

# Juror Information on the Web: A Study of Hispanic Populated Texas Counties

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## Abstract

In response to the initiative of providing juror education materials online, this study proposes that unless Web sites are designed in a usable fashion, this initiative could fail to enhance jury response and further aggravate the problem of under-representation by minorities. This study suggests that all online juror information Web sites be analyzed for “usability” and “design” if they are to be an effective education tool. In addition, this study proposes to compare responses to county Web sites in order to gauge bias responses of participants to their own county’s Web site vs. other county Web sites.

## Introduction

State courts are faced with the high cost of dissemination of juror education material to a large constituency. In business, corporations, large and small, seek methods for providing the most information, product, or service for the least amount of capital outlay. Similarly, those responsible for court management constantly review and implement different methods for providing information to prospective jurors in an effort to save resources as well as to encourage more participation by citizens in the jury process.

To that end, the 78<sup>th</sup> Texas Legislature authorized Texas counties to implement methods whereby prospective jurors may appear in response to a jury summons by computer or automated telephone system (No. 2188, 2003). In response, many Texas counties have instituted such measures. For example, some counties have automated telephone systems where prospective jurors can call in for juror information, instructions, and directions. Other counties have placed juror education information on their county Web sites for the prospective jurors to review prior to reporting. One county even has an interactive program that allows potential jurors to respond to their jury summons over the Internet and to be impaneled online via a questionnaire.

In response to the state initiative for providing juror education materials online, this study proposes that unless Web sites are designed in a usable fashion, the initiative could fail to enhance jury response and further aggravate the problem of under-representation by minorities. To that end, this study suggests that all county Web sites that provide online juror information be analyzed for both “usability” and “design” if they are to be an effective educational tool. Specifically this study will answer the following questions:

1. Do the five county Web sites selected for this study adhere to established Web design guidelines as perceived by all respondents?
2. Are the five county Web sites selected for this study perceived as usable by the respondents of this study?
3. Do respondents have a bias, favorable or unfavorable, to their own Web site when compared to the other Web sites?
4. Do respondents without online juror information materials have different opinions than do residents with online juror information materials as to the usability of the five county Web sites selected for this study?
5. Is the end-user evaluation approach a useful and feasible testing method for counties to implement when launching Web sites that offer online juror information materials?

The results of this study will provide counties with a tested method of evaluating their own Web sites before launching them for public consumption. This study will contribute to the literature of on-line juror education.

## Literature Review

One of the most basic and important civil rights of all Americans are the right to a trial by a jury of peers (Landsman, 1999; Saks & Marti, 1997; Abramson, 1994). Although each year approximately 15 million Americans are called to jury duty, only about one-third ever report to serve as jurors (Schneider, 1997). This low response rate has resulted in the under-representation of some areas of the population on juries (Fukari, 1996).

Response rates are similarly low in Texas. One example of this under-representation occurred in Dallas County, Texas. In 2000 nearly one of every four county residents was Hispanic; however, only one of 14 reporting for jury duty was Hispanic (Eades, 2001). One researcher, critical of Hispanic participation in the grand jury system, has suggested a mandate that juries be racially representative of the communities from which they are drawn (Fukari, 2000).

Judges, attorneys, court administrators, scholars, and former jurors have made various recommendations for making jury service a more positive experience in order to increase the low juror response rates in the state and nation (Jury Summit [JS], 2001). One proposal has been to increase the use of technology by providing online education prior to reporting for jury duty. Another approach has been to implement methods whereby prospective jurors can appear in response to a jury summons by computer or automated telephone system (No. 2188, 2003). During the Sixth Court Technology Conference in 1999, conference participants identified three strategies to address the issues of respect, public trust and confidence, and accountability by the courts as a means of improving external communication. These strategies included improving dissemination of court information to the public and to court users; making the courts more inclusive and outreaching including creating user-friendly court environments; and simplifying courts to make them more understandable to persons without an attorney (Nyberg, 1999). These strategies should be used when counties are considering developing their Web sites.

When considering using technology to simplify and improve juror response, the fact that "Generation X" and "Generation Y" jurors make up more than 40% of the national jury pool should be taken into consideration. Generation X potential jurors (defined as people born between 1966 and 1981) and Generation Y potential jurors (born in 1982 and after) were raised on cable television, computers and video games and are, therefore, more likely to respond to high-tech techniques (Brennan, 2004). With that in mind, a Missouri senate bill introduced in 2002 sought to lower the age of jury duty in their state to 18 instead of 21. Although there were pros and cons to this bill, one fact remains: no matter whether 18 or 21, this segment of the population is Web educated (Jackson, 2002).

Because juror education information is now being published online in the state of Texas where 31 percent of the population in the year 2000 was Hispanic, this literature review describes the demographics of the Hispanic consumers of juror materials, describes the usability of such materials and describes the design guidelines for Web

sites providing this information (Texas State Data Center and Office of the State Demographer, 2003).

## Hispanic Juror Demographics

Although the Constitution does not indicate that a jury of twelve men and women must be representative of America=s diverse ethnic, racial, and economic groups (*Donaldson v. California*, 1971), there has been some concern whether prospective juror pools correctly emulate shifting racial and ethnic populations (Fukari, 1996).

In the United States, the Hispanic population increased by 58% from 22.4 million in 1990 to 35.3 million in 2000. By the year 2050, it is projected that the Latino population (including Hispanics) will triple in size to reach 100 million (U.S. Census Bureau 2001).

Half of all U.S. Hispanics reside in California and Texas. The Hispanic population in Texas increased from 25.5% in 1990 to 31% in 2000. By the year 2030, it is projected that Hispanics will comprise 46% of the Texas population (Texas State Data Center, February, 1988). However, in Texas, juror demographics fall short of reflecting this trend. A joint study, conducted by the *Dallas Morning News* and Southern Methodist University in 2000, found that nearly one of every four Dallas County residents was Hispanic; however, only one of 14 reporting for jury duty was Hispanic. The study concluded that inherent barriers systematically prevented large segments of the population from participating in jury duty. While most citizens think of jury service as a “duty”, rather than as a right or privilege, the composition of juries is viewed by some researchers as a matter of controversy and an indicator of the boundaries of community and of racial mistrust (Sheridan, 2003).

Within the Hispanic community, language can serve as a barrier to jury duty participation. Nearly 70% of Hispanics/Latinos over the age of five speak Spanish at home (U.S. Department of Health and Human Services [USDHSS], 1997). Yet, only 8 percent of Hispanic American Internet users prefer Spanish-language Internet content. Although 15% of the general population has less than a high school education, more than 40% of Latinos are not high school graduates. Counties with large Hispanic populations must take into account that potential jurors are essentially bilingual and poorly educated when designing Web sites that offer juror education information (USDHSS, 1997). This would also incorporate McAllister=s (2000) recommendations that computing should be more accessible to non-English-speakers and the adoption of new tools, practices, technologies, and idioms would avoid “shoehorning the field into an English-speaking, American way of life” (2000) .

According to the Second Annual America Online/Roper ASW U.S. Hispanic Cyber study (2004), 42% percent of Hispanic online consumers have had Internet connection at home for less than two years as compared with just 15% of the general at-home online population and have quickly made the Internet part of their everyday life. More than half (53%) of offline Hispanics expect to get an Internet connection at home within the next two years.

This study proposes that online juror education materials designed for use in counties with large Hispanic populations should be evaluated for usability in an effort to increase participation by potential Hispanic jurors. The next section describes usability and why usability is an important step in the publication of online juror education materials for Hispanic audiences.

## **Usability**

As the World Wide Web continues to expand and grow, the creation of effective Web sites becomes more important. Effective Web designs will be essential as both governments and educational institutions begin increasing their dependence on the web to offer information and services online. (Shneiderman, 1997). Usability testing is critical to judging a Web sites effectiveness of whether a Web site is perceived as effective by its users. Although worldwide access is a significant economic and policy issue, it is also a critical design issue (Shneiderman, 1997).

One of the first questions that should be answered before embarking on the creation of a Web site is what is required to make a Web site successful. Nielsen (2003) indicates that a Web site is successful when it is perceived to be usable by the user. Usability is a process that evaluates user-friendliness by potential consumers. Usability also refers to systems for enhancing ease-of-use during the planning phases of a Web site (Nielsen, 2003). Palmer (2002) refers to usability as involving "what elements appear on screen and how efficient, intelligible, and intuitive they are" (Palmer, 2002). Nyberg (1999) indicated ten elements of a terrific court Web site: mission statement and audience, content, coverage, currency, constancy, contact, arrangement, appearance, formats and accessibility. Web designers must consider usability as well as other proven design guidelines. According to Shneiderman (2002), "the old computing was about what computers can do; the new computing is about what users can do. Successful technologies are those that are in harmony with users' needs." Therefore, when designing a Web site, one of the stages that should be followed is evaluating that Web site for usability. "The method you choose and the depth at which you conduct usability testing should correlate to the potential risk, such as lost revenue, associated with poor usability" (Guenther, 2003). In this study, usability might be perceived as the ease of locating and retrieving information within the Web site as well as the comprehension (readability) of such information.

"The most expensive, but arguably the most thorough option for usability testing is to outsource the testing to an outside vendor" (Guenther, 2003). According to one vendor, Software Usability Research Laboratory, usability testing is an empirical method of measuring a Web site's ease-of-use by bringing representative users into a fully equipped usability laboratory (Chaparro, 2000). The users are asked to complete a series of tasks within the Web site. Data is collected by observing the users, by soliciting feedback on user satisfaction, and by collecting performance data. The goal is to assess the ease of use, efficiency, usefulness, and appeal to its users.

For those electing to conduct usability testing independent of vendors, but with the desire to accomplish the same goals, end-user evaluation can be conducted. End-

user evaluation determines how easily typical users can accomplish tasks that are critical to the success of the Web site (Lisney & Schang, 2001). Data is collected for end-user evaluation in much the same way as with an outside vendor. The main difference is that testing is conducted in-house. "Engaging end users throughout the process of developing a Web site is critical to the success of the project. Doing so has significant advantages, namely the assurance that your project is on track during all phases of development, not just at the end when it comes time to formally test the product" (Guenther, 2003).

Based on the usability literature, it makes sense that end-user evaluation by prospective Hispanic jurors would yield important data for the creation of Web juror education materials, especially in those counties with a high Hispanic population.

## **Design Guidelines**

Two leaders in the research on Web design guidelines are Jonathan Palmer and Jakob Nielsen. Palmer (2002) recommends that all Web sites be assessed by users to ensure their compliance with four basic design elements:

- navigation - design should aid users in finding information quickly and efficiently;
- response time - design should provide users with fast loading pages and readily available search results;
- content - design should constantly update company information, organize content within a single click where possible, offer a number of printing options, and order the most relevant material at the top of a page and at the top of the hierarchical structure;
- Interactivity and responsiveness - design should give users the opportunity to customize their interactions and should provide users with appropriate feedback.

Nielsen (1994) has been a leader in defining Web site usability and in what constitutes good Web design for over a decade. Nielsen has published numerous reports on what design elements should be followed and what design pitfalls should be avoided when designing Web pages. The most commonly reported guidelines fall into the categories presented in this paper: response time, navigation, structure/layout, and content.

The most commonly recommended guidelines have been summarized into a checklist format. Testing of the checklist by representative user groups has been conducted by The Web Site Usability Testing Center (2001). The design guidelines determined to be the most important were load time, navigation, structure/layout, content, and visuals.

In this study, an evaluation instrument modified for this study but based on the work of Palmer (2002), Nielsen (2003), and The Web Site Usability Testing Center (2001), was used to evaluate the five (5) Web sites with juror education materials. The use of this instrument is described in more detail in the next section.

## Methodology

In the year 2000, Texas had a total population of 20,851,820 (U.S. Census Bureau, 2004). Of that population, the Texas State Data Center (1988) estimated that, in the areas of race and ethnicity, there were 54.6% Anglo; 31.0% Hispanic; 11.4% Black; and 3.1% other. In deciding which county Web sites to evaluate, the authors considered two factors: the percentage of Hispanic population within each county and the number of counties that had official Web site addresses with juror education information. Of the total 254 Texas counties, only 187 had Web sites. After reviewing the 187 counties with official Web sites, the authors further selected only those counties that had a Hispanic population of more than 50%. Thirty-four out of the 187 counties reported a Hispanic population of more than 50%. Of the 34 counties, only five counties had actual juror education information listed on their sites. These five counties (in alphabetical order) are: Bexar County, El Paso County, Hidalgo County, Nueces County, and Webb County (Texas Association of Counties, 2000). This inquiry will, therefore, survey prospective jurors in each of these five counties to determine their perception of whether usability and Web design guidelines were followed to make these Web sites effective vehicles for disseminating juror education materials to a predominately-Hispanic population.

The authors identified colleagues in higher education in the five specific counties to be evaluated. The colleagues volunteered to find prospective jurors to complete these surveys. All participants were volunteers in this study with no remuneration given. This survey was not a part of a class at any university.

Participants were given an informational sheet that outlined instructions for their participation in the survey. These participants were to locate and navigate the Web site looking for specific information that is frequently requested. Participants were then asked to answer questions about their navigational experience not about the specific information found. Respondents were asked to navigate the sites in alphabetical order. The instruments were stapled in alphabetical order so that every respondent navigated in the same order. This was done so that all participants would have the same experience in navigating the Web sites. Specifically, the first Web site would be the Web site where participants were just beginning to learn what information and navigational tools to use before evaluating it. Because it was the first for *all* respondents, the results could be more equitably compared. This process did not appear to bias the sample for or against any one site. Participants were asked to locate responses to the following three questions.

1. What is the name of the District Clerk?
2. What is the address indicated for the Court?
3. How would you describe the amount of information available about the jury duty process and procedures? Detailed information, sketchy information, or no jury duty information available? Explain.

Because the participants were volunteers, there was no formal review or assessment of individual computer Web skills. The authors recognize that the sample

size of approximately 20 prospective jurors in each of the five counties is not a comprehensive sample and should not be interpreted as such.

## Findings

### Participant Demographics

Participant demographic data was collected for identifying the population being surveyed. Table 1 describes the participants for this survey. As shown, more than 80% of the respondents were female and more than 74% were Hispanic. More than 76% were registered voters yet only 53% had ever been called for jury duty. Of those who had been called, only 11.7% had actually served on a jury. Less than 2% of the participants had ever been instructed to use online juror education materials.

Table 1 Demographic Information	
Description	Percentage
Number of Respondents, n=103	
Gender	
Male	18.4%
Female	81.6%
Ethnicity	
Hispanic	74.8%
White	14.6%
Other	10.6%
Age	
Under 20 years old	12.6%
20-29 years old	50.5%
30-39 years old	14.6%
40-49 years old	12.6%
50-59 years old	4.9%
60-69 years old	0.0%
over 69 years old	0.0%
Are you a registered voter?	
Yes	76.7%
No	20.4%
Are you a holder of a Texas Driver=s License?	
Yes	86.4%
No	13.6%
Jury Duty Service	
Have you ever been called for jury duty?	
Yes	53.4%
No	45.6%
Jury Duty Service	
Have you ever actually served on a jury?	
Yes	11.7%
No	88.3%
Online jury education	

Table 1 Demographic Information	
Description	Percentage
Have you ever been instructed to use online materials?	
Yes	1.9%
No	97.1%
Online jury education	
Have you ever actually used online materials?	
Yes	1.0%
No	99.0%

## Design Guidelines and Usability Opinions for all Counties

Two types of data were gathered from the respondents: the responses to the Web design guidelines checklist and the responses to the usability opinion questions. The data were analyzed to determine how the entire sample evaluated each of the five Web sites. Responses were received from all counties. The five participating counties were Bexar, El Paso, Hidalgo, Nueces, and Webb.

Table 2 presents the percentage of positive responses to each guideline. The Web site that best followed each design guideline is redouble-underlined; the Web site that least followed each design guideline is underlined.

As shown in the table, Bexar County was selected as having the highest percentage of “yes” responses to ten of the 15 design guidelines and the lowest percentage of “yes” responses to only one of the 15 design guidelines. El Paso had the highest percentage of “yes” responses to two of the 15 design guidelines and the lowest percentage for none of the guidelines. Hidalgo had the highest percentage of “yes” responses for only one of the design guidelines but had the lowest percentage for four of the guidelines. Nueces County had the highest percentage of “yes” responses to two of the 15 design guidelines and the lowest percentage of “yes” responses to six of the 15 design guidelines. Webb County was not selected as having the highest percentage of “yes” responses for any of the design guidelines but was selected as having the lowest percentage for four of the 15 design guidelines.

Table 2 Analysis of Responses to Web Design Guidelines					
	Responses by County				
	Bexar n=107	El Paso n=95	Hidalgo n=103	Nueces n=105	Webb n=75
adheres to 8-second rule	<u>98.1%</u>	93.7%	89.3%	93.3%	<u>58.7%</u>
progress indicator is included during load time	<u>81.3%</u>	82.1%	81.6%	<u>83.8%</u>	82.7%
groups buttons, bars, and other aids together	<u>97.2%</u>	92.6%	92.2%	89.5%	<u>86.7%</u>

Table 2 Analysis of Responses to Web Design Guidelines					
	Responses by County				
consistently places buttons, bars, and other navigational aids on each Web page	<u>92.5%</u>	91.6%	<u>80.6%</u>	85.7%	85.3%
uses hyperlink text (clickable text) accurately to describe linked pages	<u>91.6%</u>	88.4%	86.4%	<u>75.2%</u>	80.0%
provides a back-to-home link on every page	<u>86.0%</u>	82.1%	<u>63.1%</u>	83.8%	80.0%
able to distinguish between used and unused links	57.0%	45.3%	<u>64.1%</u>	<u>43.8%</u>	48.0%
uses page anchors (links) on large documents such as a <i>return to top</i> option	50.5%	53.7%	50.5%	<u>54.3%</u>	<u>48.0%</u>
orders most relevant material at the top of the site=s hierarchical structure	<u>89.7%</u>	86.3%	<u>81.6%</u>	81.9%	85.3%
orders most relevant material at the top of each page	<u>92.5%</u>	90.5%	<u>79.6%</u>	82.9%	84.0%
maintains constant design from page to page	83.2%	<u>92.6%</u>	77.7%	<u>81.9%</u>	85.3%
organizes each page within the site consistently (including navigation)	<u>91.6%</u>	88.4%	78.6%	<u>78.1%</u>	85.3%
avoids horizontal or side-to-side scrolling on Web pages	<u>88.8%</u>	86.3%	77.7%	78.1%	<u>74.7%</u>
provides contact information for Webmaster and/or site owner	<u>89.7%</u>	85.3%	44.7%	<u>42.9%</u>	76.0%
tells user when site was last updated	<u>71.0%</u>	32.6%	46.6%	<u>32.4%</u>	37.3%

Table 3 presents the mean response to each opinion question. For questions 1, 2, 3, and 5, a lower mean value translates to a more favorable response. For questions 4, 6, 7, and 8, a higher mean value translates to a more favorable response. The county with the most favorable response is double-underlined for each opinion question, and the county with the least favorable response is underlined.

Table 3 Analysis of Responses to Opinion Questions	
	Responses by County

	Bexar Mean n=107	El Paso Mean n=95	Hidalgo Mean n=103	Nueces Mean n=105	Webb Mean n=75
(1) The Web site used a readable and visually appealing font and format.	2.15	<u>2.14</u>	2.54	<u>2.67</u>	2.39
(2) The Web site presents color in a visually appealing way.	2.20	<u>2.02</u>	<u>2.64</u>	2.54	2.36
(3) I found it easy to get to the juror information on this Web site.	2.53	<u>2.11</u>	2.98	<u>3.48</u>	3.01
(4) The sequence of obtaining information was clear.	<u>3.58</u>	3.54	3.30	<u>2.78</u>	3.41
(5) The information on succeeding links from the initial page was predictable.	<u>2.47</u>	2.54	2.67	<u>2.97</u>	2.77
(6) The Web site was satisfying.	3.60	<u>3.68</u>	3.34	<u>2.84</u>	3.40
(7) If you had a future need for information presented in this Web site, how likely is it that you would consider returning to this site?	<u>3.86</u>	3.85	3.11	<u>2.86</u>	3.48
(8) How would you compare this site to other similar Web sites (much better)?	<u>3.67</u>	3.66	3.13	<u>2.71</u>	3.37

### Analysis of Respondents= Bias of Web Sites

The responses to the opinion questions were further analyzed to determine if any bias (favorable or unfavorable) toward their own county's Web site existed on the part of the respondents. Specifically, did county residents have a more or less favorable opinion of their own Web site than they did of the other Web sites? To answer this question, the mean values were calculated for each opinion question. T-tests were calculated to determine if a significant difference existed between the responses of residents to their own county Web site as compared to their responses to the other four Web sites. A probability value of less than .05 is considered significant indicating that a significant difference existed. The analysis for each county is shown in tables 4-8. The questions that resulted in a significant relationship are marked with an asterisk.

The results for Bexar County are shown in Table 4. Bexar County residents did not have a more or less favorable opinion of their own Web site than they did of the other Web sites. No statistically significant relationships were discovered.

Table 4 Comparison of Bexar County Responses				
	Usability Opinions			
	Bexar County	Other Counties	t	p=
Juror Information on the Web				

	Mean n=19	Mean n=65		
The Web site used a readable and visually appealing font and format.	2.00	2.48	-1.351	.180
The Web site presents color in a visually appealing way.	2.11	2.42	-.911	.365
I found it easy to get to the juror information on this Web site.	3.21	2.80	.941	.350
The sequence of obtaining information was clear.	3.63	3.43	.561	.576
The information on succeeding links from the initial page was predictable.	2.21	2.63	-1.269	.208
The Web site was satisfying.	3.58	3.60	-.060	.952
If you had a future need for information presented in this Web site, how likely is it that you would consider returning to this site?	4.16	3.78	1.046	.299
How would you compare this site to other similar Websites (much better)?	3.63	3.25	1.229	.222

\* Significantly different at the .05 level.

El Paso County had five occurrences of a statistically significant relationship for questions 3, 4, 6, 7, and 8 as shown in Table 5. In other words, El Paso County residents did have a more or less favorable opinion of their own Web site than they did of the other Web sites.

Table 5 Comparison of El Paso County Responses				
	Usability Opinions			
	El Paso County Mean n=19	Other Counties Mean n=76	t	p=
The Web site used a readable and visually appealing font and format.	1.95	2.38	-1.894	.067
The Web site presents color in a visually appealing way.	1.95	2.38	-.869	.387
I found it easy to get to the juror information on this Web site.	1.68	3.21	-5.698	.000*
The sequence of obtaining information was clear.	3.84	3.05	2.620	.010*
The information on succeeding links	2.47	2.66	-.700	.486

from the initial page was predictable.				
The Web site was satisfying.	3.89	3.20	2.598	.011*
If you had a future need for information presented in this Web site, how likely is it that you would consider returning to this site?	4.11	3.11	3.261	.002*
How would you compare this site to other similar Websites (much better)?	3.95	2.87	4.106	.000*

\* Significantly different at the .05 level.

The results for Hidalgo County are shown in Table 6. Hidalgo County residents did not have a more or less favorable opinion of their own Web site than they did of the other Web sites. No statistically significant relationships were discovered.

Table 6 Comparison of Hidalgo County Responses

	Usability Opinions			
	Hidalgo County Mean n=13	Other Counties Mean n=54	t	p=
The Web site used a readable and visually appealing font and format.	2.08	2.06	.049	.961
The Web site presents color in a visually appealing way.	2.23	1.96	.643	.523
I found it easy to get to the juror information on this Web site.	3.00	2.54	.847	.400
The sequence of obtaining information was clear.	2.92	3.20	-.638	.526
The information on succeeding links from the initial page was predictable.	2.54	2.69	-.335	.739
The Web site was satisfying.	2.77	3.19	-.885	.379
If you had a future need for information presented in this Web site, how likely is it that you would consider returning to this site?	2.23	3.22	-1.952	.055
How would you compare this site to other similar Websites (much better)?	2.38	3.13	-1.592	.116

\* Significantly different at the .05 level.

The results for Nueces County are shown in Table 7. Nueces County residents did not have a more or less favorable opinion of their own Web site than they did of the other Web sites. No statistically significant relationships were discovered.

Table 7 Comparison of Nueces County Responses				
	Usability Opinions			
	Nueces County Mean n=10	Other Counties Mean n=26	t	p=
The Web site used a readable and visually appealing font and format.	2.70	2.15	1.217	.232
The Web site presents color in a visually appealing way.	2.60	2.08	1.156	.256
I found it easy to get to the juror information on this Web site.	3.60	2.65	1.425	.163
The sequence of obtaining information was clear.	3.00	3.85	-1.926	.062
The information on succeeding links from the initial page was predictable.	2.60	2.04	1.403	.170
The Web site was satisfying.	2.60	3.62	-1.950	.059
If you had a future need for information presented in this Web site, how likely is it that you would consider returning to this site?	3.20	3.46	-.490	.628
How would you compare this site to other similar Websites (much better)?	2.90	3.42	-1.192	.241

Significantly different at the .05 level.

Webb County had only one occurrence of a statistically significant relationship ( $p=.039$ ) for question number 7 as defined in Table 8. In other words, Webb County residents did have a more or less favorable opinion of their own Web site than they did of the other Web sites, at least with regard to question number 7.

Table 8 Comparison of Webb County Responses				
	Usability Opinions			
	Webb County Mean n=21	Other Counties Mean n=99	t	p=
The Web site used a readable and visually appealing font and format.	2.48	2.67	-.640	.524
The Web site presents color in a visually appealing way.	2.48	2.72	-.869	.387
I found it easy to get to the juror information on this Web site.	3.14	2.86	.862	.391
The sequence of obtaining information was clear.	3.52	3.22	1.135	.259
The information on succeeding links from the initial page was predictable.	2.90	2.91	-.017	.987

The Web site was satisfying.	3.48	3.31	.613	.541
If you had a future need for information presented in this Web site, how likely is it that you would consider returning to this site?	3.90	3.35	2.088	.039*
How would you compare this site to other similar Websites (much better)?	3.71	3.54	.730	.467

\* Significantly different at the .05 level.

## Analysis of Cameron County Responses

The responses to the opinion questions were analyzed a third time to determine if residents from a county without any online juror information materials available to them responded differently to the five Web sites than those living in counties with online juror information materials. For example, did Cameron County residents (without juror information material) have a more or less favorable opinion of a Web site than did all of the other respondents (with juror information material) to the same Web site? To answer this question, the mean values were calculated for each question. T-tests were calculated to determine if a significant difference existed between the Cameron County responses and the other responses. A probability value of less than .05 is considered significant indicating that a significant difference existed. No statistically significant differences resulted in this analysis.

## Conclusions

In an effort to determine which Web sites were perceived to have followed the Web design guidelines, we analyzed the data received from the five participating counties in aggregate. In addition, we analyzed the results of the opinion questions by calculating mean scores for each opinion question and reported the probability value for the bias/usability of the participants toward their own county's website as compared to the other websites. In addition, we compared participants without a county Web site to participants with a county Web site to gauge whether county of residence has any impact on the perception of adherence to design guidelines or the opinions on usability. This information will be useful as counties select their own end-user testing groups to evaluate newly created or revised county Web sites.

## Web Design Guidelines

Bexar County had the highest percentage (double underlined values) of "yes" responses to ten of the 15 Web design guidelines. In other words, Bexar County was selected to have the highest incidence of compliance with the Web design guidelines. El Paso County had the highest percentage of "yes" responses to two of the 15 Web design guidelines, Hidalgo to one of the 15, Nueces to two of the 15, and Webb to none of the 15 guidelines. Looking at the counties with the lowest percentage (underlined values) of "yes" responses for the Web design guidelines, Nueces had the highest incidence of noncompliance for six of the 15 guidelines. Both Hidalgo and Webb

Counties tied at four of the 15. Bexar County had only one and El Paso had none. It can be concluded that Bexar County is perceived by all respondents to have the best-designed Web site.

## **Web Opinion Questions**

The respondents identified Bexar and El Paso County Web sites as the most favorable in four of the eight opinion questions. In other words, Bexar and El Paso County had the highest mean value out of all the Web sites for four of the questions. The Hidalgo, Nueces, and Webb County Web sites were not found to be the most favorable for any of the eight questions. In fact, Hidalgo County was found to be the least favorable Web site for one of the opinion questions while Nueces County was found to be the least favorable for six of the eight opinion questions. It can be concluded that both Bexar and El Paso were perceived to be the most usable Web sites. For Bexar County, the results of the opinion usability questions are consistent with the mechanics noted in the Web design checklist. However, for El Paso County, the Web site was perceived to be exceptionally usable but was not determined to consistently adhere to the Web design guidelines. This may mean that some simple modifications could be made to bring the Web site into compliance with the guidelines without major modifications to the site=s layout.

Overall, the Bexar County Web site was considered by all respondents to be the best Web site in following the Web design guidelines and in terms of usability.

Based on the results of this study, the end-user testing approach is a useful and feasible approach for counties to use to judge their own Web sites.

## **Recommendations**

The following are recommendations about the survey instrument, research method, and future research.

1. Counties interested in offering online education materials should do the following:  
Study the Bexar County Web site for ideas on how to create a Web site that is appealing to potential jurors.  
Select a representative user group to conduct usability testing.
2. Use the design guidelines checklist and usability opinion instruments used for this study with the noted modifications.
3. The recommended modification for the section of the survey instrument used to gather data for the usability opinion questions is to restructure the questions to use a consistent Likert scale. In other words, the one=s should consistently represent the least favorable response and the five=s the most favorable response.
4. Based on the participants' feedback, the overwhelming majority indicated that they had no knowledge that online juror information was available. One recommendation would be that any county deciding to place juror information

online should frequently publicize the availability of such information to its constituents. In addition, counties should consider offering an incentive to potential jurors to use the online materials and to respond to the summons online. This could result in a significant cost savings for counties with large jury pools.

5. With more and more people using the Web, it is recommended that more counties in Texas establish county Web sites with online juror education materials.
6. As more counties establish county Web sites, it is recommended that they adopt the end-user evaluation approach to gauging the usability of their Web sites as described in the literature review section and as tested in this paper. Counties currently summon a large group of potential jurors each month for jury service. One recommendation would be to use this group of potential jurors to conduct end-user evaluation of Web sites during the design phase as recommended in this paper. Another advantage to this approach is that it would take into consideration a larger and more representative sample of the population.
7. Texas counties seeking to enhance online juror information could study the wealth of information available on the Travis County Web site ([http://www.co.travis.tx.us/district\\_clerk/jury/default.asp](http://www.co.travis.tx.us/district_clerk/jury/default.asp)). Travis County's I-Jury program received an award from The Center for Digital Government for Best Application Serving the Public. Travis County's I-Jury program was also selected by the Texas Association of Counties for award recognition in the area of superior innovation. The interactive program allows potential jurors to respond to their jury summonses over the Internet and to be impaneled online via a questionnaire, eliminating one trip to the courthouse.
8. Other Texas county Web sites could be studied to determine usability of online juror education materials and percentage of Hispanic representation on juries in those counties. If greater usability correlates with a higher percentage of Hispanic juror representation, then counties with large Hispanic populations could redesign their online juror education materials. Researchers could then compare Hispanic representation on juries in those counties before and after the Web site design.
9. Future research should evaluate if any bias (favorable or unfavorable) exists on the part of residents versus non-residents of a county toward their own Web site during evaluation.
10. Future research should be aimed at determining whether under representation of Hispanics on juries is related to the language barrier and the fact that the juror education materials are being published only in English.

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