Usability Test of an Adult Literacy Council Website

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Dear Marilynn Golightly, Director of the Concho Valley Adult Literacy Council,

In response to the requested usability test from Angelo State University’s usability laboratory, the project team, including Laura Nicole Carpenter and Joseph Kalani Kealoha Aquino, is presenting a final report of the usability test.

The Adult Literacy Council needed research and data to aid in the creation of a website. The Adult Literacy Council caters to the Tom Green County community who are in need of educational and/or bilingual services.

The primary goal was to research the most effective features of an Adult Literacy Council website. Given that there is currently no website for the Adult Literacy Council of Tom Green County, gathering data about which features are most effective for a website designed for an adult literacy council was a priority.

Our team conducted a usability test of the Adult Literacy Council of Fort Bend County’s website. Our team also conducted a comparative test and a formative test. The following report details the project team’s findings.

Sincerely,

Laura Nicole Carpenter  & Joseph Kalani Kealoha Aquino
Executive Summary

In response to the requested usability test from Angelo State University’s usability laboratory, the project team, including Laura Nicole Carpenter and Joseph Kalani Kealoha Aquino, is presenting a final report of the usability test on the Adult Literacy Council of Fort Bend County’s website, including the project team’s findings.

The Adult Literacy Council needed research and data to aid in the creation of a website. The Adult Literacy Council caters to the Tom Green County community who are in need of educational and/or bilingual services.

The primary goal was to research the most effective features of an Adult Literacy Council website. Given that there is currently no website for the Adult Literacy Council of Tom Green County, gathering data about which features are most effective for a website designed for an adult literacy council was a priority.

Our team conducted a usability test of the Adult Literacy Council of Fort Bend County’s website. Our team also conducted a comparative test and a formative test. The following report details the project team’s findings.

Based on our findings of the usability tests, we recommend tailoring the website to a multi-lingual individual, which could include having an option to translate the entire website into an alternative-to-English language. There is also an undeniable need for ethnographic research, in order to find out exactly who the target population is, what their wants and needs are, and what features are most accessible to all of the users possible. Our recommendations, based on the need for easy find-ability involve using current protocols in HTML markup, or otherwise known as coding, to maintain easy user access.

We recommend placing information under logical and corresponding headings, and we recommend conducting another usability test of the target users, involving Open and Closed Card Sorting. We recommend using SEO principles in the creation of a website. We also recommend minimizing the request for funds, or maximizing requests for other materials. Maintain a balanced approach, and keep in mind how the public feels about donating what is not readily available, like money. Our recommendations include creating an option for donating other materials, or leaving information about such donations. Finally, our recommendations include making sure that your contact information stands out from the background enough to see it clearly.
2.000 Overview
San Angelo’s Adult Literacy Council (a member of Concho Valley Partners) requested a usability test from Angelo State University’s usability laboratory. The Adult Literacy Council needed research and data to aid in the creation of a website. The Adult Literacy Council caters to the Tom Green County community who are in need of educational and/or bilingual services. This project (which satisfies requirements of English 4365, Usability Testing in Technical and Business Writing) was chosen because of the lack of a created website.

3.000 Introduction

3.100 Research Question
Since there is currently no website for the Adult Literacy Council of Tom Green County, the primary research question was: “What types of features and information are most accessible and effective on a website designed for an adult literacy council?”

3.200 Goals and Objectives
The primary goal was to research the most effective features of an Adult Literacy Council website. Given that there is currently no website for the Adult Literacy Council of Tom Green County, gathering data about which features are most effective for a website designed for an adult literacy council was a priority.

4.000 Methods

4.100 Test Types
A comparative test and a formative test were conducted. A formative test is conducted at the outset of a project. A formative “study is conducted quite early in the development cycle, when a product is still in the preliminary stages of being defined and designed” (Rubin and Chisnell 29). Utilizing the Adult Literacy Council of Fort Bend County’s website to conduct tests, a comparative test “is not associated with any specific point in the product development lifecycle. In the early stages, it can be used to compare several radically different interface styles via an exploratory test, to see which has the greatest potential with the proposed target population” (Rubin and Chisnell 37).

4.200 Test Methods
Given the lack of human resources, time, and data, a usability test –employing “techniques to collect empirical data while observing representative end users using the product to perform realistic tasks” (Rubin and Chisnell 19) –on the Adult Literacy Council of Fort Bend County’s website was conducted. We used a background questionnaire to obtain information about internet habits, and user-specific habits. These questions were designed to obtain ethnographic research. Ethnographic Research involves “observing users in the place where they would normally use the product to gather data about who your target users are, what tasks and goals they have related to your planned product, and the context in which they work to accomplish their goals” (Rubin and Chisnell 16).

We used formative and comparative study principles in the testing process. A formative “study is conducted quite early in the development cycle, when a product is still in the preliminary stages of being defined and designed” (Rubin and Chisnell 29). A comparative test “is not associated with any specific point in the product development lifecycle. In the early stages, it can be used to compare several
radically different interface styles via an exploratory test, to see which has the greatest potential with the proposed target population” (Rubin and Chisnell 37). We administered post-test surveys, “used in the early stages to better understand the potential user” (Rubin and Chisnell 18), which were designed to collect post-testing thoughts and feelings.

4.300 Data
Qualitative data was collected. We originally intended to collect quantitative data, but given the challenges, results would have been incomplete and possibly tainted. Quantitative data would have provided information “measuring how well the user is able to perform” (Rubin and Chisnell 31). With qualitative data, “you strive to understand why the user performs as he or she does” (Rubin and Chisnell 31).

4.310 Quantitative
Measurements taken included:
• Usability Testing of the Adult Literacy Council of Fort Bend County’s website
• Task success

4.320 Qualitative
Measurements taken included:
• Note-taking- taking notes of important pieces of information, like moments of frustration, necessary deviations from original scripts, and other statements
• Self-Reported Metrics- any information that the participant communicates
• Pre-test surveys- “used in the early stages to better understand the potential user” (Rubin and Chisnell 18)
• Post-test interviews- (or post-test survey)

4.400 Tools
Given the challenges, a usability test was conducted in the Angelo State University’s usability laboratory using the programming of Morae and an audio recorder.

4.410 Morae
Morae is recording software which collects the number of mouse clicks, collects the number of backward clicks, records video and audio, shows task times and errors, and other efficiency-related information. According to the website, “Morae is a leading usability software that removes the guesswork from your decisions and helps you make products people love. Record user interactions, efficiently analyze results, and instantly share your findings with anyone, anywhere” (Morae).

4.500 User Profile
Given the challenges, testing included six participants over the age of 18, since the Tom Green County Adult Literacy Center caters to those that are 18 or older. The user profile was split in between ‘Students’, who 1) read at a level lower than a high-school graduate, and 2) possibly bilingual and/or only Spanish speaking, and ‘Volunteers’, who might donate money and/or time to local-to-Tom Green county organizations/non-for-profit organizations. Once testing was completed, the participants included five ‘Volunteers’ (4 male, 1 female) and one Student (1 female).
5.000 Findings
Given the challenges associated with the project, including lost human resources, data, and objectives/scope, findings will be broken into a subjective analysis of our theories, supported by empirical data.

5.100 Critiques

5.110 Need for Spanish
We learned with Participant 2, Participant 3, and Participant 4, there is an obvious need for Spanish use in anything involving the Adult Literacy Council. We know that Spanish is a must because: Participant 2 only speaks, reads, and understands Spanish, which resulted in a lack of communication, and led to multiple failed tasks. Participant 3 and Participant 4, both tutors at the Adult Literacy Council, commented on the need for Spanish. Participant 3 said “‘Cause if they’re in there for [English as a Second Language] ESL, you know that most of the time there’s people that come in that are not going to know any English or just barely some.” Participant 3 went on to say “And it’s [referring to the website] going to be even more confusing for somebody that’s trying to learn English.”

Participant 4 said “If I was a student, and I was illiterate, this page would be impossible for me to navigate. If I were a student, one of ESL (English as a Second Language), and I know a little bit of English, and maybe my kids were smart enough to get me to this webpage, they could probably navigate it for me, but maybe some of this needs to be in Spanish, which is their biggest target audience.” Participant 4 went on to say “So, here’s ESL, English as a Second Language, section under the students, for example, and if I needed English language help, I’d have to be pretty darn good to read that and find out when they’re holding classes, and when they’re enrolling, so it needs to be in Spanish.”

With so many references to the need for Spanish, and given that between 24.5% and 34.4% of the population speak a language other than English between 2007 and 2011 in Tom Green County (U.S. Department of Commerce), the need for bilingual capabilities on a website for an Adult Literacy Council is obvious.

Our recommendations, based on the need for a multi-lingual website, are:

- There is an undeniable need for ethnographic research, in order to find out exactly who the target population is, what are their wants and needs, and what features are most accessible to all of the users possible. Ethnographic Research involves “observing users in the place where they would normally use the product to gather data about who your target users are, what tasks and goals they have related to your planned product, and the context in which they work to accomplish their goals” (Rubin and Chisnell 16).
- One possible way to tailor the website to a multi-lingual individual would be to have an option to translate the entire website into an alternative-to-English language. Participant 4 mentioned, “Or maybe a tab, I’ve seen some webpages where you can click on it and the whole thing becomes Spanish, or some other foreign language.” Such features are available on many different websites and applications.
- Another way to tailor the website to a multi-lingual individual would be to utilize an open-source, or free, online search engine, like Google Chrome, in such translations.
- Another way to tailor the website to a multi-lingual individual would be to only tailor one specific page (the page associated with a multi-lingual individual) to an individual, while maintaining English on the rest of the pages.
Given a lack of knowledge in the procedures, costs, and tools needed for such technological abilities, an estimate of cost and difficulty is unavailable.

5.120 Easy Location
For creators of websites, including details about the subject, titles, and additional information in the beginning of the code makes searching for that website on a search engine, like Google, easier. Such elements are known as “meta tags”. “A meta element can be used in a web page for different reasons. Some are used to provide additional information that’s not displayed on screen to the browser or search engines; for instance, the name of the pages author or a copyright notice might be included in meta elements” (Lloyd 766). These are the types of elements that would make searching for and finding a website easy.

Participant 2 typed information about Adult Literacy Council into the search box, and returned many different sites—none pertaining to Fort Bend County. “Yo pienso que se yo, no. Eres donde estamos.” – Rough Translation: “I believe this is it, no? Is this where it is?” “Oh, hijo[le]” (5.57)—Rough Translation: “Oh, gosh”. Based on this, we can deduce some frustration was experienced in trying to find the website. The Moderator had to guide the participant to the correct website after 8 minutes of trying to locate the right website.

Participant 3 first navigated to the Facebook page, then navigated to a couple of information pages about Ft. Bend Adult Literacy Council, run by a separate entity from Ft. Bend Adult Literacy Council. The moderator had to give P3 a hint to find the link leading to the Ft. Bend Adult Literacy Council. Participant 3 said “This is embarrassing.” Given that the participant expressed embarrassment, we can deduce that an Adult Literacy Council website needs to be simple and easy to remember and locate.

Our recommendations, based on the need for easy find-ability involve using current protocols in HTML markup, or otherwise known as coding, to maintain easy user access.

5.130 Organization
Throughout testing, participants were asked to complete a number of tasks involving exploring the website. Tasks, like donating books, were designed to test the effectiveness and logic behind the website's layout. Participants revealed challenges in locating specific information.

All the participants failed to locate specific information, like donating books. Logically, information about donating books should be located under the Donate tab on the website. Participants assumed that information would be located under logical headings, like “Outreach” containing information on reading to the community. Websites should be organized logically, and information should be found under the headings that an individual expects specific information. Participant 6 spoke about the illogical format of the website. “it just seems … unlogical in a sense, based on how much information they’re putting on each page … don’t overload each page with so much that the user just becomes so confused and so … discouraged that he doesn’t even want to even try”.

We know that users expect to find what they are looking for under corresponding headings. Recommendations include:

- Placing information under logical and corresponding headings.
- We propose conducting another usability test of the target users, involving Open and Closed Card Sorting, which uses “card sorting to design in ‘findability’ of content or functionality” ...
“give participants preliminary or preexisting categories and ask participants to sort content or functions into those (a closed sort)” (Rubin and Chisnell 18).

5.131 Search Engine Optimization (SEO)
For creators of websites, including Search Engine Optimization (SEO) principles in the creation of the website is a must. Search Engine Optimization involves tailoring the test on a website to the internet and its users. Internet users are, typically, impatient, time-consuming, and searching for something specific. Internet users do not want to be overloaded with information, and, especially, don’t want to be forced to read through paragraphs of irrelevant information while searching for something specific. Internet text should not be written like a novel to be enjoyed leisurely, but, rather, written like note/flash cards, including quick, shortened, and contextualized bullet points.

We can deduce that following SEO principles would be, not only beneficial, but, bordering on necessary. Participant 1 commented on the disorganization of the website. “It’s a lot of information, I’m sure if I took the time to read all of this, I could probably, maybe, somewhat understand it, just it’s a little disorganized.”

Recommendations involve using SEO principles in the creation of a website.

5.140 Money
Given the state of the economy, it is obvious that everyone is in need of financial security. Unfortunately, no one wants to be asked to provide funds. Every participant, except participant 2, had something to say about asking for money. Participant 3 said: “but I see only here that, you know, they’re more interested in money. Yeah, money does make a big difference. But, why would anyone want to turn down donations of free books that can be used to help children.” … “A lot of people do get turned off because that’s when they see ‘they always want money, they always ... what else do they want?’” Participant 4 said: “And this ‘Ways to Donate’ seems to be just about money. Yeah, just about money, and things like that.”

We felt that Participant 1 said it best, see fig. 1.: “Kind of annoying that this is on every page. It almost feels like they are screaming that you ‘give money.’”

Recommendations include minimizing the request for funds, or maximizing requests for other materials. Maintain a balanced approach, and keep in mind how the public feels about donating what is not readily available, like money.

5.150 Books and Materials
If there is an interest in collecting books, supplies, and other materials, the Adult Literacy Council must feature options available for such materials. Every participant, except Participant 1,
failed to find out if donating books was an option through the website.

Participant 4 said: “if she wants people to donate books, that should be one of the tabs. I’m sure I could find it, if it’s here, given enough time, but if I was really, really wanting to donate my books to the literacy council of San Angelo, Concho Valley, I would spend the time finding it, or I just call ‘em up and ask at this point, ‘cause it’s too difficult.”

Participant 3 said: “Ok, a lot of people would rather give something that they don’t have any use for at the house; books, a lot of people do a lot of reading, and they may read the book maybe one time or two times, and it’s still in very good condition, so... To me, they would have, it would be better to donate books” ... “As far as, you know, if you want to donate something, it should be under ‘Donate’. But the only thing I see here are, like, gifts of literacy.”

We know that there needs to be an option for donations of things other than money. Recommendations include creating an option for donating other materials, or leaving information about such donations.

5.160 Visibility
Visibility includes the most frequently viewed areas of a webpage. Making sure that your contact information stands out from the background enough to see it clearly is a necessity. Participant 3 said “I’m still going to say, you have to have in there, either some kind of a phone number, or a way to get a hold of them”. Visibility means ensuring that the information is accessible to all, including those that might be visually impaired.

We know that further advertising is necessary. If no one knows that something exists, how likely is it going to be used? Participant 3 said “One of the biggest problems I think that we have is advertising. The thing about, you know, sometimes we have people that walk in and says ‘wow, I didn’t even know you existed, even here!’”

Maintenance of a website can be seen like maintain a property. How likely is it that someone will spend time in a place that is unkempt? Participant 4 said “there’s nothing worse for somebody interested in something to go to a webpage, and find that it’s not being maintained. It’s like they’re not really there anymore.” ... “So you go to a webpage, and it looks like nobody’s been there for a few months, they’ll go to someplace else”.

We know that the information on the pages needs to be visually accessible to all, advertising is necessary, and maintenance is constant. Recommendations include:

- Making sure that your contact information stands out from the background enough to see it clearly.
- Further advertising is necessary.
- Maintenance of a website is necessary.

5.200 Positive Outlook

5.210 Colors
All participants, as well as the project team, had no complaints about the color scheme. Participant 1 said “But, as far as this top part goes, I think that, I think that's fine.” Participant 5 said: “It looks really friendly. I don’t see anything wrong with the color scheme”.
Recommendations include choosing pleasing, calming, and cohesive colors.

5.220 Presence of a Detailed website

5.221 Information inclusion
Despite being overwhelmed with the amount of information, participants were impressed by the details that were included in the information. When asked, “Do you like how this website is working?” Participant 2 responded: “Sí, porque, ni-estaba información de que...” —Rough Translation: Yes, because here is information that...” In the closing questionnaire, in question #1, Participant 6 agreed, responding: “Because it’s simple but informative...”

Recommendations include not necessarily cutting out information from the volume, but rather tailoring the volume of information to the Internet and its users.

5.222 Inspiration
Every participant felt inspired by the Adult Literacy Council, and said that the Adult Literacy Council itself was useful. After reading the mission statement, Participant 6 said: “So, based on this information, I would say that I would want to join in their community, just to help out their mission of ending adult illiteracy.

Recommendations include continuing with the goals and objectives, or mission statement, of the Adult Literacy Council.

5.230 Donation options
Despite being overwhelmed with the request for money, having multiple options for donating money is seen as beneficial. Participant 6 said “Donate through credit cards—they’re pretty convenient now-a-days. Which I’m guessing more people are doing now, a lot, so.” ... “Here are the options, “One month”, “Three Months”, “One Year”; so they really are expecting you to give a dollar a day, and if you just wanna make it out in one payment, that’s nice too.”

Recommendations include having multiple options for donations available.

5.240 Link location
We know that the side-like locations were visible, clear, and really easy to find. Task 3 originally asked Participant 2 to find information about the price of receiving a GED and receiving help with that price. The participant did not understand the instructions and did not understand the information on the website, and although the participant failed the task, Participant 2 was able to locate the information pertaining to the GED price. Participant 2, a Spanish-only speaker, was successful in locating the information. See fig. 2. We can deduce that having side links is a very efficient feature of the website.

Recommendations include having side links.
Figure 2: (Literacy Council of Fort Bend County)

GED Class Information

Registration for the GED preparation classes will begin August 15th at the Sugar Land/Main campus. Classes will start on August 20th for the Sugar Land/Main campus and after the Labor Day holiday for all other locations. Morning, afternoon and evening classes are available at various locations. Additional registration locations for the GED classes in TBD, and will be posted ASAP.

To register, applicants will need to bring proof of address and annual household income. All classes are free however, there is a $30 registration fee. Students will be responsible for the GED Prep book published by Steck Vaughn that can be purchased from Barnes & Noble, Half Price Books, Amazon.com or the Literacy Council of Fort Bend County. The book price varies between $13 and $20 depending where it is purchased.

GED Math will meet every Tuesday beginning August 20th. GED Language, Science and Social Studies will meet every Thursday beginning Thursday, August 30th.

Students must attend an afternoon session from 1:00 p.m. to 4:00 p.m. or an evening session...
Works Cited


