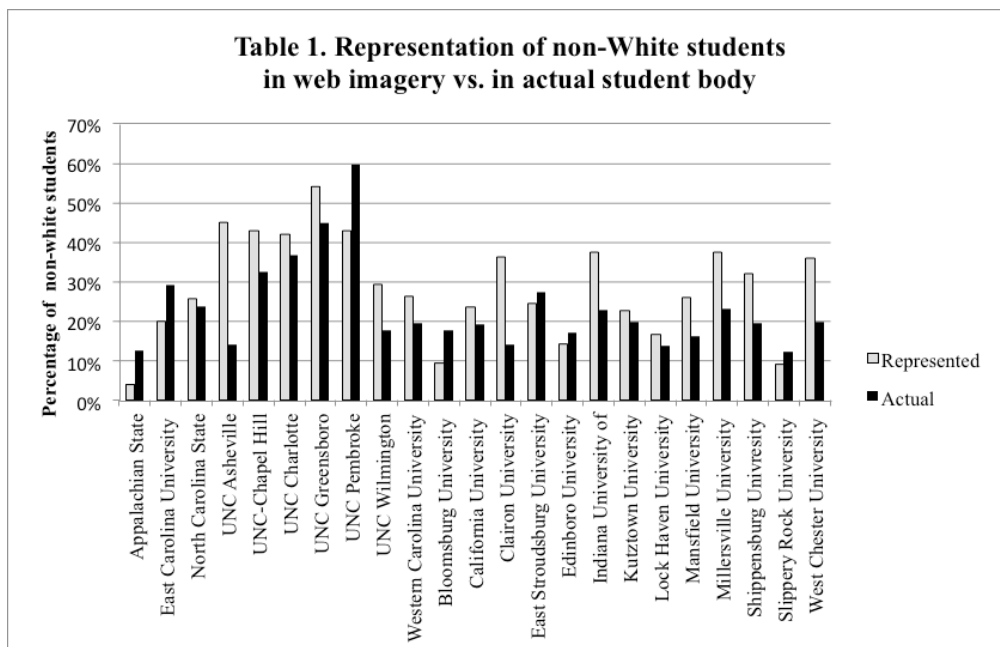
Images counted in the study included any full-size images or thumbnails on the specified pages. Background images and video screenshots were disregarded. Within individual images, a subject was counted only if he/she appeared to be a student and had at least one-half of his/her face visible. Subjects at a significant distance, such as distant shots of crowds or subjects in the background of an image were disregarded. Each eligible subject in an image was coded as either White or non-White, with a ratio of non-White-to-total-subjects count being recorded for each page and each university as a whole. This total ratio was compared to the actual ratio of non-White students on a campus as reported by College Factual (collegefactual.com), an independent aggregator of college statistics and information. The non-White students on these campuses means all except for White students as well as students classified as "ethnicity unknown."

Due to the nature of attempting to classify a person's race and position on campus based on visual cues alone, researcher bias may be present in this study. In fact, the use of racially ambiguous figures is a strategy used in visual marketing, and such figures are seen differently by different people, depending on their own predispositions about race (MacLin & Malpass, 2001). However, there is no concrete way for anyone to accurately assess a subject's race based on a photograph, so one uses the mindset of an average website viewer. When conducting similar research on minorities in college viewbook imagery, Pippert et al. (2013) wrote:

"We are acutely aware that classifications based on visual cues are problematic, but our goal was not to say with complete confidence that we could perfectly classify all subjects into a single racial or ethnic category. Through this research we were attempting to say: 'When viewing this photograph, would the average casual observer place the subject into a racial classification?' . . . If we could not answer that question positively, with confidence, then the subject was not classified" (p. 269).

IV. Results

As shown in Table 1, non-White students are more often represented on the examined school websites than they actually are on campus. Out of the 22 schools examined, 16 (73%) overrepresented their minority representation in imagery. In the UNCS, 7 of 9 schools (78%) overrepresented non-White student populations in imagery, while 9 of 13 schools (69%) in the PSSHE did the same.



To examine which webpages are most likely to portray ethnic minorities, the author examined a total of 994 human images across 121 webpages. Of these student images examined, 247 (25%) were determined to be of non-White students. By page, 33% of student images on “about” pages were of non-White students, followed by 29% for home pages, 24% for “academics” pages, and 22% each for “campus life” pages, “admissions” pages, and “visit” pages.

V. Discussion

The percentage of college students identifying as non-White has grown significantly over the past four decades, a trend expected to continue into the future (NCES, 2014), and websites are often the first touchpoint for prospective students to interact with a university (Howard, 2013). The fact that 16 of 22 (73%) of schools overrepresented non-White students on their websites shows that marketing teams are, at the very least, cognizant of the trend and are taking steps to ensure that their websites are attracting attention of non-White students.

Marketers must be aware of potential negative consequences should they choose to intentionally overrepresent ethnic minorities in imagery. Nielsen Norman Group research shows that users are good at deciphering between authentic photographs and stock photographs or photographs that were staged (Sherwin 2016). In the context of university websites, when users see stock imagery, they are instantly connected to ideas of blandness and effortlessness, while authentic photographs connect users to ideas of trust and genuineness (Sherwin, 2016). Thus, if website users feel a university has specifically chosen or even staged a photograph to show an idea of ethnic diversity, a website runs the risk of alienating prospective students of all ethnicities.

When broken down by page type, this study found that the percentage of non-White students was higher on the homepages and “about” pages than the other pages examined. Research from digital ad group Oho Interactive points out that college website homepages have an average bounce rate, or percentage of users who leave after visiting a certain landing page, of 47 percent, and that college website visitors view about three pages on average (Smith, 2015). This means that college homepages often struggle to keep attention and interest from viewers, and that colleges have only a few chances to make them continue further into the site. In addition, the “about” page is one of the most viewed webpages other than the homepage on college websites (Sherwin, 2016). Selecting the best images for these two pages is crucial for catching attention and making a good impression, and if college marketing teams desire to specifically attract non-White students, selecting images showcasing ethnic diversity will help them in this endeavor if the images appear authentic.

Of the schools studied, UNC-Asheville has the greatest disparity between minority representation in website imagery and representation on campus. On the pages examined, 45% of student images were of non-White students, while the school’s student body is 14% non-White. Visiting the “Diversity at UNC-Asheville” section of the school’s website, readers find information about how the school defines and addresses diversity. This section also displays information about the school’s “Diversity Action Council,” which was founded in 2008. Information about this council includes efforts to hire a more diverse faculty and to increase scholarships to diverse students, but makes no direct reference toward specific recruitment of students of color. It is, therefore, unclear whether specific, university-directed efforts could have anything to do with the selection of images on the school’s website; however, it is clear that the school’s executives are attempting to make the school’s student body appear more diverse.

As marketing colleges to ethnically diverse populations becomes more of a necessity than a strategy, college admissions and marketing teams find themselves in an ethical gray area. They must balance their desire to show ethnically diverse prospective students how they will fit on a campus and encourage them to apply with a clear and honest view of campus life for all students. The 2016 assembly of the National Association for College Admission Counseling (NACAC) emphasized that the primary role of admissions counselors is to treat students fairly and with honesty, always putting their best interests first (NACAC, 2016). Under their “Statement of Principles of Mandatory Practices” doctrine, the first point under the section on promotion and recruitment states that all members will “accurately represent and promote their schools, institutions, organizations and services” (NACAC 2016). In this regard, encouraging diversity recruitment

techniques that are not representative of a school as a whole is considered unprofessional and unethical.

Recruiting ethnically diverse populations, when done correctly, is not just a marketing campaign, but rather an all-encompassing institutional endeavor. Other forms of external communication can be equally important to perception of ethnic diversity on a campus. The Association of American Colleges & Universities (AACU) hosts a “Diversity, Equity, and Inclusive Excellence” resource center for schools (AACU Home Page). Created by a panel of higher education executives, examples of resources include “Resources for Campus Leaders Crafting Messages in Response to issues of Racial Justice” and “Committing to Equity and Inclusive Excellence: A Campus Guide for Self-Study and Planning.” The content of these works shows that while marketing efforts like campus websites may be the first touchpoint for prospective students, the entirety of a university’s communications structure contributes to the total brand image of a higher education institution. This brand image, as perceived by prospective students, will determine whether an ethnically diverse student feels as though they would fit in with a certain school.

This study has some limitations. The coding of the human images in websites lends itself to researcher bias, incorrectly identifying a student as non-White when they are White or vice versa. This study examined only six top-level webpages because they were identified as the most likely pages to be visited by prospective students. Future studies may examine the totality of a website’s imagery, which may give a more accurate representation of a school’s ethnic diversity. Another interesting topic might be to determine whether non-White students visited the same pages as White students did.

VI. Conclusion

This paper explored the relationship between a school’s ethnically diverse student population and their visual presentation on their websites. Diversity in all forms is more important than ever to higher education marketing teams, so they use websites as an important marketing tool, as they may be the only point of contact between the institution and prospective students. Websites need to both engage and inform effectively to hold viewers’ attention.

The findings of this study show that a majority (73 percent) of universities in the UNCS and PSSHE systems overrepresented non-White students in their website imagery, probably to appeal to prospective students who are becoming increasingly ethnically diverse. However, negative perceptions of diversity marketing may occur when minority populations are overrepresented. Marketing departments at colleges need to balance their desire to appeal to a diverse audience with maintaining authenticity to earn viewers’ trust and attention.

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References

- Brunner, B. R. (2006). Student perceptions of diversity on a college campus: scratching the surface to find more. *Intercultural Education*, 17(3), 311-317. Retrieved from <http://www.tandfonline.com/doi/full/10.1080/14675980600841751>
- Cyr, D., Head, M., Larios, H., & Pan, B. (2009). Exploring human images in website design: a multi-method approach. *MIS Quarterly*, 3, 539-566. Retrieved from <http://www.jstor.org/stable/pdf/20650308.pdf>
- Espinosa, L., Gaertner, M. N., & Orfield, G. (2015). Race, class, and college access: achieving diversity in a shifting legal landscape. *American Council on Education*. Retrieved from <http://www.acenet.edu/news-room/Documents/Race-Class-and-College-Access-Achieving-Diversity-in-a-Shifting-Legal-Landscape.pdf>
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- Ford, W. G. (2011). Evaluating the effectiveness of college web sites for prospective students. *Journal of College Admission*, 26-31. Retrieved from <http://files.eric.ed.gov/fulltext/EJ939063.pdf>
- Howard, J. (2013). The search for knowledge: How students use digital to choose schools. *Think With Google Blog*. Retrieved from <https://www.thinkwithgoogle.com/articles/search-for-knowledge.html>
- Osei-Kofi, N., & Torres, L. (2015). College admissions viewbooks and the grammar of gender, race, and STEM. *Cultural Studies of Science Education*, 10(2), 527-544. Retrieved from <http://link.springer.com/article/10.1007/s11422-014-9656-2>
- Maruyama, G., & Moreno, J. (2000). University faculty views about the value of diversity on campus and in the classroom. *American Council on Education – Educating All of One Nation Conference*. 8-35. Retrieved from <http://web.mit.edu/cortiz/www/Diversity/PDFs/MaruyamaandMoreno2000.pdf>
- MacLin, O., & Malpass, R. (2001). Racial categorization of faces: The ambiguous race face effect. *Psychology, Public Policy, and Law*, 7(1), 98-118. Retrieved from <http://eyewitness.utep.edu/Documents/MacLin%26Malpass01AmbRaceFace.pdf>
- Ming, L. (2007). Content and design for international students: a content analysis of U.S. university web sites. *Conference Papers – International Communication Association 2007 Annual Meeting*, 1-22. Retrieved from <http://eds.b.ebscohost.com/ehost/pdfviewer/pdfviewer?vid=1&sid=8012557b-edd4-4afe-8a78-1263e5ce1e48%40sessionmgr103&hid=127>
- National Association for College Admission Counseling. (2016). *Statement of Principles of Good Practice*. Retrieved from https://www.nacacnet.org/globalassets/documents/advocacy-and-ethics/statement-of-principles-of-good-practice/spgp_10_1_2016_final.pdf
- National Center for Education Statistics. (2014). Digest of education statistics: 2014. *Institute of Education Sciences*. Retrieved from http://nces.ed.gov/programs/digest/d14/ch_3.asp
- Pippert, T. D., Essenburg, L. J., & Matchett, E. J. (2013). We've got minorities, yes we do: visual representations of racial and ethnic diversity in college recruitment materials. *Journal of Marketing for Higher Education*, 23, 258-282. Retrieved from <http://www.tandfonline.com/doi/full/10.1080/08841241.2013.867920?scroll=top&needAccess=true>
- Rubin, R. (2011). Recruiting, redefining, and recommitting: the quest to increase socioeconomic diversity at Amherst College. *Equity & Excellence in Education*, 44(4), 512-531. Retrieved from <http://www.tandfonline.com/doi/full/10.1080/10665684.2011.613299>
- Saichaie, K., & Morphew, C. (2014). What college and university websites reveal about the purposes of higher education. *The Journal of Higher Education*, 85(4), 499-530
- Shadinger, D. (2013). Dialogistic presence on community college websites in nine megastates. *Community College Journal of Research and Practice*, 37, 925-935. Retrieved from <http://www.tandfonline.com/doi/abs/10.1080/10668926.2010.515516>
- Sherwin, K. (2016). University websites: top 10 design guidelines. *Nielsen Norman Group*. Retrieved from <https://www.nngroup.com/articles/university-sites/>
- Smith, J. (2015). 2015 analytics benchmarks for college, university, and higher education websites. *Oho Interactive*. Retrieved from <https://www.oho.com/blog/2015-analytics-benchmarks-college-university-and-higher-education-websites-0>
- Umbach, P., & Kuh, G. (2006). Student experiences with diversity at liberal arts colleges: another claim for distinctiveness. *The Journal of Higher Education*, 77(1), 169-192. Retrieved from http://www.jstor.org/stable/3838736?seq=15#page_scan_tab_contents
- Wang, X. (2008). Gender and race portrayed in the web sites of U.S. higher education institutions: stereotypical status and power positions. *Conference Papers – International Communication Association 2008 Annual Meeting*, 1-29. Retrieved from <http://eds.a.ebscohost.com/ehost/pdfviewer/pdfviewer?sid=d2e90589-e221-4f4a-aa34-2ba5483e185a%40sessionmgr4009&vid=5&hid=4202>
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