To: Steering Committee, Department of English

From: Daliborka Crnković Date: November 26, 2013

Re: Department of English Website - Design Justification Memo

Executive Summary

The website of the Department of English at UTEP shows a few gaps in both the visual design and the information architecture of its pages. With a consideration of the website's primary and secondary audiences, I analyzed and attempted to fill in these gaps based on the concepts of usability and user experience (Rogers, Sharp, and Preece, 2011; Nielsen, 2012).

1. Current website gaps:

- Navigation panes are not geared towards the primary audiences (undergraduate and graduate students), and they could also be improved for secondary audiences (faculty and scholars).
- Poor visibility and organization of information causes a time consuming user experience, and it shows the Department as a collection of separate entities (i.e., programs) instead of as one unit.
- The inconsistency of the navigation menus and other elements causes usability errors and user disorientation.

2. Proposed changes:

- Reorganization of the navigation panes to allow users to accomplish basic tasks efficiently, to reestablish proficiency quickly, and to be able to recover from potential errors easily.
- Creation of new elements or rearrangement of existing elements by positioning similar elements in similar positions in order to create consistency that would help avoid constant disorientation of the user.

Although my analysis and suggested redesign do not include all the necessary changes on the Department's website, I have obtained a good amount of information that will be useful in my next redesigning steps.

Usability

Usability, as defined by Rogers et al. (2011), is "generally regarded as ensuring that interactive products are easy to learn, effective to use, and enjoyable from the user's perspective," (p. 20). This view of usability is expanded by Nielsen (2012), who proposes the following specific questions as guidelines for establishing usability:

Learnability: How easy is it for users to accomplish basic tasks the first time they encounter the design?

Efficiency: Once users have learned the design, how quickly can they perform tasks? Memorability: When users return to the design after a period of not using it, how easily can they reestablish proficiency?

Errors: How many errors do users make, how severe are these errors, and how easily can they recover from the errors?

Satisfaction: How pleasant is it to use the design?

When answering the above questions on usability, it is necessary to first consider the audience, or as Rogers at al. (2011) put it, "who is going to be using [the interactive products]," (p. 5) and what "kind of activities people are doing when interacting with the products," (p. 6).

The primary audiences for the English Department website are both prospective and current UTEP students. Based on the level of their current education, students are typically further divided into two categories: undergraduate and graduate students. This distinction is important because the desired level of education guides these audiences in their search for the information they are seeking on the website. Thus, the basic task that these users would likely want to accomplish is finding a list of undergraduate or graduate degrees that the Department offers. Currently, this task is inefficient because the navigation pane does not offer such a list. In fact, users must first navigate to each individual program, where they eventually see all the possible degrees (both undergraduate and graduate) (see Figures 1 and 2 in the Appendix). The amount of information that users are faced with and that is not relevant to their search will consequently affect the memorability; therefore, if and when users return to the website, they would most likely spend additional unnecessary time to reestablish proficiency by navigating through the same menus again. Furthermore, links to certain programs take the users to sites that appear to be external sites, even if they are not (see Figures 3-5 in the Appendix). These apparently external sites face the users with completely new navigation menus that may not offer a link back to the Department's page. Although users can solve this error by using the browser's "back" button, this task can become time consuming if the users visited various pages within the new sub-site. Considering these gaps, it could be assumed that users would not be satisfied with the use of the design.

User experience

Rogers et al. (2011) define user experience as the use of "elements that contribute to making a user experience pleasurable, fun, exciting, etc.," (p. 26). The authors explain that interaction designers use a set of designing principles "when designing for the user experience," (p. 29), and they further describe the most common design principles, such as visibility, consistency, and affordance. According to Rogers et al. (2011), "the more visible functions are, the more likely users will be able to know what to do next," (p. 29). Considering the aforementioned distribution of different types of degrees across a variety of programs within the Department, it is clear that visibility is affected negatively. Furthermore, as mentioned earlier, one of the crucial issues of the website are the links that cause the user to navigate away from the Department's pages, sometimes even without an option to navigate back (except by using the browser's "back" button). A sudden change in navigation and in a different placement of elements causes disorientation due to lack of consistency, which is defined by Rogers et al. (2011) as "designing interfaces to have similar operations and use similar elements for achieving similar tasks," (p. 32). In turn, visibility and consistency affect what Rogers et al. (2011) call "affordance". According to the authors, affordance "refer[s] to an attribute of an object that allows people to know how to use it," (p. 33). The authors further explain that "[w]hen the affordances of a physical object are perceptually obvious it is easy to know how to interact with it," (p. 33). The poor visibility and consistency of the Department website's navigation menus make the interaction confusing, and thus the user experience is not pleasurable.

Solutions

Based on the concept of usability, as defined by Rogers et al. and Nielsen, I reorganized the left navigation pane of the website in a way that allows the primary audiences to accomplish basic

tasks efficiently (*learnability* and *efficiency*), to reestablish proficiency quickly (*memorability*), and to be able to recover from potential errors easily (*errors*) (see Figures 6-8 in the Appendix). Likewise, by rearranging the navigation menu as shown in Figures 6-8, *visibility* increases significantly. In order to achieve *consistency* on the website, the navigation menus should be the same regardless of which individual page the users are accessing; also, by positioning similar elements in similar positions, such consistency would help avoid constant disorientation of the user (see Figures 9-10). Finally, by improving the visibility and the consistency of the website's elements, users can quickly learn the conventions of the website, which in turn would make their user experience pleasurable.

Questions and Concerns

- The FYC program is an undergraduate program: should it be placed within the "Undergraduate Degrees" link?
- Should the pages with faculty, etc. provide information on office and phone numbers?
- If you have any other questions, concerns, or suggestions, please send me an email to dcrnkovic@miners.utep.edu.

Attachment: Appendix with figures of gaps and proposed solutions.

References

Nielsen, J. (2012). Usability 101: Introduction to usability. Nielsen Norman Group. PDF. Rogers, Y., Sharp, H., and Preece, J. (2011). What is interaction design? In *Interaction design:* Beyond human – computer interaction (1-18). West Sussex, UK: Wiley.

Appendix: Figures of Proposed Solutions

Figure 1: Unclear distribution of undergraduate and graduate degrees

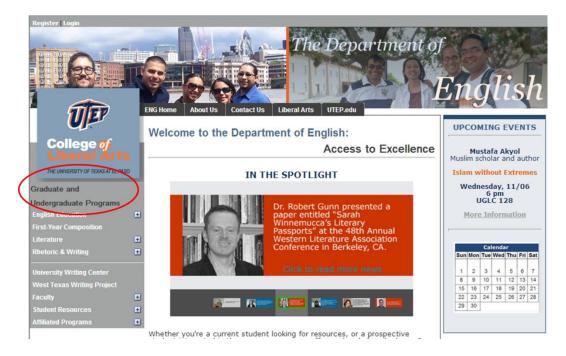
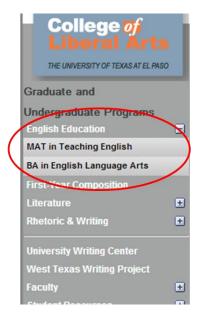


Figure 2: Unclear distribution of undergraduate and graduate degrees - Details



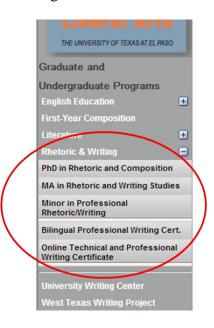


Figure 3: Inconsistent navigation - FYC



Figure 4: Inconsistent navigation - WTWP

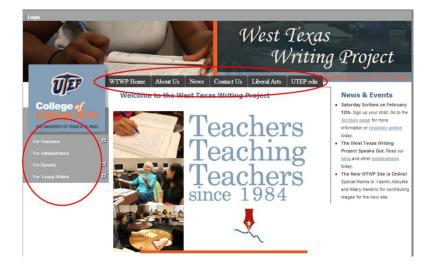


Figure 5: Inconsistent navigation - RWS

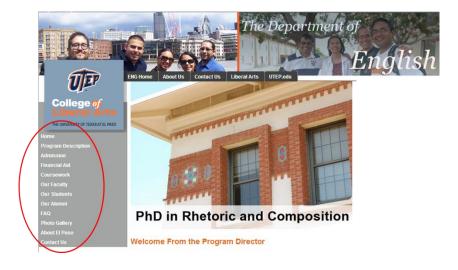


Figure 6: Left navigation pane with clearly visible academic degree levels

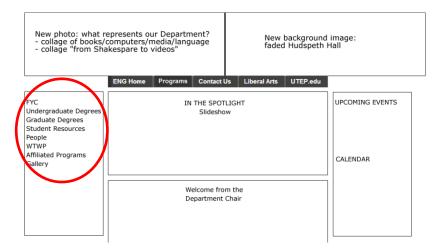


Figure 7: Left navigation pane – Undergraduate Degrees

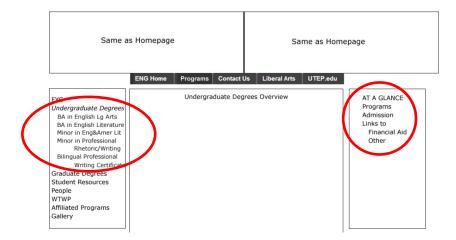


Figure 8: Left navigation pane – Undergraduate Degrees Details

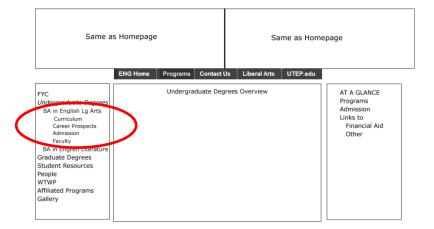


Figure 9: Consistency of the navigation menus and other elements

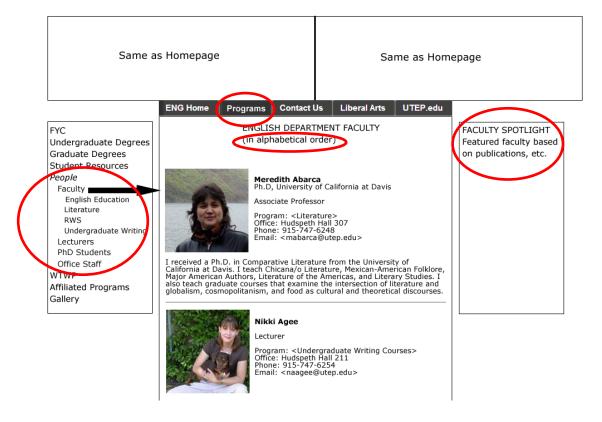


Figure 10: Consistency of the navigation menus – FYC

