How Culturally Responsive Are Public School District Websites to The Needs Of The Latino Community?

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Introduction

The research team identified and tested six criteria that operationalize cultural responsiveness as a factor for evaluating school district Websites: cultural utility, representation of diverse cultures of target populations in graphics, percentage of website topics translated into Spanish, the content of topics translated, the level on which translation takes place, and the level on which website navigation elements are translated into Spanish. Fifty school district Websites were evaluated. Findings indicate lack of cultural responsiveness on websites and that cultural responsiveness should be added to website evaluation instruments.

Problem

School districts serve not just their students, but also the communities where students live. In addition to being educational institutions, they are cultural, political, and economic institutions. Therefore, school districts need to address cultural responsiveness on their websites (Huang & Tilley, 2001; Badre & Barber, 1998). On websites, "metaphors, mental models, navigation, interaction, or appearance confuse, or even offend and alienate, a user" (Marsus & Gould, 2000). The need for Texan school district Websites to address language and worldview differences for the Latino community provides a basis for asking, "How culturally responsive are public school district Websites to the needs of the Spanish speaking community?"

Ninety-five percent of the families of the 630,000 students that have been placed in Limited English Proficient programs in Texas indicated that they speak Spanish in the home. In addition, many more families have indicated that Spanish is spoken in the home but have not placed their children in the Limited English Proficiency program (Seidner, Director of the Bilingual Education for the Texas Education Agency, personal communication, July 27, 2003). Although federal law assures equitable access to educational resources, Spanish speakers in Texas have limited access to general information that is provided on school district Websites.

Website evaluation typically focuses on the dimensions of design, credibility, usability, and accessibility (Alexander & Tate, 1999; Lynch & Horton, 2001; Nielsen, 1993). Design relates to the overall aesthetics of a website. Credibility involves the quality of the information on a website (Fogg, et al, 2001). Usability refers to the ease with which users find information on a website and their level of satisfaction with the experience. Accessibility is the use of the Internet by people with disabilities through assistive technologies such as web-readers for the blind or pointing sticks for the physically handicapped.

Cultural responsiveness in website design impacts each of these dimensions and is particularly important for equitable access to educational environments. The emergence of Latinos as a force in online shopping and political polls has triggered acknowledgment by the business and political worlds of the importance of tailoring websites to reach Spanish speaking populations (Swartz, 2003). However, our literature review reveals that educational institutions are not yet addressing cultural responsiveness on Websites and that cultural responsiveness is not included as a Website evaluation criterion on existing instruments.

Objectives

Three intents of this exploratory study were to (1) develop criteria for evaluating the effectiveness of school district websites at meeting the needs of the Spanish speaking community, (2) field test these criteria using 50 district websites in Texas, and (3) specify directions for future efforts aimed at website evaluation to address cultural responsiveness.

Participants

Six criteria for evaluating websites' cultural responsiveness were tested on websites for the 50 largest school districts in Texas (a purposive sample) using both descriptive statistics and naturalistic inquiry methods (Lincoln &

Guba, 1985). These included districts in Houston, Dallas, Fort Worth, San Antonio, Austin, El Paso, Brownsville, and Laredo. They represent 50% of the total student population in the state of Texas and 75% of the limited-English-proficient student population. The six criteria tested were: Percentage of topics translated to Spanish, the content of topics translated to Spanish, level on which translation first takes place, level on which navigation devices (menus and navigation bars that enable movement through several topics on the Web site) are translated to Spanish, cultural utility, and inclusiveness of graphics.

Methods

Criteria for evaluating websites' cultural responsiveness were tested on Texan school districts using both descriptive statistics and naturalistic inquiry methods (Lincoln & Guba, 1985). The field test evaluated the websites of the 50 largest school districts in Texas. These included districts in Houston, Dallas, Fort Worth, San Antonio, Austin, El Paso, Brownsville, and Laredo which represent 50% of the total student population in the state of Texas and 75% of the limited-English-proficient student population.

Evaluation Matrices were designed to describe each Website in terms of six cultural responsiveness criteria:

- *Cultural utility* was estimated by establishing topics of interest to parents in the Latino community and determining which of those was addressed and how many of the topics were translated. Community interests were identified through interviews with individuals and focus groups with Latino parents and students. These included a representative from the Mexican American Legal Defense and Educational Fund, a representative from the Mexican American Latino Research Center at a research university, and six focus groups of parents and teachers from different school districts in Central Texas and from the Rio Grande Valley. Each reacted to a variety of websites revealing their interests and reactions, both positive and negative. The interview process was conducted by two of the researchers and contents were recorded and transcribed for evaluation by all researchers who identified emergent themes by color coding text and marking in margins. We achieved consensus regarding topics of interest to Spanish speaking users and conclusions that could be drawn regarding culturally responsive design issues.
- *Percentage of topics translated to Spanish*: The researchers counted the topics listed on levels one and two of each site, counted the topics translated on those two levels, and calculated the percentage translated. If a topic that appeared on the first level appeared again on the second level, it was not counted twice. If translation was indicated on the second level, then the researchers pursued those topics to their full extent. Therefore, most topics that were translated on subsequent levels were identified.
- *The content of topics translated to Spanish*: These will be identified during the exploratory process described for criteria one and will include translated topics found on any level of the site.
- *Level on which translation first takes place*.
- *Level on which navigation devices are translated to Spanish* (menus and navigation bars that enable movement through several topics on the Web site).
- *Inclusiveness of graphics* was determined by six evaluators. The evaluators all had college degrees in education, business, computer science, or biology. They ranged in age from 21 to 50 and included 4 females and 2 males. All six evaluators were white. They listed graphics on each district's home page and labeled each listed graphic as cross-cultural, neutral, or specific. If evaluators labeled a graphic as "specific," they specified the culture represented by that graphic. They provided a rationale for the decision making regarding culture represented by graphics. After compiling evaluators' categorizations and rationales in a summary matrix, we paid closest attention to the evaluators' rationales. Throughout the data analyses we inserted our own judgment and understanding to summarize and draw conclusions keeping in mind that the ambiguous nature of the data made it subject to our interpretation. Therefore, we do not claim that our interpretation is the sole interpretation of these data.

Results

Preliminary results of the exploratory study follow. In testing the six criteria on Texas ISD Web sites, we found that they informed us regarding dimensions of cultural responsiveness.

Focus groups and interviews of the Latino community members revealed that cultural utility, or topics of interest, included information about registration, bussing, curriculum and programs of study, quality of program, class sizes, immunization information, how to contact the Board of Trustees, how to make course

changes, extra curricular activities, wages of teachers, and credentials of teachers.

For 31 ISD Websites, the percentage of topics translated to Spanish was .02% of the topics posted on school district Websites. They ranged from 0 translation to .15% of topics translated. However one site was an outlier with 23% of the 610 topics translated. This site was not included in the averaging process.

The content of topics translated to Spanish Translated content was idiosyncratic in that it varied widely from district to district including topics ranging from bacterial meningitis warnings to parental permission forms. Generally content fell under the following categories: Calendar, newsletters, menu, PTA information, school handbook, health information, bond information, enrichment information, and curriculum. Curricular information included information about migrant education, bilingual programs, pre-kindergarten, kindergarten, recommended high school programs, magnet schools, grading periods, exam schedules, and gifted and talented programs. Only two of the 31 sites had translated information about gifted and talented programs.

Again for just 31 sites, the level on which translation first took place were identified. Translations were typically found on the third or fourth level of the Websites making them inaccessible to users who only spoke Spanish. One site had no translation; 6 sites began their translations on level 3, and 14 sites began their translations on level 2. Ten sites had an "En Espanol" on the first level of the site.

For those same 31 sites, navigation devices were translated to Spanish starting with different levels. One site had no translation for navigation; 7 sites began their translations on level 3, and 13 sites began their translations on level 2. Ten sites had the "En Espanol" link on the first level of the site.

Website developers appear to be somewhat responsive in their selection of images that revealed the cultural diversity of the district. On the 50 Websites, one hundred and eleven graphics were polycentric, 707 were culturally neutral in their imagery, and 51 were ethnically specific or ethnocentric.

Data analysis reveals that the criteria developed for website evaluation facilitates identification of cultural responsiveness or unresponsiveness on websites.

Conclusions

When evaluating web sites, cultural responsiveness should be considered as an aspect of each of the four conventional criteria: design, credibility, usability, and accessibility. Continued research needs to aim at further identifying clear operational elements of culturally responsive website design.

A next step is to quantify our developed and tested criteria. Once our criteria have been quantified, a cultural responsiveness score and portrait of any district website will be able to be drawn. Based upon each score and portrait, specific recommendations for improving cultural responsiveness in website design can be specified for any given Web site.

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