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## 2014 OWL Usability Report

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# 2014 OWL Usability Report

Presented to the Writing Lab

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## Summary

Consisting of six sections, this report was completed by groups composed of students registered for ENGL515: Advanced Professional Writing. Studying the concepts of User-centered Design, Usability, and User Experience Design (UxD), the students offer this report and accompanying redesign materials for the use of Purdue's Online Writing Lab (OWL). It is presented to Tammy S. Conard-Salvo, Associate Director of the OWL, in support of user research conducted throughout fall 2014 and into spring 2015.

This report is aimed at improving the user's experience of the OWL and as such offers methods of learning more about the site's audience and both responding to user need and developing methods of gathering data about these users and their needs. The first task, then, is to collect data about users using a demographic questionnaire. Then, this report recommends developing a series of online research tools that will reveal users' preferences before performing any redesign. We forecast potential for primary research developing and reporting the results of developing user measurement tools that can be used remotely through Qualtrics.

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## Chapter One

### Qualtrics and the OWL: Collecting User Demographics

By Tanner Haffner and Michael J. Salvo

#### Summary

Tammy Conard-Salvo, the Purdue Writing Lab Associate Director, with OWL coordinator Joshua Paiz and OWL Webmaster Caitlan Spronk, approached Michael Salvo as the Director of Professional Writing to develop and rethink the OWL Usability project for 2014. Following the lead of the Usability Professionals organization and trends in web development, the authors represented in this report studied and then applied the lessons of User Experience Design and User Experience Architecture in order to move beyond usability testing. Central to the study is an interest in remote and low-cost testing, and the solution for that challenge is the online survey tool Qualtrics. While Qualtrics is a commercial product, it is powerful and Purdue has a campus wide subscription, making it accessible for students. A longer exploration of the tools is available on two blogspot blogs students populated during the semester.

The first is the classroom blog students published to through the semester: <http://purduxd.blogspot.com/>  
The second was curated by the OWL Associate Director: <http://purduxd.blogspot.com/>

As this chapter demonstrates, the shift from usability and user testing to *user experience assessment* creates opportunities to innovate in data collection and test design, and Qualtrics is a representative application of a class of online data-gathering tools that may prove effective long-term partners to developments in usability represented in the shift from time consuming face-to-face usability testing in expensive purpose-built usability testing facilities. This chapter reports on the experience of iterative design of a demographic data collection tool and its relationship to more intensive online user data gathering.

## Navigating Qualtrics

Towards the latter half of the semester, our class began thinking about tools available to us that we could use to both develop a demographic survey of users and measure the usability of particular aspects of the Purdue OWL (e.g. the splash page, site map, and general navigation paths). One such tool available to us through Purdue is Qualtrics.

While some of the class members were new to Qualtrics, others had used it before in previous professional writing classes while I myself had been introduced to it in a graduate-level seminar on empirical research that I took last spring. While Qualtrics is not a free survey generator (unlike sites like SurveyMonkey), it is free to Purdue faculty and students and our class decided that we should use the best available tools to us and the OWL. Also, Qualtrics offers more features than sites like SurveyMonkey, which would encourage us to think more deeply about the process of writing and designing a survey.

While Qualtrics allows a user to create the standard type of survey questions like text entry and multiple choice, it also presents a range of other options that would potentially help each team tailor their survey questions to their particular topic of research. For instance, Qualtrics has a survey feature called a Heat Map, which presents an image to the participant and asks him or her to click on an area of the image that stands out the most (see Fig. 1).

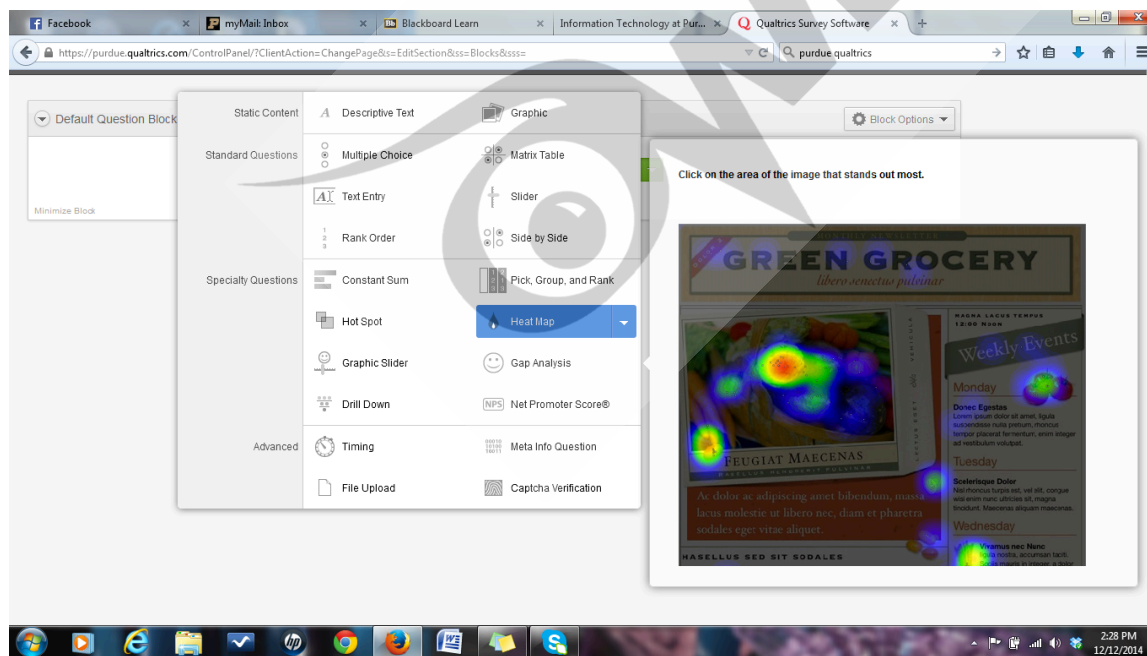


Figure 1: HeatMap feature of Qualtrics.

This feature is similar to Tanner's work on eye-tracking while opening up several exciting possibilities for our class survey-wise. Kristin and Broc, who designed several mock-ups for a new OWL splash page, could design a survey to see which sections of the current splash page stand out to users while testing their own designs. Jessica and Andrea, who are conducting research about site maps, have discussed creating a survey with Tanner that collects information about what users already know (or don't) about site maps and includes a Heat Map to see where a user would click on the current splash page to search for a particular topic.

Similar to the Heat Map feature, Qualtrics also has Hot Spot, which shows an image and asks a participant to click once on concepts they like and to click twice on concepts they dislike (see Fig. 2). The former show up as green while the latter are highlighted in red. This feature could be useful for Kristin and Broc if they wanted to show different versions of their mock-ups to users and see which elements users liked and which ones they might have found confusing or otherwise ineffective.

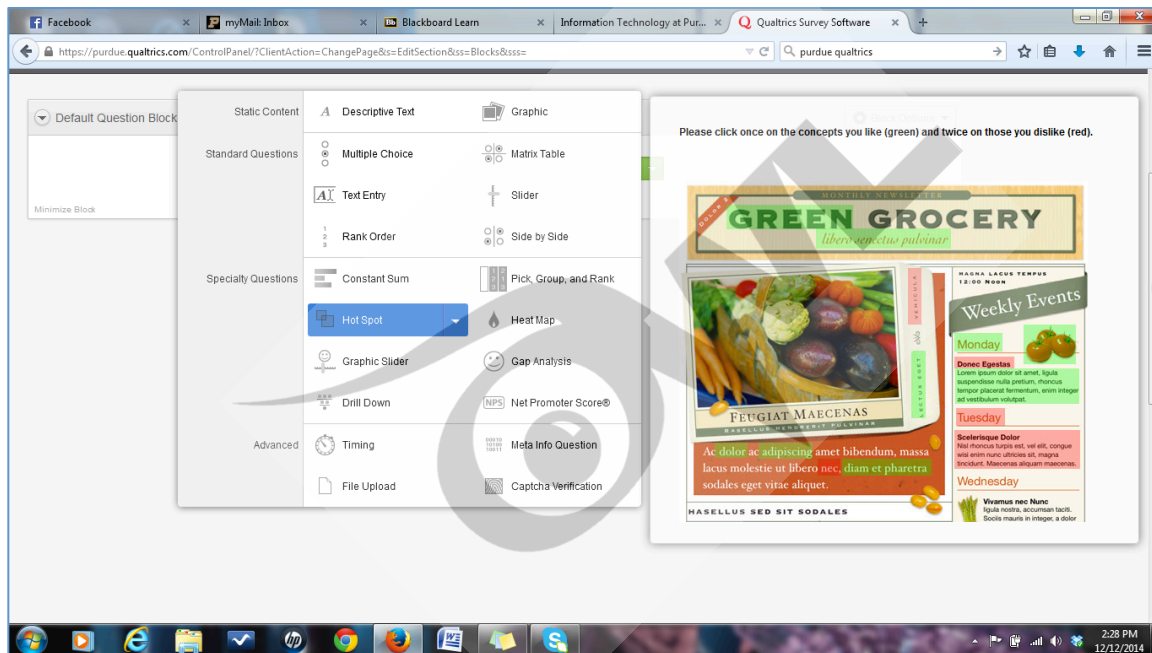


Figure 2: HotSpot feature in Qualtrics.



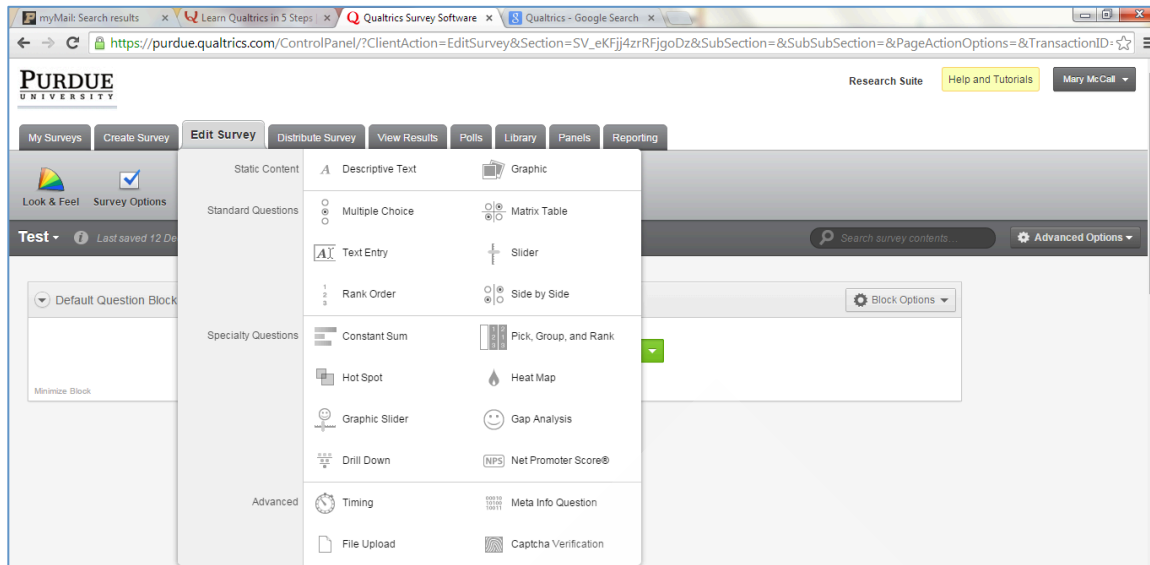


Figure 3: Qualtrics offers numerous features for collecting visual information.

Qualtrics also has different questions types that can be selected to collect a range of responses by asking participants to rank the order of different items (Rank Order), to compare different topics (Side by Side), to indicate the range of their preference for a particular item (Slider and Graphic Slider), to rate their experience or satisfaction with various services (Gap Analysis), and to signify the probability of particular actions with a Likert scale (Matrix Table and Net Promoter Score) (see Fig. 3).

Finally, another important thing to note is that Qualtrics allows a designer to have more control over the participant's navigation of the survey. To help mitigate survey fatigue, a designer can allow participants to skip particular questions if these prompts do not apply to them. For instance, if a participant categorizes herself as a "graduate student" in the demographic survey, she will be directed to questions that are geared towards that group instead of having to answer questions meant for undergraduate students or non-Purdue students that do not apply to her. This feature is called Add Skip Logic and it can be used during survey design to help participants move through a survey more quickly and only answer those questions that are relevant to them. This feature is especially helpful given the context of designing a demographics survey that is meant for hundreds of participants and users of the OWL who come from a range of different backgrounds.

Overall, our class enjoyed exploring Qualtrics in more detail and found the following link featuring several tutorials helpful:

<http://www.qualtrics.com/university/researchsuite/misc-pages/misc/learn-qualtrics-in-5-steps/>

Learning how to build effective surveys is a valuable skill that is needed for all types of workplace writing and technical communication. Qualtrics will be especially useful when collecting more usability information about the Purdue OWL.

## Collecting Demographic Information

Prof. Salvo developed a Demographic Questionnaire based on the 2006/7 tool. It has been designed to screen OWL users under the age of 18, and differentiates between on-campus and off-campus users. During design testing, the simple demographic was completed in under 3 minutes by 90% of users and all 10 test subjects completed the demographic in under 4 minutes. The second part of the survey, the likert-scale measure of preferences, took users an additional 3-5 minutes, with no user taking longer than 5 minutes to complete the questionnaire. Qualtrics allows users' exposure to be limited to relevant questions and saves time by allowing dynamic navigation. In subsequent testing where I asked users to take every possible navigational path, users expressed surprise that the instrument was as complicated as it was.

This URL links to a sample survey where the reader can explore the instrument. The survey can be shared with anyone with a Purdue logon the OWL staff selects upon request:

[https://jfe.qualtrics.com/preview/SV\\_9ZbpipzGBGY8nCR](https://jfe.qualtrics.com/preview/SV_9ZbpipzGBGY8nCR)

Rather than going through the entire survey here, we recommend launching the sample survey. Any overlooked problems can be corrected before launching the survey.

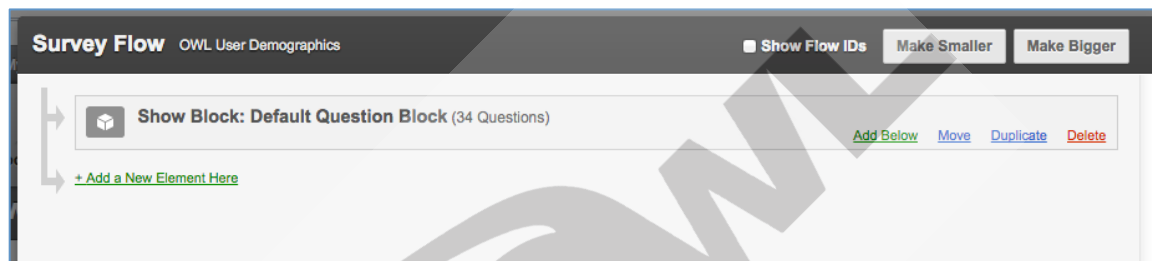


Figure 4: The Survey Flow feature.

We direct the reader's attention to the Survey Flow feature. The tool includes the ability to visualize different testing components, and in the next section, attention is given to the relationship between the 34 question Default Question Block for user demographic collection and the additional testing instruments recommended for development in spring 2015.

## Additional Testing Recommendations

Three to five additional tests need to be developed based on the work contained in this report. With OWL's global user base, it is possible that hundreds if not thousands of users will complete the two-part demographic and Likert preferences questionnaires. Even if only 5-10% of these users agree to additional testing, dozens or even hundreds of responses to a sophisticated HeatMap and HotSpot survey will yield valuable data as well as opportunities to publish basic research for relationships between onsite and online testing, usability and UxD, and ubiquitous computing research. Overall, this is a promising opportunity that should not be missed to enable both undergraduate and graduate participation in research.

Rather than designing a number of tests, this report offers food for thought and visions of alternative testing regimes developed with the understanding that OWL, as a twenty-year old site with millions of users in hundreds of countries, is highly successful. The challenges facing the OWL are not common problems faced by startup websites, new organizations, or stale brands. Instead, the challenge is to maintain the OWL's leadership and status, expand its reach, and attract new generations of users while providing trustworthy

writing resources. As the Style Guide group reports in the next chapter, the tone is authoritative, appropriate, and seen as trustworthy by users. These are important, hard-won successes for the OWL, and no recommended changes should be made without careful consideration of the impact on the site's success, rightful pride in its reputation, or national and international acclaim.

Therefore, while this report is based on recent research and strives to innovate moving from usability to User Experience Architecture, each recommendation should be contextualized and balanced against OWL's current needs and priorities. Indeed, many suggestions are aimed at developing heuristics for self assessment and means of articulating when it is most appropriate and potentially useful to invite user participation and when best practices, use-centered design analysis, and in-house expertise provide the best insight.

That said, a suite of 3 to 5 tests taking approximately 15-20 minutes to complete would offer the best payback for the OWL. After completing the simple demographic survey, users are asked to complete the Likert preferences scales that measure interest and ability in digital literacy and web design. We recommend following up these short surveys with a randomly generated link to one of three more in-depth questionnaires. Each questionnaire should be paired with a face-to-face test that can be compared with the results of the online portion to determine whether the findings of face-to-face testing match online, and can support opportunities for primary research for graduate students to determine whether online regimes can accurately replicate face-to-face results. To the authors' knowledge, such research has not been done.

The tests recommended include:

- Site map options testing content, design, color and branding
- Alternative designs for the OWL splashpage
- Developing and testing personas for OWL website navigation
- Second language and international users preference survey
- Heat-map density and aim study in comparison with eye tracking

Rather than creating testing materials, each chapter addresses challenges in creating each testing suite, context for previous and related testing regimes, and offers advice and heuristics for developing appropriate materials.

### *Site Map Testing*

The Site Map team, reporting in chapter 2, offers a means for assessing the usability of the site map. Although the current site map has the advantages of being auto-generated and listing every sub-page and represents all site contents, the students comprising this group determined their own dissatisfaction with the page design almost immediately. The immediate recommendation, to change the map design from blue to orange in order to match current color identity, is easily implemented. However, the next steps beyond color are challenging and require resources, especially time. One recommendation involves development of user personas. See Personas development below as well as Chapter 7 for a sense of the complications inherent in developing such a long-term strategy.

### *Heat Mapping and Eye Tracking*

Here the most potential for creating high-technology options for testing arise. Chapters 4 and 5 describe tools for drilling down to user actions. The heat mapping tool allows for capture of the same kind of information face-to-face eye tracking tools produce, and opportunity for comparing remote and face-to-face data provide strong opportunities for next generation usability testing while recent publications in CCC, rhetoric and composition's flagship journal, reveal current opportunities for publishing results linking lower-cost tools like heat mapping to high-investment, high-expertise tools like eye-tracking. This regime of testing is most like traditional usability testing with target users and so there are some limitations to returning to an earlier style of user research.

### *Splashpage Design Options*

The splash page, entry point, or homepage of the OWL has presented numerous challenges to OWL designers for two decades. With a history of more and less satisfying designs, the challenge remains in distinguishing the worldwide, outward-facing, international Online Writing Lab versus the Purdue-focused writing lab. It is a persistent problem—guiding users off campus to appropriate resources while keeping them from trying to make face-to-face appointments and signing up for on-campus workshops. Chapter 6 offers food for thought in working beyond current conceptualizations of the most-used page of the OWL with options for rethinking its design and purpose.

### *Personas Development and Deployment*

Personas have the least support among the OWL team, which has expressed concerns over the implementation of a redesign based on the practice of articulating personas for users. While promising in the approach it offers for conceptualizing the user base and providing numerous avenues for redesign and redevelopment, personas also represent a significant shift in the rhetoric of universal design that characterizes the current OWL. While heat maps and eye tracking offer tools, the approach offers an overall approach and underlying theory for design development. Both the site map redesign recommendations and the splash page redesign and development have been informed by the insights provided by the approach of articulating personas, which may be enough to lend it credibility.

### *Second Language and International Users*

Based on a short ethnographic study, chapter 8 presents a new approach for learning about the large numbers of international students—most of whom are L2 English learners. Rather than design a survey that would require advanced language skills to complete, the ethnographic team offers the insights collected over a month of conversations, interviews, and informal interactions with four representative students. This research has a strong potential for helping the lab understand the challenges it faces and offers a new way to interact with international students. Recommendations include IRB review of the pilot study to expand and deepen the interaction undertaken here in preliminary form.

While chapter 2 does not lend itself to online testing tools development, it does offer a clear program for collecting and rearticulating existing style guide resources for OWL content development.

## Chapter 2

### Producer as User: Reimagining OWL Style Guides

By Kira Cazenave, Carly Harmon, and Mary McCall

#### Summary

The Style Guide team was approached by Tammy Conard-Salvo, the Purdue Writing Lab Associate Director, and Joshua Paiz and Caitlan Spronk, the Purdue OWL Coordinator and Webmaster, to look over the existing content manual that was created for OWL content developers and to make suggestions that would create a clearer and more detailed manual. Over a two-week process, we conducted interviews with seven current content developers and found the concerns they had with the manual, including unawareness of creative flexibility, no guidelines for language, vague suggestions on final formatting, and difficulty knowing when certain projects are due. Based on what we found in our interviews, we then compiled our results to come up with recommendations for the content manual, which include a set of style and content guidelines, a new timeline template, and an updated, condensed Table of Contents. The mock-ups of these recommendations are included in the Appendices section.

#### Procedure

As the style guide team, our focus for this project was centered on improving the content manual for the OWL content developers. In order to collect the data we used to come up with our suggestions for improvements, we conducted interviews with a few of the current OWL content developers. We interviewed some experienced developers as well as developers who were new to the program so that we could ensure that we got a wide range of opinions from people with different experience levels.

We started each interview by asking each content developer what their specific role was for the OWL and from there we asked them about how they use the current content manual to help them complete the tasks of their projects. We also asked about their impressions of the tone of the OWL and content manual, for specific suggestions that they might have to improve the content manual, and for ideas on what would help them to better do each of their specific jobs.

After we met with all of the content developers, we each organized our notes and then met up as a team to go through the results of our findings. We compiled all of the information and suggestions for each of the content developers into one document and pulled out the commonalities to form our final list of suggestions to present to Tammy, Josh and Caitlan.

The last thing we had to do was to prepare for the final presentation of our findings; thus, we divided the information up equally among each team member. The first part of our presentation focused on the information obtained from the new content developers, the second part focused on the information from the experienced content developers, and the last part was where we presented our suggestions and ideas to improve the content manual based on the common findings among all of the content developers that we interviewed.

## Analysis of Interviews

### *Evaluating Data Collection*

After we conducted all of our interviews with the current content developers, we were then left with a large amount of information regarding the Content Manual. As Scott E. Hubbard mentioned in his article, “A Practical Approach to Evaluating Test Results,” evaluating your data can be a frustrating task. You have collected all of this material and you want to do a thorough job evaluating it, so as not to undermine the time and effort put in to collecting the data (285).

In Hubbard’s approach to evaluating data, his first course of action was to collect and compile the test results. During the interviews with the content developers, each member of our team took their own notes and asked their own questions. In order for us to collect and compile our notes, each member typed their notes in a Google Doc. After we had compiled all of our interview notes, we then needed to evaluate our findings further. Hubbard mentions four main steps to evaluating test results: preparing for meeting, discussing results, assessing problems, and determining solutions (286-288).

The Google Doc we had created for compiling our interview notes was a good way to prepare for our meetings. Our team met multiple times to talk about what we found during these interviews. During those meetings, we then discussed our results. We each were able to look at other member’s notes to see if there were any commonalities and differences between content developers. As for assessing any problems, we mainly did that by deciding what we could do for the content manual in the short amount of time we had to finish this project. That being said, we developed a list of our solutions based on what we felt needed first priority.

### *Improving Usability of the OWL Content Manual*

Looking at the usability of the OWL content manual as a whole, we found that for the most part, the content developers did not use the manual, but instead used other OWL pages as references. Some of them even did not know that the content manual existed, or even if they did, they did not find it as useful for their individual tasks as they did with other OWL pages. One thing that was brought up multiple times during our interviews was that it would be helpful to have a more detailed table of contents. In terms of usability, many of the content developers found that the content manual had too much information that was hard to find so they suggested a revised table of contents that would be more specific. A new and improved table of contents would make it more feasible for content developers to find exactly what they need from it and, therefore, the manual would get more use.

The OWL content developers work to improve the usability of the OWL for all of the people who visit the site by trying to make content easier to find. The OWL has so much information on it that it can be overwhelming to the user, but the content developers strive to constantly improve the site usability. In turn, based on our interviews, their job can be made easier if the content manual were to be updated with screen shots of exactly how they should format each page to be uniform throughout all of the OWL pages. Many of the content developers agreed that this would enhance the usability of the site for all OWL users if each page

looks uniform. Given that Josh provides a sample of how content should be formatted for the OWL to the content developers as part of their onboarding materials, we suggest that this PDF should be embedded into the OWL content manual as an additional reference resource.

### *Storytelling and Narratives*

Another interesting angle to usability and interactive design—especially in the context of our research about the OWL content manual—is narrative and story-telling. Both aspects are tied to personas, which are figurative models for designers to describe users in order to get a better understanding of their perspectives and responses to certain tasks (Constantine 504). While personas help to frame different kinds of users, stories connect the personas to the project or product (Quesenbery 521). Although Quesenbery states that stories can be a handy tool in describing different scenarios and discussing how they can be “solved” (usually with the target product), she also mentions how they can communicate the values and culture of a company, organize information, and explore new ideas (Quesenbery 525).

While conducting the seven interviews for our research about the OWL content manual, we could see all three points emerging from the stories of both the newer and more experienced content developers. For instance, developers from both groups described how the formal, but friendly tone of the manual mimicked the voice of the OWL, which they tried to represent in their own materials. Also, many of the developers told stories of how they went about using the manual in terms of locating it (looking for the original onboarding email from Josh or searching for a copy on Google), skimming it for administrative information (e.g. how to submit timecards), and searching for formatting guidelines. Two of the more experienced developers spoke of how they found the information in the manual “overwhelming” and often turned to more accessible formatting models through the OWL.

One interesting thread that we uncovered was how stories about the tone and language of the manual (and, consequently, the OWL), conflicted. While all of the developers appreciated the sense of professionalism both sources evoked, one of them ultimately worried that this type of language was not accessible for high-school aged readers (and younger). She then proceeded to tell the story of how she was first introduced to the OWL in high school and used it all through college before turning to the source again as a high-school teacher. Now, armed with 10 years of experience of being an OWL user plus the insider knowledge of high-schoolers (and now college students) perspectives, she described her desire for an OWL Jr. type of site that would have more content (and language) suitable for students at the high school level and younger. She connected these types of thoughts back to the manual when she suggested that it should be called a “guide” rather than a manual to make it more friendly and flexible.

Overall, Quesenbery states that both personas and stories “have a power of persuasion” that helps to create “a vision of the users’ worlds and [invites] others to enter it” (554). Stories help to make personas work. By conducting interviews with some of the OWL content developers, we got a first-hand glimpse into the types of personas that could be used to describe these developers (e.g. high-school teacher, graduate student, creative writer, rhetorician, etc.). While we were not specifically telling stories *about* these users, we still got more information *through* their stories. Their narratives of approaching, using, and interpreting the OWL content manual and the OWL helped us to decide how to develop, frame, and prioritize our final

recommendations for this report. At a more basic level, they also helped to add a personal, human element to our usability research.

While we have been focusing on the results of our interviews, it is also good to take a moment to discuss why we have chosen this type of method in the first place. Sullivan describes research methods as one type of “filter” in a study and mentions how observations and interviews, among other methods, are “most helpful in finding out what users expect to happen before they use a product, how they respond to using a product, what they thought was happening during a session, their attitudes, their memory, their learning, and their judgments” (259). Specifically, interview methods can yield “good” results in terms of user satisfaction about documentation quality and the situated use (in a workplace) and user satisfaction about documentation usability (260-261). Since surveys are generally not a useful method in determining how someone uses a product, observation methods are recommended for this purpose (Sullivan 259-260). Because our team wanted feedback from the developers about how useful the manual was *after* their projects were largely finished, we went with the interview option. Also, we were interested in how satisfied the developers were with the manual in terms of accessibility and as a resource. However, if further research were to be conducted about how the developers use the manual, more formal, observational testing is recommended. We discuss this type of testing next in the “Limitations” section.

## Limitations

In his article, “A Discussion of Modes and Motives for Usability Evaluation,” Grice describes three ways to evaluate a document’s usability: exploring, verifying, and comparing. In the section that follows, we will describe how our round of interviews with OWL content developers reflects the first two modes of evaluation while analyzing the benefits and limitations of such preliminary research.<sup>1</sup>

First, Grice explains exploratory testing as “a means of seeking out answers to questions of direction, scope, and approach” (231). He states that this type of testing can be conducted early on in a document’s development cycle to determine necessary design criteria or later to assess changes to the document that users would find helpful. Since the OWL content manual was already completed and in use by the start of our project, our team chose the latter type of exploratory testing to gain a preliminary understanding of how newer and more experienced OWL content developers approach and use the manual.

In addition, Grice states that this form of testing can address questions such as: *What do people expect and like? What do people need in the way of support? What do people see as the bounds of tasks to be done? When do the tasks begin and end? Is there sufficient closure of the tasks to give users an adequate sense of completion and accomplishment?*

Based on the results previously described in our “Analysis of Interviews” section above, we determined that both groups of OWL content developers liked the overall tone of the manual, but needed additional support in terms of having more examples and templates, a clearer timeline for project deadlines, and more content guidelines. These results are helpful in answering the first two questions given how the “task” (i.e. generating OWL content) is always flexible and shifting given how developers can start a project from scratch or enter it

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<sup>1</sup> The third mode of evaluation, comparative testing, was not used in our research since our team only looked at one version of the OWL content manual. However, this type of testing would be more useful with iterative versions of this document.



mid-way through or towards the end. Thus, while more formal interviews would be needed to better answer the latter questions about tasks, we hope that the updated timeline template we provide in the Appendices section will be able to organize project deadlines and reviews more efficiently while being adaptable to varying project scopes.

After exploratory testing, verification testing checks to see if a document meets its original objectives while confirming if people can use it to complete the tasks it describes (Grice 232). This mode of testing can answer questions such as: *Does the documentation meet the requirements that were set for it? Does it do what it was supposed to do? (Does it meet specifications?) Does it follow conventions? Does it make the appropriate contribution towards the desirability of the product? Were our hypotheses on improvements correct?*

At the end of our interviews with the developers, we concluded that these users found the manual helpful for some formatting guidelines, but less so with content ones. Others admitted that they referred to other OWL pages for formatting help over using the manual. Thus, while the manual gives a good summation of what is expected of the developers and how to handle administrative tasks like filling out time cards, it could use additional information about how to negotiate style and language when developing OWL content. Overall, then, the manual is useful, but could become even more so. We hope that our recommendations and mock-ups help to further develop the OWL content manual.

Some of the benefits of informal exploratory testing include being quick and easy to do while providing immediate feedback and requiring little cost. While such methods were manageable for a 16-week long project, Grice notes that they cannot be replicated and that any “results obtained through informal means do need verification at some point, or they may be misleading” (235). Although formal testing requires more time and resources, it supplies results that “are often more valid and widely applicable than those obtained informally” (Grice 235). Thus, the recommendations (and deliverables) we offer based on our informal interviews with OWL content developers are tentative and open to revision until formal usability testing can be conducted.

Additional testing could include IRB-approved research in which formal interviews would be conducted with more OWL content developers. These interviews could be taped and transcribed and should include a range of newer and more experienced developers as our initial round of interviews did. The results from these formal interviews could be compared with our preliminary findings to build upon and even potentially validate our early conclusions. Moreover, these interviews could serve as a form of verification testing for the updated OWL content manual should any of our templates or guidelines be incorporated into the existing document. That way, the OWL coordinator can better determine if our recommendations are successful in addressing current concerns with the content manual.

## Conclusion

### *Known and Unknown Information*

As mentioned above in our “Limitations” section, our team identified several concerns that often came up during our interviews with the OWL content developers: the desire for more examples and content/style guidelines, the interest in a clearer timeline, and the need for a well-defined organizational structure for the content manual. What is less clear is whether these interests expand across the whole base of current OWL content developers. While we obtained valuable information from our interviews, we only spoke with seven developers. Thus, more formal testing would need to be conducted to confirm our results and to bring up additional concerns not addressed in this report.

### *Recommendations*

Overall, we found that the current content developers are unaware of the flexibility they have when creating content. They also expressed an interest in having guidelines for language and style. Our recommendation for this would be to develop a set of style guidelines that suggest resources for plain language, literacy levels, tone, etc. while still allowing for flexibility and personalization.

We also found that content developers are not clear on the final formatting and mentioned having examples to help them visually in writing content for an OWL page. Most content developers wanted the manual to provide screenshots. We suggest the manual show a “before” and “after” screenshot for the OWL content pages and/or include the PDF of the “Sample Static Resource Development Draft” in the content manual.

We also found that the Project Workflow & Sample Timeline created in the manual is too compact. Content developers mentioned that it was difficult for them to be clear on when parts of their work are due. Our team is suggesting that a new and more flexible timeline template should be created to allow the content developers flexibility and personalization for certain segments of their work. In order to do this, the timeline template would be to organize content project deadlines by weeks, which would be filled in by the OWL coordinator and the content developer. The template would also offer a checklist that shows particular tasks that need to be completed before submitting a draft. The template would also be flexible enough for content developers who start working on a project at a different place and with different deadlines. In order to make this timeline template even more flexible, we suggest having it in digital form. This way, content developers can easily download it, have it emailed, or print it out.

Lastly, we found that the Content Manual’s table of contents is too condensed, making it hard for the content developers to skim over. We suggest redesigning the table of contents in order to make it more skimmable and to allow for greater accessibility for content developers.

### *Priorities*

High priority changes include making a master checklist of tasks that need to be completed before a review to help the developer stay on task with his/her project, developing a new and improved table of contents for the content manual that would be more detailed to help the content developers find what they need more easily, and adding screenshots of some of the OWL pages into the content manual so that the content developers can use those as examples for formatting. Overall, these will make the content manual and the OWL itself more user-centered for both content developers and OWL site visitors.

## Chapter 3

### Assessing the OWL's Site Map for Use

By Andrea Alvarez and Jessica L. Schwingendorf

#### Summary

In the compilation of our work, the content team took on several tasks which led to the focus of the Site Map on the Purdue Owl website. We began with a broad perspective over all topics of the website that had to do with the content until the ending of our first presentation where we found the Site Map to be a main area of focus for its potential in becoming an advanced page. We hit several areas such as the ESL pages, content in itself on numerous pages across the site, as well as the Site Map which is where we switched gears. After taking into consideration the content of the Site Map alone, we gathered research, collaboration of ideas, and final potential implementations by all team members. Our goal by the end of this project was to conduct further analysis on the public use of site maps and research how general users specifically engage with Site Maps. Whether they know exactly what they are searching for or are just beginning their research from scratch, our main task is to collaborate with the client to help make the Site Map a valuable resource for all OWL users. In presenting our ideas to the client, we were able to gather feedback both our own ideas as well as ideas and questions the client posed in order for further research and different avenues to consider. The conclusive research was based on the focus of the Site Map which we have compiled for further articulation to any future considerations to this project.

#### Issues

Our first concern with the site map was its congestion and content spacing issue. We noticed the amount of content on the page before anything and the difficulty we had in finding any specific topics quickly. We examined that the page would need much precision and concision in order to work for the eager writer or researcher using the site map for its quicker access to specific pages. In thinking as users first, we considered the ways in which we execute the process of finding the links we want when searching. Having as much content as is currently on the Purdue Owl's site map, an abundance of time would have to be available for the user and this is typically not the case when using a site map for its direct and explicit access to particular pages.

One case to consider is that the Purdue OWL hosts hundreds of resources that all need to be addressed on the site map. There are many resources to acknowledge and this can become an issue when trying to fit everything on one page without having the user scroll endlessly for what is originally supposed to be a fast and easy search.

In understanding these issues, the team found it helpful to record questions we had about the site map and combine them with the questions we received after our first presentation. The questions were as follows:

- Who uses the site map?
- How do people use site maps?
- How many people know it exists?
- What headings for the site map are best? (speak with design team)
- Will they actually use it?
- Will they use it if it were better designed?
- What general information can we find about site maps?
- Is it necessary for the Owl itself?
- How many people are using the Owl site map specifically?

Among the many questions we had to answer, more particular issues arose during our thinking process. Regarding design, we made suggestions about the lines you will find on the site map and their relation to the size of the font as well as column lengths. The columns show up very uneven and the font makes it harder for the user to recognize anything in particular among so many other topics in a small font as well. We agreed that the site map had an issue with making links apparent and providing the ability to minimize scrolling. With the many problems at hand, we began our research.

### Organizational Change

When suggesting change to a client, we understand the importance in trying to perceive what their goal originally was. After recognizing their abilities and work ethic for the site, we began taking the issues we recorded and researching suggestions for those trials and errors. We grasped onto the knowledge we had of Site Maps and noted any “off-the-top” suggestions we might have. Once we put together a general idea of how we would execute our plan of suggestion, we began using other sources to help back our recommendations.

As a team, we searched for several text-based solutions for Site Maps. We gathered team-favored data and combined the ideas into one for further collaboration. These texts include a book, *Site Map Usability* by The Nielsen and Norman group, and three online articles including *Important Points for a Good Site Map* by Web Developers Notes and *What is a Site Map and Why do you Need It* by Max of Web Design Principles, *UX Matters* by Jim Nieters and Pabini Gabriel-Petit. The first text covered the logistics and professionalism of what a Site Map should be. Pulling samples of other professional Site Maps as well as explanations, the Nielsen and Norman group showed a higher level of expertise in the area of Site Mapping and web design. The first online article brought to us by Web Developers Notes was very much more straight to the point and honest about what the general public saw as acceptable in a Site Map. The article specified these points with details on what someone using a Site Map will expect when searching. The second online article by a writer who goes by the name of Max covers a sort of introduction to Site Mapping. This article is great for anyone who is first and foremost simply trying to understand what a Site Map really is and what it can do for the user. The final online article by Nieters and Gabriel-Petit take a different approach by going into detail about the success of getting something fixed. They give a list of descriptions on how to work with the designers, in this

case a client, in order to come to a successful agreement on the final implementations. It is an exceptional read for its blend of both usability and project incorporation.

In order to fix some of the problems that we researched, we found that the best suggestions were coming from our readings. First, a member of the team decided it might be best to incorporate a new search feature. Our team was able to carry a collaborative discussion with Caitlan Spronk, one of the three clients we worked with and we have discussed that the OWL's site map has a sense of ease in its usability when you use find command (Mac: Command+F, Windows: Ctrl+F). This built in browser tool highlights the words that the user types into the search box and auto-scrolls them down the page to where the text is located. The issue in using this means of search is that few people know that the tool exists and, for those that are aware of its existence, fewer utilize it when browsing web pages because its general use is very uncommon.

### Future Research

In order to have a thorough understanding of how OWL users specifically engage with the site map, we will distribute an online Qualtrics survey that gives insights to move forward with more redesign. This survey will ask general questions such as:

- “What do you think a site map is?”
- “How often do you use site maps?”
- “What do you use to search a website?”
- +CTRL F, Search Bar, Third Party Search Engine?

Along with demographic questions and more inquiries such as these, we will be able to evaluate the kind of site map experience the OWL currently gives its users. Once we complete these surveys, we will be able to establish how users engage with site maps and determine the ideal structure and organization. We believe the current OWL site map is not as clean or clear as it could be, and we want the user to have the easiest experience possible. Conducting this research will help us find ways to resolve issues and make the site map more accessible. We believe this page could be an invaluable tool on the site and aid users in their searches, so we want to make it the best it can possibly be. A full version of this Qualtrics survey is included in this report's section on technology by Tanner.

### Changes to Implement Now

As of now, the site map is an overwhelming “wall of text”; difficult to navigate, the current site map raises more questions than it provides answers. *Site Map Usability*, by Donna Tedesco, Amy Schade, Kara Pernice, and Jakob Nielsen, has proved itself an invaluable resource in both confirming our hypothesis about site map usage as well as the best way to design the OWL site map. In addition to our suggestions discussed regarding further research into how OWL users specifically engage with the site map, we have several recommendations we believe should be implemented immediately. The following suggestions are features well-researched by the authors of *Site Map Usability*, and we have filtered their suggestions for all site maps and found the ones most pertinent to the OWL. There are many things on this list that the OWL already does well, but we decided to make them apart of this document so that OWL designers going forward are aware of the site map's strengths and do not alter or rid of them. Our goal is to make the site map a valuable research for all OWL users and these suggestions are the first steps to attaining that goal.

These recommendations are clearly displayed in order to act as a check-list for OWL designers to move forward with the project. These recommendations span design, content and organization, and again, some are already implemented, but are repeated here to ensure they remain an aspect of the site map.

### *Hierarchy*

- **Follow organization of headings:** The order of the categories should follow the same structure as the other navigational hierarchy of the website, such as the main page links. We want everything to be consistent so users can seamlessly move from page to page and easily find what they are looking for on the site map.
- **Do not bury link & provide link on every page:** The site map is located on the top right corner of every page, which is a real strength of the current OWL. We want to make sure this remains consistent in the future. The site map is there to help users when they are lost, so we do not want them to have to search hard to find it.

### *Aesthetics*

- **Make obvious if more than 1 page:** This suggestion is not as pertinent to the OWL as it may be for other site maps because the OWL has so much information that it will likely always be obvious that the site map is more than one page.
- **Minimize scrolling:** With such a large amount of information and pages to list on the site map, the OWL as of now cannot avoid a lot of scrolling. If we could adjust the design to allow for just 3-4 scrolls, that would be ideal. However, as of now it takes many scrolls to get to the end of the site map, and this weakness is an issue we may need to wait to address until a cleaner design has been implemented.
- **Clean and simple:** Currently, the site map is bunched together and it is difficult to locate the categories. Everything is jammed together, overwhelming and the font is an odd blue color. In order to make the site map look cleaner, we need to clearly separate the various categories. We also want to make sure we keep categories organized with multiple columns.
- **Clearly distinguishable categories:** The categories need to be obvious to users. As of now, it is difficult to find a specific category in the middle of the site map because although it is a different color than the handout links, the lack of space between the texts buries the categories.
- **Make links obvious:** This is a general suggestion that is applicable to the OWL in general. A lot of the links on the website are not apparent to users and with the site map every word on the page is a link so we need to make them even more obvious. Instead of the static blue color they currently are, the links should change color as the mouse rolls over the text. This is a standard method on many other sites and the OWL needs to make this change now to ensure it gives users the experience they expect from links.
- **Alphabetical:** Although we want the categories to follow the same hierarchical structure of the website, we believe on the site map the handouts under the major categories should be alphabetically

listed. This would make it easier for users to find a specific handout once they have chosen the category they want.

### *Content*

- **Be brief, but clear with precise names:** As of now the OWL's headings and categories are clear and as descriptive as needed. There is no question as to what a handout contains because its title effectively previews the topic without being verbose.
- **Include all pages:** The OWL's site-map is self-generated and updated automatically. This is a strength the OWL has because this ensures that the site map is always current and every handout/page will always be present.
- **If under two categories,** make sure topics appear in both places: We want the Site Map to follow the same hierarchy and navigational structure of the website, so if a handout fits under multiple categories, it should appear under all categories on the site map.

### **Conclusion**

Given the restrictive timeline of the project, at the close of the semester it has been difficult to complete user testing and implement all of the changes we see necessary. The OWL site map has many strengths that we want to remain in the future, but there are also many weaknesses we need to address. The next step for the incoming OWL re-designers would be to conduct research via the Qualtrics survey and move forward as soon as possible with the hierarchy, design and content suggestions we have made. As an educational tool, we have provided a background of the site map, drafts of surveys and research ideas, design suggestions and evidence to back up all of our claims. We hope we have provided detailed, tangible tools for future OWL staff to move forward with our research and changes.

## Chapter 4

### Using Qualtrics to Assess Site Map Usability

By Tanner Haffner

#### Qualtrics

Before making any major changes to the OWL site map and the OWL website as a whole, it is necessary that we collect data beforehand. For the OWL, we have tools such as the eye tracking equipment and access to a lab space, however, collecting usability data in a lab is time consuming, expensive, and we will be unable to receive data from as many subjects. Given that the OWL has a global user base, our data should also be collected on the global scale. As students and faculty at Purdue University, we have access to Qualtrics survey software. While many of us have taken surveys built by Qualtrics and some of us have even created surveys using it, not much has been looked into in regards to creating usability based surveys. Using certain lesser known features in Qualtrics will allow us to create surveys generating extremely useful data for the OWL.

#### Images

When working with anything usability related, it is much easier for a user to see what is going on rather than read about it. On a traditional paper survey, there is limited space and images and large images are usually not used. Using a web based survey, we are capable of giving the user visual information and letting them use this information in order to answer a question more accurately.

For example, the Site Map group worked on a Qualtrics survey that implemented several images. One of these images was used to compare which border color users prefer when visiting the OWL site map. While this seems like something that could have been verbally explained, having an image that shows the current border side-by-side with the proposed changes allows the survey taker a chance to compare and contrast. It also saves time and effort in creating descriptive questions with unbiased phrasings.

Future studies on the OWL could perhaps take advantage of the images by showing the proposed changes for navigation menu changes. As we are dealing with web development, images and designs are a large part of what is happening and the ability to use images can be extremely beneficial.

#### Heat Maps

With the eye tracking device that the Writing Lab has access to for usability testing, one of the resources that is capable of being generated is a heat map. Using the eye tracker, the heat map highlights the areas on a screen that a user focused on and color codes them based on where they spent the longest time looking. Even though eye tracking produces great information, there are some major drawbacks such as time and location restraints that make it impractical for wide usability testing.

Qualtrics, while not nearly as high-tech as the eye tracker, is capable of producing heat maps. Rather than having a heat map built around where a user was looking with the eye tracker, Qualtrics allows us to create heat maps based on where a user clicks within an image. If we create images of a website design and then use these with the Qualtrics heat maps, we will be able to see where exactly users would click on the actual site. With the eye tracker, we are limited to one user at a time and demographically limited to having only participants that are likely Purdue faculty and students. The Qualtrics heat map, while not quite as comprehensive as the eye tracker heat maps, will give us more data as it is globally deployable.



In the demonstration Qualtrics survey that the Site Map group created, we used the OWL homepage and asked users to click where they would first click if they were tasked with finding an article on a specific subject. This question, if deployed, would allow us to visually see what users are likely to do when faced with navigational decisions. In theory, this question would allow us to see if users would click on the search bar, try to click on menu topic, or click the site map button.

Future studies using the site map could be quite useful in regards to usability testing and the OWL. Some of Qualtrics' advanced features allow researchers to see how long a user spent on a question. For example, a heat map question could ask a user to find a specific button on the site. The user would be tasked with clicking on the button and the researcher can see roughly how long it is taking participants to find the button. A researcher could then use this information to make design modifications to increase browsing efficiency. Really, there are many possibilities for use with usability testing and Qualtrics heat maps.

### Conclusion

As part of the Site Map group, the survey we created is specifically intended to collect information regarding the OWL site map, however, using Qualtrics, it is extremely simple to modify the survey and repurpose it for use with the OWL as a whole. The survey that we created, while not fully complete and there are some phrases that need to be changed, still provides a template that can be used in future OWL usability research. Dr. Michael Salvo, Tammy Conard-Salvo, and Caitlan Spronk currently have access to this template and are capable of distributing it to others.

We live in an age where we have the tools to do almost anything we want to do; it is simply a matter of figuring out what is needed and how to use tools effectively to reach the goal. Qualtrics is one of these tools.

## Chapter 5

### Eyetracker as Usability Tool: EyeGuide by Grinbath

By Tanner Haffner

#### Introduction

Grinbath's EyeGuide is an incredibly powerful tool that the OWL has access to for usability testing. In combination with some of the other usability testing tools and methods, the EyeGuide can lend us unique data to make meaningful and impactful decisions for the OWL. In this document, I'm going to discuss some of the suggested studies that might prove effective in usability testing with the OWL and I am also going to give a list some of the tips I have for conducting the usability tests.

#### Suggested Studies

A large part of obtaining data from the EyeGuide will come down to implementation; how are we going to use it in the most effective ways? The device does take time to set up, it can make the test subject uncomfortable, and the data can also take time to analyze and interpret. Dr. Salvo suggested a method which involved comparing data from the EyeGuide with data collected from Qualtrics surveys. Qualtrics has a question type called "heat map" which asks a user to click on an image. The spot that the user clicks is then recorded and the researcher can see a map of where users are clicking. The map that Qualtrics generates looks very similar to a map that EyeGuide is capable of creating. Dr. Salvo recommended that we collect data on where users click on the image and compare it to the areas that they actually click. This would allow us to see if a user is quickly finding information and clicking it or if they are searching for extended periods of time before actually finding it. Being able to see what a user looks at in relation to what they click could lead to interesting data in the usability testing.

A short study that can be conducted relatively quickly and without the use of other tools is also possible. In this study, a user is tasked with finding a specific article on the OWL. For example, a user could be asked to find an article on the ethics of journalism. The EyeGuide would track where the user is looking while they search for that document and how they get to the webpage. This technique should also be combined with some of the traditional moderating techniques such as a retrospective probing session where we ask the user questions about their thoughts and actions as they navigated the site. Use of the think aloud techniques, while effective, are not suited for work with eye tracking; the movement of a user's mouth when talking is capable of throwing off the calibration of the EyeGuide. I would recommend that all traditional techniques be conducted after the eye tracking portion has been completed.

#### Tips

While the EyeGuide comes with a full tutorial video that explains how to set everything up, working with the device leads to a few new discoveries. One of the main things I discovered was that even though the EyeGuide is said to work on Mac computers, it is incompatible with our Mac equipment due to driver issues. After speaking with Grinbath support, this is a third-party driver developer and they have no way of releasing a software patch that allows us to use it on a Mac. Therefore, we are required to use Windows computers for our lab.

A small problem I did encounter when working with the EyeGuide was that it seems to have a lot of static interference. This interference lead to problems keeping the EyeGuide's tracking accurate. In calibration mode, the EyeGuide software would display targets where the user was instructed to focus; the interference lead results showing the user looking extremely far off from the displayed targets. While I have not determine the exact cause of the interference, Purdue does have a lot of wireless signals that could potentially interfere with the EyeGuide's wireless connection. When actual usability testing begins with the EyeGuide, I would recommend using a space that has less wireless interference. This will help reduced the amount of interference and help maintain the integrity of the data.

The EyeGuide uses a wireless receiver that plugs into one of the USB ports on the computer. I would recommend using a USB extension cable to help bring the wireless receiver closer to the EyeGuide camera. This could potentially help eliminate some of the signal interference. If it is not possible to use a USB extension cable, I would recommend picking a USB port that is closes to the EyeGuide headset and make sure that there are no objects between the two devices.

### Conclusion

While I wasn't able to conduct usability tests in my time with the EyeGuide, I was able to learn how to operate the device, troubleshoot some of the problems that arose, and find a few ways to utilize the device. Even though I will not be at Purdue, I would like to help anyone that has any questions about the device, its operation, or troubleshooting a problem with it. If anyone working with the device has any questions about it, please have them e-mail me at: [theffner@tannerheffner.us](mailto:theffner@tannerheffner.us).



## Chapter 6

### New Design Visions: Rethinking the OWL Splashpage

By Kristin McFarland and Broc Smith

#### Summary

As the design team, our goal in the overall project was to analyze the visual design of the Purdue OWL website. Our primary focus was redesigning the entry point to the site, which is the OWL splash page. This portion of the report will discuss the current OWL splash page as far as the qualities that work and the characteristics that can be improved. Included in the splash page analysis will be explanations of our drafts and the reasoning behind the design choices we made. An appendix of the designs is provided at the end of this section of this report. When looking at the work done at the beginning of the semester for the client, we found a lot of ways to improve our work and focal point. The client was happy with the work we did from a design standpoint, but was concerned about the usability for all of the different people that visit the site daily. We hope that this report is beneficial in the ongoing project of reconstructing and reimagining the OWL website with the user experience in mind.

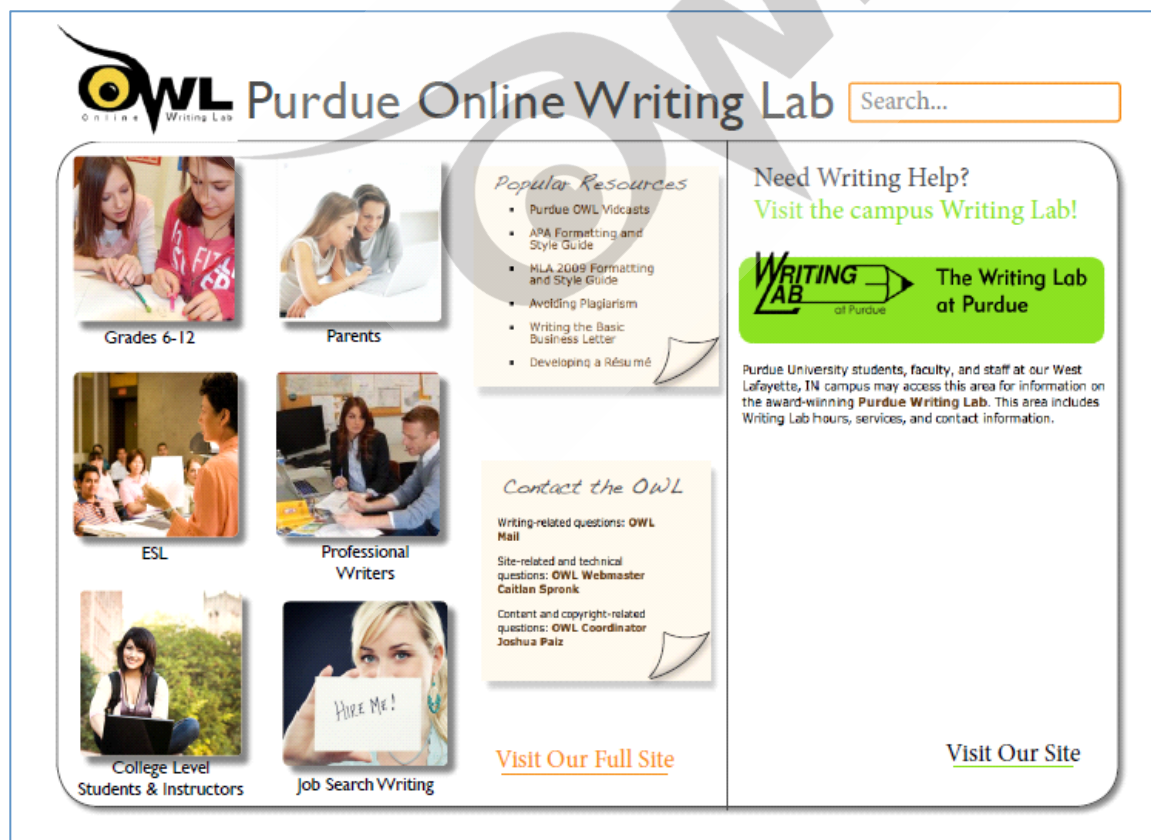


Figure 5: Distinguishing the online from onsite lab.

## Analysis

At the start of this project, one of the main concerns about the splash page is how the user would distinguish between the Online Writing Lab and the physical writing lab space on Purdue’s campus. The current splash page does well at making a visual distinction between the two links to the separate websites. The contrast of the colors (orange for OWL, green for campus lab) along with the brief descriptions provided below the links creates that separation. However, as our client mentioned, many users still contact the OWL for information regarding the writing help that the on-campus lab provides, which is not the desired outcome.

In Figure 2, the personas are displayed as titles, which would be links to the corresponding pages of the site as entry points. The stock images selected are visual representations of each category. During our presentation, our client mentioned her concern with the images being too cliché. Research shows that humans are attracted to images, especially when those images are relatable. For example, a 10th grade student is much more likely to be attracted to a photo with a person in it that looks like him or her in a common setting. The images in the draft are meant to provide visual cues to the user to help them identify with each category. Further research shows that people tend to process information much more quickly when it is presented to them visually. The images can be changed based on the client’s preferences.

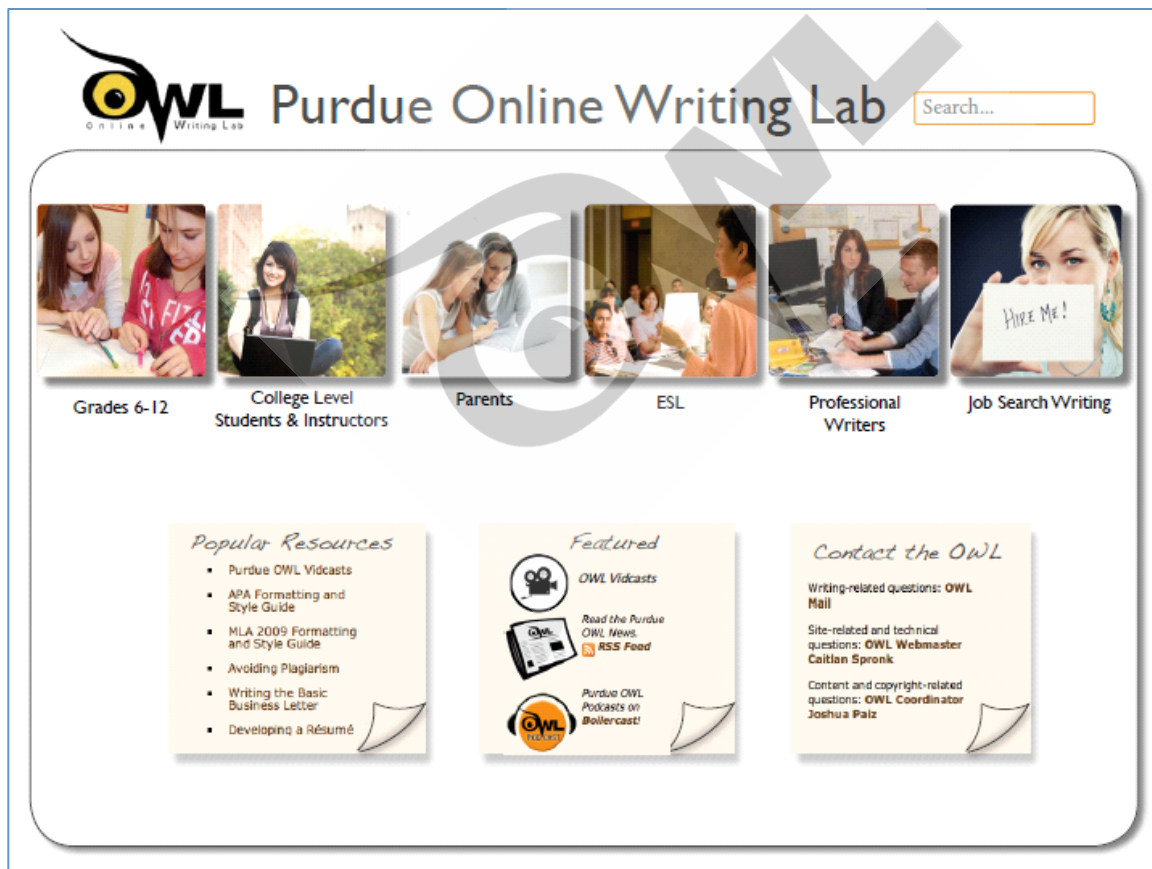


Figure 6: Tiled persona images for navigation.

Confusion may arise because of the title of the splash page, which could be adding to the confusion by making users think that they are on the OWL homepage. Because the campus writing lab site link is listed, users get confused and think that it is the same as the OWL. One way to resolve this issue is design the splash page so that there is a cognitive distinction between the OWL and the campus writing lab. Figure 1 is a rough example of this distinction. In the image, the OWL uses the left side of the page, while the writing lab uses the far right. Each section has its own title, with a link to the home page of each site provided at the bottom. Separate contact information can be added as well so the user can quickly acknowledge that distinction.

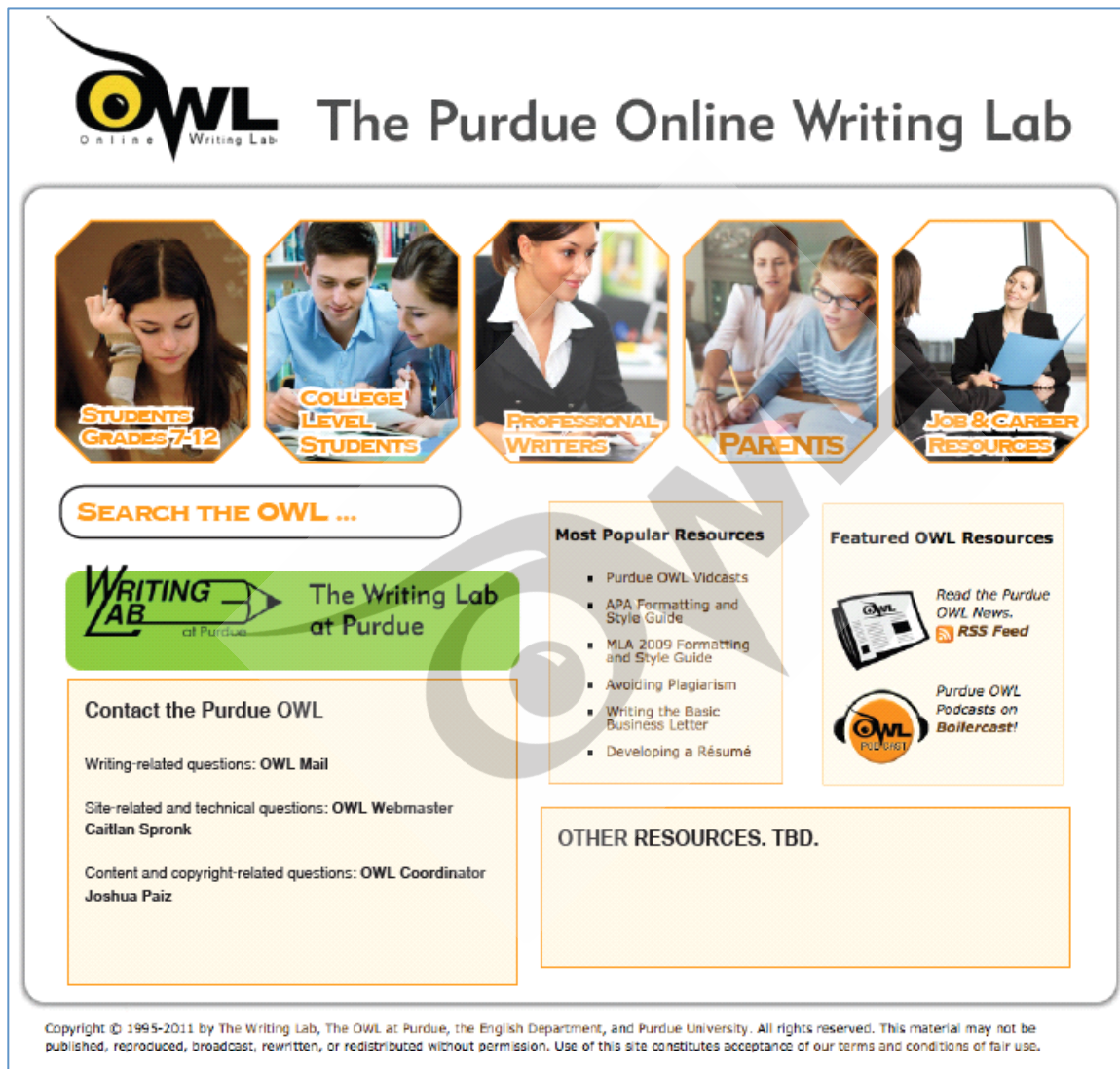


Figure 7: Here, the tiles are cropped for a geometric effect.

In Figure 3, the personas stretch across the top of the splash page with different images as representations. On the current OWL splash page, the “Suggested Resources” are listed in the top left corner in small text without much color, making it easier to miss. This section of the splash page has been the primary focus in our design work. For the second half of the project, the Visual Design Team paired up with Kaitlyn Neis, who was in charge of developing user personas from the suggested resources list. The purpose of developing personas is to help different users clearly identify how to navigate the site in order to find the information

they need on the OWL as quickly as possible. This idea is more beneficial to the newer users of the OWL website. As designers, our task was to incorporate the personas into our drafts and give the client a visual idea of how these personas could work. When the persona research was completed the design group was able to really dig in and do our part of the project. We met with Professor Salvo in class to talk about the possible ways to arrange the six personas. With his help, we came up with a more image heavy design for them. Figures 2 and 3 are examples of how we imagined the personas would be displayed and accessed on the website.

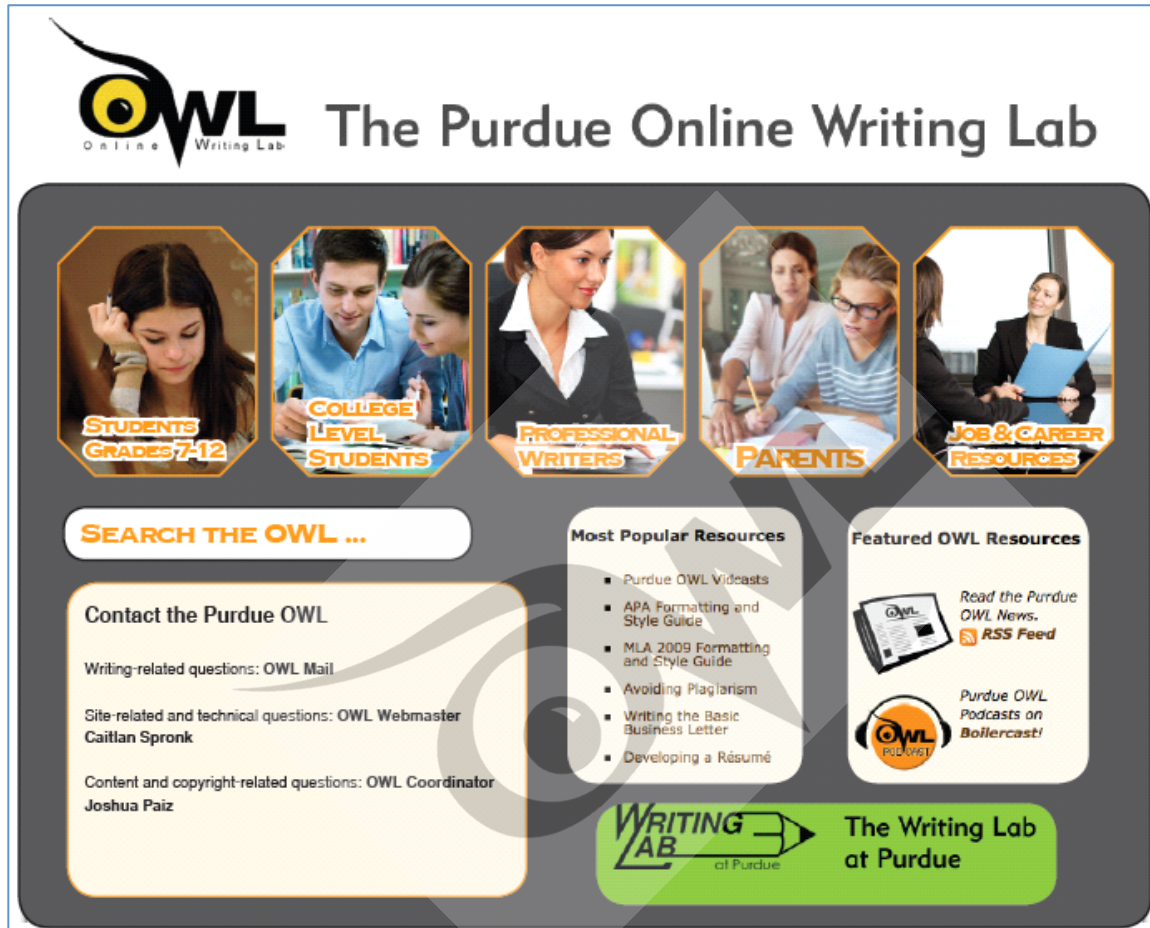


Figure 8: Adds charcoal background, increasing contrast.

Figure 4 is very similar to Figure 3. It is a different look at the same sort of concept and execution of Figure 3, except with a few changes. The charcoal background makes the persona images and texts pop out at the visitor much more than in Figure 3. This design also tightens up the resource boxes below the personas, which is an improvement. At this point, our concern with this design is eliminating enough of the colors now that there is less white space. The background on the bottom resources can be removed and the brightness of the Writing Lab button can be toned down a bit.

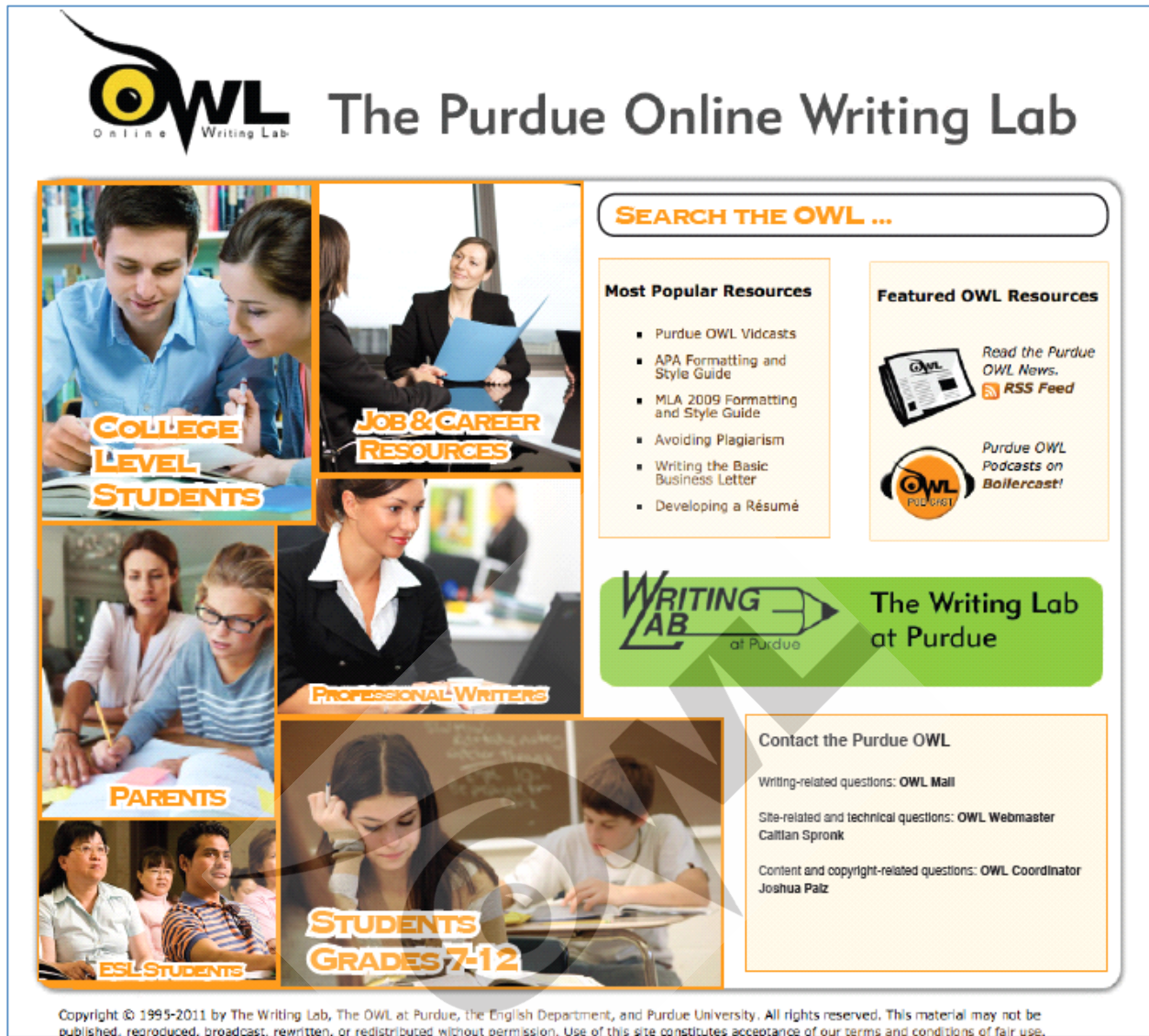


Figure 9: Images dominate this freeform design.

Figure 5 in the Appendix uses similar ideas of the first two but arranges the personas in a completely different way. First, there is way less white space in this mock-up, which may be an issue. With another revision, we would suggest spreading it out, allowing for more white space like the other. The goal of the personas in this one, taking up most of the entire left half of the splash page, is to show by size and relation how important each persona is. We didn't have the numbers so we made an educated guess that the personas "Students Grades 6-12" and "College Students and Instructors" are the most commonly accessed categories. The smallest category in terms of size for my mock-up was the "ESL Students" category. As we mentioned previously, a lot of this can be changed though. What is most important in this mockup is the general idea of certain categories needing a larger image and area size than others. It would be worth looking into a cleaner cut edge on the different sized boxes on the right side. That would help with the cluttered look that the client was concerned about. Overall, for this image, the jagged edge works well with the rest of the content.



A change that was made after the presentation in class on December 4th was the borders of the photos in this splash design. The corners were changed to 90 degree angles without the orange awkward background. Exploring something similar to that could work well. The new version is much cleaner and much less distracting. Another strong part about this design is the search bar being at the top of the page. Unlike other designs in our work, the search bar is featured very strongly in this design.

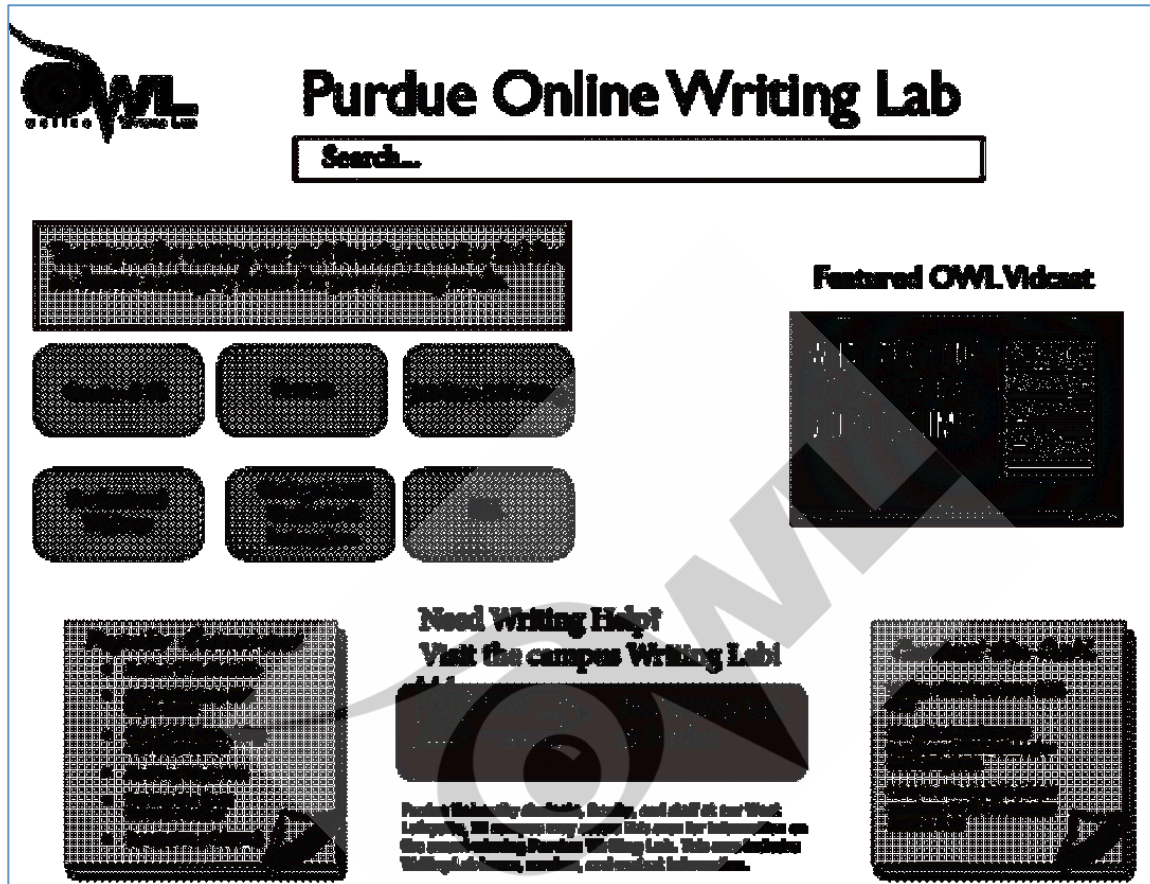


Figure 10: Color is eliminated to allow the design to be seen without distraction.

The client also mentioned the “Featured” section of the current splash page being a little unnecessary since the podcasts have not been updated. However, having a section that features certain tools or guides on the site would be beneficial because it would high light the recently update information. Figure 6 is a rough example of how the OWL vidcasts can be featured on the splash page, or even the OWL homepage. The OWL YouTube channel is a really helpful resource that summarizes basic guidelines for different writing tasks. Having a video displayed on the splash page would not only draw more attention to the OWL YouTube channel, but also act as a quick resource for a user who learns visually. The other images in the Appendix are the rest of the drafts that we came up with to help our client get more ideas regarding how to redesign the website.

Lastly, there were some rough sketched out ideas we had that were not explored in actual draft layouts. The strongest possibility of success came with the idea of a sort of web in the center of the splash page featuring the personas on top of photos with the OWL logo serving at the center of the web. When a visitor clicks one of the personas, they change out for the “sub-personas”. For example, if someone clicks “Job Resources”

then the options around the web become categories, such as, “Interview Tips” and “Resume Techniques” with the center being “Job Resources”. There would probably be a link to go back to the original web too. It is extremely usable due to the simplicity of clicking on a web. The page changes for the user and keeps things in the same place. The search bar would be placed at the top of the splash page in this design along with a few resources at the bottom if the client wishes.

### **Conclusion**

Overall, the drafts that we have designed are meant to be starting points in the redesign of the OWL website. We hope that this sparks a conversation amongst the future contributors to this project as it did for our clients during our presentation. The drafts are mere suggestions and can be tweaked in any way that the clients feel appropriate for the site. Our goal was to spark ideas for the design of the OWL that would work best for the user, but still be true to the original purpose and goals for the site. The original design files will be included with this report for future reference and tweaking.



## Chapter 7

### Personas: a New Tool for User Experience Design

By Kaitlyn Neis

#### Summary

This segment of the report addresses the idea of using personas as a tool to aid future OWL development. It begins with a brief introduction to the concept of personas, then moves on to how the OWL might benefit from their use. The latter part of the segment is dedicated to determining what personas might be useful to OWL users and how they might be briefly defined, briefly explaining the process of creating personas for future reference, and providing a more fully developed persona for a newly proposed persona: job/application materials.

#### Introduction

Previous design recommendations have not been implemented to their full capacity or have needed additional work to produce the kind of results the OWL needs. Rather than merely producing recommendations for the OWL, this section of the report focuses on the creation of a new tool to aid in future design and analysis of the OWL: personas.

#### What is a persona?

Personas are “archetypes that describe the various goals and observed behavior patterns” (Goodwin 229). What does that really mean? In simpler terms, personas are ideal users formed around user patterns. They are a type of model that is given a variety of user characteristics, allowing designers to work with a variety of specific users in mind. According to Kim Goodwin, who wrote a significant amount about personas in *Designing for the Digital Age*, personas are “helpful in creating and iterating a design, building consensus, marketing the product, and even prioritizing bug fixes” (Goodwin 231). A persona is a representation of a key audience or user, designed in a realistic manner to represent a major user group. Personas should focus on the expectations and needs of specific user groups, allowing designers to see how their work might function prior to in-person user testing. What might that mean for the OWL? The development of personas could allow users to follow a more natural path through the OWL. When the users first enter the splash page they will make a series of snap decisions. They will determine how they are going to navigate the website (search, site map, or browsing a path) and as designers, we need to provide them with an accurate, navigable path to the resource they need if they choose to browse the website.

In theory, upon arriving at the splash page the user would choose the persona they feel fits them best. The user’s preliminary decision will allow them to take more accurate path and arrive at their desired resource more quickly. As users become accustomed to the new method of navigating the OWL, they will be able to understand how the site can work best for them, but in the meantime, how do we create these personas?

#### How can Personas help the OWL?

The development of personas will allow the future developers of the OWL to determine what their users may need before they do further user testing. Interestingly enough, though, we need to start with an idea of what the users need to develop personas, and then do further testing. New iterations may be necessary down the line, based on data gathered from user tests.

That, in fact, threw a wrench in the works as the concept of personas and how they might be developed for the OWL was being developed. One of the greatest difficulties with creating personas based on the usability.gov recommendations is that they recommend starting with user research, like demographic information or other previously conducted studies. Much of the research available about OWL usability is have was gathered in the last project (2007). The current project has a number of resources that were unavailable to the team at that time, and there is a large quantity of data that could be gained from users through such new technology.

## Organization of New Personas

According to usability.gov, there are a number of good questions to look at while developing a persona. These questions were used to build the framework for the in-depth persona developed for users looking for job or education application materials. They list five steps to creating strong personas, starting with the problem already addressed: conducting user research. That was followed by another step that had to be sidestepped: condensing the research.

Seeing as these two steps were not going to be finished or available for use by the end of the semester, it became a question of determining what was currently being used or recommended on the site, and how. One of the first interesting things was the splash page. The splash page is currently the site listed on all of the OWL promotional materials, and is oftentimes an entry point to the site. It is broken down with a main link to the OWL site, as well as a link to the physical Writing Lab and its resources. However, on the left hand side, there is a box containing what are currently defined as “Recommended Resources”. That was a place to start looking at groups of users.

The Recommended Resources are currently broken down into several links. These links lead to more extensive lists of resources available for people that believe they fit the taglines given on the splash page. The current list is:

- Grades 7-12 Instructors and Students
- English as a Second Language
- Non-Purdue Instructors and Students
- Purdue Instructors and Students
- Professional Writers
- Parents
- Adult Basic Education (GED, ESL, Cover Letters, Résumés)

These gave a good idea of what users accessed on the site. The next step recommended was to brainstorm, organizing different elements from the data into different groups that represent target users. The largest problem there was that we didn’t actually have much data for classification use. With that in mind, the list under “Recommended Resources” gave a solid starting place. Based on observations of the current groupings, it was possible to determine a number of highly viable potential personas:

Resources for Students Grades 7-12 and Basic Adult Education (GED) fulfill the need for basic writing resources with the idea of a series of basic resources. This category would also allow students looking to complete their GED to work at the proper level. One consideration is that Indiana has changed its GED

requirements, and therefore new resources may need to be developed for the new testing regimen. Still, this section covers basic educational resources.

The ESL Resources section is currently solidly set up and has numerous helpful resources for ESL students. One additional navigation tool that would also be helpful is one that sends Purdue-specific ESL users to the on-campus Writing Lab, or to local resources for ESL students. Though this addition might not be helpful for off-site users, it will help navigate those on-campus to the proper place, and will help off-site students not get mixed up with local tutoring. In turn, clarifying what resources are for local users may reduce excessive OWL mail and questions from off-site users about how to sign up for tutoring in the lab.

The current resources for College Level Instructors and Students are broken down into Purdue-specific and non-Purdue sections. It would reduce the needed number of personas if those sections were combined, but within the persona there would need to be a Purdue Students and Instructors sublevel. This will help to clean up the current page by removing the separate, specific link for Purdue students. As it is, it only leads to three different links than the non-Purdue instructors and students section.

The section of Resources for Professional Writers has a number of valuable resources currently, but the resources there for job applications and other application processes seem to be in multiple places. Those resources are not evident in the title 'Resources for Professional Writers', and would be best moved into a new section (which would be provided in a link). It may be beneficial to rename the section as 'Resources for Workplace Writers', but that is up for consideration. This section pertains to reports, professional portfolios, and other workplace documents like memos.

The section of Resources for Parents is currently well put together, but it may also be helpful to include a link to basic education (including resources for grades 7-12) so they can provide help to their child. Parents looking for other resources, other than teaching aids, may need to backtrack and reclassify themselves as another persona.

My recommendation is that we add a new persona to help condense a number of resources that are currently scattered throughout the other sections: resources for job/educational applicants and professional portfolios. Currently, a lot of the existing sections provide links to areas that are for job application materials and application materials for higher education. This means that job-seekers have to know to look under 'professional writing' to achieve the best results for their purpose. This really isn't intuitive, and neither is it easy to find. We need to create a clearer path to those resources, in the form of a persona. It needs to be clear that there is a path for people looking for those materials, for job applicants and those looking to create professional portfolios. If possible, it would also be helpful to define the title and include 'materials for higher education applications' (personal statements, cover letters, essays, preparation of writing samples, etc). Though much of the following work is focused on the development of this persona, it is always possible to continue that development based on new information and material.

Following the redefinition of the potential personas, it became a question of 'what next?'. Usability.gov defined the next step in the persona-development process as 'refining', or separating the personas and finally making them realistic by developing them. Questions needed to be asked about each persona's needs.

## Defining Personas

Some of the questions asked by Usability.gov were fairly helpful in looking at what needs to be considered within the context of each persona. The following questions helped to form the core of the fully developed persona, and may be useful to future designers that work on this project. Some of the most basic ideas a persona should be built on is the user's motivation. Designers need to determine what the user is motivated by, what resources they are looking for, and what his or her needs are. From there, there are additional questions to be considered for more specific cases. Some of the best questions provided by usability.gov are below, and may be used for the more complete development of future personas. The first section pertains to the user's professional experience, determining what kinds of resources they would most likely need. Some questions to ask as the persona is being defined:

- What kind of background does this person have?
- What are his/her motivations?
- What does the user expect of the site?
- What is the highest level of education this person has received?
- How much work experience does your person have?
- Why will they come to the site? (User needs, interests, and goals)
- When and where will users access the site? (User environment and context)

A second set of questions, pertaining to technological experience and access, looked at how the user might interpret the information they glean from the resources, as well as how they would use it. Some questions there might be as follows:

- What technological devices does your person use on a regular basis?
- Through what technological device does your user primarily access the web for information?

All of these questions are worth considering as the proposed personas are examined in-depth, and should continue to be examined when more user data is available.

## Developing a Persona In-Depth

For the proposed persona, one for those seeking help with application and job seeking materials, I have developed an introductory narrative. It speaks to the user, sympathizing with their confusion and stress (application materials are high-stakes and fairly stressful to construct) while encouraging them and providing them with the appropriate materials.

An introductory segway into each of the personas may be the first exposure the user has to them, and at that first introduction it will be vital for the user to choose the appropriate persona for their needs. Users need to feel comfortable and welcomed to any persona that they enter, even if they ultimately have gone to the wrong place. The materials that currently exist are scattered about under a variety of different personas, but with the recommendation that the application materials be placed under the persona for job/applicant resources, there may be some confusion. With that being said, I recommend that a link to the job/applicant resource persona is provided under several of the other personas. This would effectively cross-list the personas and leading the users to the most accurate persona for their needs if they go to a less helpful one first.

When users first enter a persona, most likely through the splash page, they may need a brief description of each persona. The first impressions of personas can be developed by making the entry point to each pathway more inviting as well as directed. Explaining each persona with a brief tagline, such as those below, may prove

helpful in leading people to the proper persona. The samples that follow are simply examples, and should be edited as the personas are more thoroughly developed. The hope is to give a voice to the proposed personas, and to give decision makers an idea of what they might look like within the context of the splash page.

### **Resources for Students Grades 7-12 and Basic Adult Education (GED)**

Don't know where to start your essay? Looking for basic writing resources? These resources are perfect for students and others looking for basic educational resources. We have materials on the writing process, rhetoric and logic, types of essays, language, and citations. Let us help you get through that assignment!

### **ESL Resources**

Is English not your first language? Look here for a variety of resources including tips on writing in English, English practice exercises, and strategies for reviewing and revising your writing.

### **College Level Resources for Instructors and Students**

Here we have resources for college level writers at all stages in the writing process. Whether you are in the planning stage or on final edits, we can help!

### **Resources for Professional Writers (possibly to be renamed as 'Workplace Writing Resources')**

Workplace resources for writers in a professional setting including help with reports, technical documents, and other professional communication.

### **Resources for Parents**

Looking to help your child with his/her writing? These resources are excellent for helping you help your child. We also have resources for your student available.

### **Resources for Job Applicants and Professional Portfolios (Job Search Writing Resources)**

Not sure where to start on those application documents? Putting the finishing touches on your Cover Letter? We have resources for a variety of stages in the application process, from resumes to personal statement video production, we can help!

The goal with these brief overviews is to make each persona feel welcoming and to help users relate to the rhetorical situation that the resources available within each persona may solve. The goal is to get the user to the correct location through the simplest navigational methods, and unless the user knows exactly what they want and uses the search bar, this may be the most efficient.

While the first experience the users may have with personas may be brief, it needs to leave an impression. With an introductory narrative, the goal is to provide a welcoming and open atmosphere for users, while guiding them in the right direction. In this example, the job/application material seeking persona is addressed. Application materials and their creation can be stressful and high stakes for the writer, so we want to reassure them and point them in the right direction at the same time.

The example used earlier as a draft of an introductory narrative, went something like this:

“Not sure where to start on those application documents? Putting the finishing touches on your Cover Letter? We have resources for a variety of stages in the application process, from resumes to personal statement video production, we can help!”

An example of a brief introductory narrative focused on relating to the user might be as follows:

“Struggling with job application materials? Trying to apply for a new program? Not sure how to get started? We’re here to help! Here you will find resources to help with resumes, cover letters, personal statements, writing samples, job acceptance letters, and other resources you might find helpful when applying for a new position. Sit back and take a deep breath. Applying for a new position or program can be stressful, but we’ve got your back. You can do this.”

While the early draft directs the user, the newer draft may prove more useful. This section is kept short, so it could be used in several places. One example, the splash page, could use this. Depending on the design, this small statement could appear when the user hovers over the job/application materials persona (should personas be used on the splash page). Another place that it could be used would be the top of the job/application materials page. If users arrive at the page and determine that it is, in fact, where they belong, they will continue in their navigation process. If they see this and determine that it is not where they want to go, they may continue on one of several paths.

If the user came to the site, looking for job/workplace materials, it may be useful to direct them to the workplace writing persona with a simple statement like, “Are you looking for resources to use in your workplace? Try looking under our Workplace Writing Resources [linked]”

If this fails and the user is still not where he or she wants to go, it may be useful to direct them toward a more pointed search with a statement like, “Can’t find what you’re looking for here? Try our Search function!”

If all of these pathways fail, the user has likely not chosen the proper persona from the splash page, meaning that they will likely backtrack and re-read the personas. If this happens frequently, it may be that the personas may need revision. User testing may become helpful if these changes are implemented, in order to determine if they are effective in the way they need to be.

## Example Narratives

These example narratives are targeted at the users that would relate to the persona where application materials are stored. A simple prompt-like narrative can be an excellent way of directing users, although with these narratives for the job/application materials, there are a number of different possibilities, meaning that such a specific narrative may not prove beneficial to all users. The users may fail to relate to one of these personas, and the navigation tool will be lost. Still, they are worth mentioning and taking a look at as a possible



navigational tool. They can be expanded on as it is determined what kinds or resources fit within the persona best.

“Morgan Jones is preparing for a job fair next week. There is one particular company that she wants to impress, and she wants to build a stellar resume and cover letter. If she manages to impress them with her resume, she knows that she may need to provide other materials, such as a personal statement, CV, video materials, or even a job acceptance letter.”

“Alessio Malik is a student applying for graduate school. He has worked hard on his grades, but he knows he might need a little extra help with his application materials, particularly his personal statement and cover letter.”

“Jasmine Reynolds is applying for a new school, and she doesn’t know how to go about putting together her personal statement. The application requires writing samples and her transcript, but she isn’t sure how to format her writing sample.”

Though these are all fictional characters, they may give the users an idea of who and how the OWL may help. If they can relate to a particular ‘person’ within a persona, there is a much greater chance of getting the user to the correct materials, effectively making the site more efficient and more user-friendly.

### **Conclusion: Where to go from here?**

To fully take advantage of each of the proposed personas, they would need to be developed into a usable form, one that will allow designers to look at the users and their needs as they work toward the future of the OWL. It is my hope to continue working on this project, but if that is not the case, I would highly recommend that anyone working on this project in the future read the resources within the works cited list. They are fairly in-depth resources, and provide a strong idea of what personas should do and how they should function.

It is my hope that these personas, once fully developed, will be able to assist future designers in determining the most functional ways to do things, from navigational patterns of users to the need for future resources. The development of personas may allow designers further insight into what their users may need and what they are currently providing. The construction of personas to act as guides as the OWL moves forward may provide insight into how users go about working with the OWL without actually needing to bring users in for early testing.

If we can reduce the number of early iterations of the OWL as it is being designed, we will be able to get valuable information from real users sooner, with less expense, and faster. Personas aren’t simply a set of recommendations for the OWL, they are a tool that could prove extremely valuable with a little more development.

## Chapter 8

### Ethnographic Study of Second Language Learners and OWL

By Andrew Yim

#### Summary

For the first half of the semester in English 515, I served as project manager and my job was to work with the class to establish deadlines that could be met. As project manager, I needed to be in contact with all four teams and ensure that these four teams were meeting all of the deadlines we had established. However, I was also flexible with groups that had issues that came up. It was hard to be flexible at first but I learned to deal with these issues and not let them overwhelm me. These four teams were design, technology, navigation and content. My job was to compile a mid-semester report from materials created from all of the groups talking about redesigning the Purdue OWL. After we had turned in this report, I started to determine more ways on how I could reshape the Purdue OWL. I was really interested in the ESL resources on the OWL because I have met many international students through my volunteer experiences at Purdue. In addition, I have observed tutorial sessions in the Purdue Writing Lab this semester for my English 390B class. Through these experiences, I have seen and talked to many international students who have mentioned their struggles with English. On the Purdue OWL, there is a ton of resources for international students; however, I was not sure if international students had access to this information. There was a huge wealth of resources for international students that I did not even know existed. I wanted to see how I could interact with international students and see what types of resources they would like to see on the Purdue OWL and Writing Lab.

#### Demographic Shift in the Writing Lab

There have been an increasing number of international students using the Purdue Writing Lab and OWL. With a huge international population, I wanted to determine what drew international students to the Purdue Writing Lab and OWL. In a study conducted by the Purdue Writing Lab between May of 2013 and 2014, 77% of the international students who used the Writing Lab were international students (Conard-Salvo, McCall, Bergmann 17). About 2456 Chinese students used the Writing Lab during this time (Conard-Salvo, McCall, Bergmann 17). I wanted to see why there was a huge trend of international students using the Writing Lab instead of American Students. Thus I decided to conduct ethnography to determine why more international students were using the Writing Lab at Purdue.

#### Ethnographic Study

I conducted ethnography, which is the study of people and cultures. Interviewers will observe cultures through the eyes of people they are interviewing. Ethnography would allow me to collect data as I talked to international students about their experiences with English growing up in their native country and when they first came to the United States. This ethnography would allow me to determine what resources international students would like to see on the Purdue OWL and Writing Lab. I decided to conduct four in-depth informal interviews with four international undergraduate Chinese students who are good friends of mine. I decided to focus on interviewing undergraduate Chinese students because Chinese students use the Writing

Lab the most compared to other international students from other countries. I approached my friends and asked them if I could talk to them over lunch or dinner about their experiences. Also, I asked them for their permission about reporting any facts from our conversation for this project. Most of interviews did not have an appropriate time limit; instead we talked for as long as we needed to.

## Interviews

My first interviewee talked about his experiences with English Education in China. He talked about how many of the English classes in China did not necessarily prepare him because these classes did not focus a lot on formal academic writing. There was more heavy emphasis on getting a good grade and memorization that actually learning the English language. He talked about his experiences with the Test of English as a Foreign Language also known as the TOEFL Exam. He talked about how he had to study for the TOEFL exam and how studying for the TOEFL Exam was a difficult experience. He mentioned how he struggled with grammar and speaking English fluently. When I asked him about what types of grammatical issues he struggled with, he was not entirely exactly sure. As we talked more, I determined that he struggled with sentence structure and vocabulary. My second interviewee talked about how he learned English in middle and high school in China. In addition, he talked about his struggles with understanding spoken English when interacting with native English speakers. He talked about certain words in English that were hard to understand because people would say the word in a way that was confusing for him. We also talked about his interest in using the Purdue Writing Lab and OWL and he talked about how he would like to practice his English language skills more with a native speaker.

## More Interviews

My third interviewee talked about his experiences with English because he attended high school in the United States. He talked about his struggles with formal essay writing in high school because he was not as familiar with formal English writing as he went through high school. He also talked about the difficulty of English 106 classes at Purdue because these classes are much harder than the English classes offered in China. We talked about how potential Chinese students coming to Purdue might struggle with these types of classes. He said he would be interested in the Writing Lab and OWL; however, he would be interested in developing a long-term relationship with a native English speaker to help improve his English writing and speaking skills. My last interviewee talked about her experiences as an international student who is currently pursuing an undergraduate degree in English. She mentioned that she originally was not pursuing English as a major; however, she grew to love the language. This was one of the reasons that she wanted to pursue an English degree at Purdue. She mentioned English classes she had taken and we talked about grammatical issues she struggled with. She also talked about her experiences with the TOEFL Exam and how she did not really study for the exam. Instead she studied with friends and off old exams; we discussed how preparing for a TOEFL exam was not the best approach to learning English because students will spend more time memorizing for the exam than immersing themselves in the English language.

## Results

From all of my observations, I learned that all four of these students had a basic understanding of the English language before they arrived at Purdue. They all took English classes in China; however, they took these English classes to get a good grade. These classes did not necessarily help these students become immersed in the English language. Thus they struggled with adapting to the English classes offered in high school and college when they first arrived here. Furthermore, each student took and prepared for the TOEFL Exam

before they came to the United States. They needed a decent score on the TOEFL exam in order to study in the United States; however, they studied with friends or just memorized answers for this exam. This test did not prepare them for using the English language in other countries. All of them struggled with different grammar issues and learning to speak English more fluently. When I asked them what types of grammatical mistakes they struggled with, some knew immediately what grammatical errors they struggled with while others were not as familiar with these types of errors. Many of them would be interested in using the Writing Lab at Purdue; however, only some students were aware of the different services offered like the ESL Conversation Groups and tutorial sessions. Furthermore, some had liked the thirty minute tutorial sessions in the Lab while others wanted to see the sessions be longer. In addition, all four of the students would be interested in developing long-term relationships with American students to help them improve their Written and Spoken English skills.

### **Conclusions from Ethnography**

Based on the observations, I learned that many international students need to show that they are familiar with English before coming to the United States. However, international students may not feel prepared because they may be familiar with English but they have not immersed themselves in the English language. English classes in China do not necessarily improve English language skills; however, these classes are taken to get a good grade and introduce the English language to these students. These classes just give a general overview of English. It is important to find ways to help international students improve their English writing and speaking skills especially as the number of international students continues to grow at Purdue. All of interviewees had indicated that they would like to use the resources in the Purdue Writing Lab. However, international students are not aware of the purpose of the Writing Lab. Thus it is important to highlight these resources that offered by the Purdue Writing Lab because there are so many helpful resources.

### **Recommendations for Purdue OWL and Writing Lab**

From this ethnography, I have learned what potentially could draw international students to the Purdue Writing Lab and OWL. I believe that the most important question moving forward for the Purdue OWL and Writing Lab is to determine what role the Writing Lab and OWL play for international students. Currently the Writing Lab offers thirty minute tutorial sessions to students who may come in twice a week for an appointment. If students want any additional help, they can attend tutorial sessions at off-site locations on Mondays, Tuesdays, and Wednesdays from 6:30-9:30. These writing tutorials do not focus on grammar as much; these tutorials focus more on helping further students' ideas. However, international students would like to see these tutorial sessions be longer because many do not know about the purpose of the Writing Lab. They would like to see sessions longer because many want tutors to help them correct their grammatical mistakes. Thus it is important to ensure that international students are informed about the purpose of the Writing Lab moving forward. I have observed many tutorial sessions for another English class and I have learned that international students have different issues with their writing compared to issues faced by American students. Thus the Writing Lab has to consider how to repurpose their tutorial sessions for international students. Some ways would be to train their tutors about using different strategies when interacting with ESL Students. On the other hand, the Writing Lab and OWL may need to consider if they need to change their goals as more international students use the Writing Lab.

## Additional Recommendations

The ESL conversation groups at Purdue meet every day and they cover the same formal topics once a week. All of my interviewees had indicated that they would like to develop long-term relationships with native English speakers; thus these groups would be a great way to develop these relationships. I would also recommend that ESL conversation groups have informal topics where students and native English speakers can talk about anything. It is important to consider where these ESL Conversation Groups take place because these locations help improve international students' experiences. It is important to see if students would like to study in more of a classroom or a café setting. For the Purdue OWL, there is currently a wealth of ESL resources on the Purdue OWL so advocating these resources to students will be important. It seems that international students have many questions about grammar; however, many are not aware of the different grammatical mistakes they are looking to correct. If there was a page on the Purdue OWL that looked over common grammar mistakes that international students make, this might help students have a clearer idea of the mistakes they want to correct. Furthermore, the Purdue Owl can develop a page for the TOEFL exam because many international students currently take the TOEFL exam. I have seen handouts that illustrate all of these different services; thus these handouts should be given to international students when they first come to the Purdue Writing Lab. Also, these handouts can be distributed to international students at offices like the office of International Students and Scholars or at events like Boiler Gold Rush International.

## Moving Forward with This Research

I am interested in expanding the demographics of my ethnography so I will have the chance to interview more students about their experiences with English in their native country and when they first arrive in the United States. Furthermore, I would like to observe the ESL Conversation Groups so I can observe the interactions of international students in these groups. I would like to interview these students so I can get a sense of what they like about these conversation groups. I would like to ask them what they would like to see on the Purdue OWL and in the Writing Lab. I would like to conduct untimed tutorial sessions with these students so I can see what types of grammatical issues they might struggle with. These untimed tutorial sessions would be on my own time and would be a way to determine what types of mistakes students struggle with. Based off the responses from my ethnography, I would like to possibly develop a questionnaire for international students who come to the Purdue Writing Lab and use the OWL. These questions could be created from the responses I get for my ethnography. All of this future data collection can help the Writing Lab and OWL determine what resources will be helpful for improving both services.

## Conclusion

As project manager for English 515, I have learned numerous skills about managing team members and reaching deadlines. As project manager, I learned how to interact with our clients in the Purdue Writing Lab and others in our class. Furthermore, I have learned a lot from conducting ethnography this semester. I have learned so much more about the international students that are coming to Purdue. It is important to note that all of this information will be helpful for both the Writing Lab and me. I have really enjoyed being project manager and conducting ethnography. As I head into next semester, I looked forward to continuing this line of research.

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# Appendices

## Appendix A: Draft of Style and Content Guidelines

To be placed after “*Reflecting Advances in Writing Pedagogy*” in the “Guiding Development Principles” section

***Content and Style Guidelines.*** As an OWL content developer, you have a wide range of flexibility and creativity at your disposal when it comes to creating your materials. Nonetheless, the following guidelines will help to give you some direction and structure as you go about generating content for your specific topic(s).

**1. Length of content.** As you start generating content, you will also want to think about how to organize it. As you can imagine, most readers prefer to scan online content. The Nielsen Norman Group describes a 2008 study that tracked the browser activities of 25 users and determined that users will read about 20% of text on the average page (about 593 words).<sup>2</sup> Thus, it goes without saying that the more concise your materials can be, the better. In terms of organization, you will want to **aim for paragraphs that are about three-four sentences long**. Breaking up content into smaller paragraphs with sub-headings also allows for quick skimming as well.

**2. Reading level of content.** Since the OWL caters to a wide variety of readers, it is important to gear your content towards a reading level that most of the site’s audience can grasp. In 2005, a study conducted by the U.S. Department of Education’s National Center for Education Statistics determined that the average prose and document literacy of U.S. adults did not significantly rise from 1993 to 2003. Differences in literacy scores were also significant in terms of race considering how White and Asian/Island Pacific Islander had higher scores than Black and Hispanic adults in the prose, document, and quantitative literacy categories.<sup>3</sup>

Overall, the results of this survey show that **the average adult reads at the 9<sup>th</sup> grade reading level**. In order to make informational documents more accessible to a general audience, it is recommended to direct content towards this reading level.<sup>4</sup> Fortunately, it is not too hard to determine the reading level of the materials you create for the OWL.

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<sup>2</sup> To read more about the results of Weinreich, Obendorf, Herder, and Mayer’s 2008 study, please see: <http://www.nngroup.com/articles/how-little-do-users-read/>

<sup>3</sup> More information about the U.S. Department of Education’s survey can be found at <http://nces.ed.gov/fastfacts/display.asp?id=69>

<sup>4</sup> For more information about audience and reading levels, please see <http://www.impact-information.com/impactinfo/literacy.htm>

Microsoft Word offers two features, the Flesch Reading Ease and the Flesch-Kincaid Grade Level tests, to help assess the cognitive difficulty of your content.

To enable both features in Microsoft Word, select **File** and then **Options**. Under the **Proofing** tab, check the box that says “Check grammar with spelling” so that you can also check “Show readability statistics.” Then, when you check the spelling and grammar of your materials or the word count, the readability level will also be displayed.<sup>5</sup> The closer to 100 your Flesch Reading Ease is, the easier your content is to comprehend. The Flesch-Kincaid Grade Level will also give a rough estimate of the current reading level of the content. Both features will help you to make your materials more accessible for OWL readers. You are also free to direct your readers to more sophisticated levels of resources if you feel this is suitable for the context of your materials.

**3. Plain language.** At its most basic level, “plain language” (also called Plain English) is defined by the Plain Language Action and Information Network (PLAIN) as “communication your audience can understand the first time they read or hear it.” **This type of language is necessary for readers to find what they need, understand what they need, and use what they find to meet their needs.** PLAIN’s website provides a few strategies that you can use to make sure that your content fits plain language guidelines. Some of these include:

- Logical organization with the reader in mind
- “You” and other pronouns
- Active voice
- Short sentences
- Common, everyday words

While these techniques are especially helpful for readers whose first language is not English, these plain language guidelines are a form of universal accessibility that benefits all types of readers. For more information and examples about plain language, please visit <http://www.plainlanguage.gov/index.cfm>

For more tips and tricks on how to produce a clear writing style, please see the information about “Clarity” and “Brevity” below.

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<sup>5</sup> For more detailed instructions, please see <http://grok.lsu.edu/Article.aspx?articleid=14250>



**4. Directive style.** While the freedom to direct the tone of your content is ultimately up to you, we also encourage you to consider the rhetorical nature of the topic you are writing about. **You may want to adopt a more directive style for content that allows little flexibility (e.g. formatting citations).** Here, it might be appropriate to offer instructions to help guide readers.

One example of this style can be found on the “MLA In-Text Citations: The Basics” OWL page. Here, we can see several types of instructions such as “When a source has no known author, use a shortened title of the work instead of an author name” within the information about citing print sources with no known author. Generally, the decision of whether or not to use this tone will depend upon the context of your materials. If you feel that your topic is more open to the creative direction of your readers, you may want to take up a more suggestive tone instead.

**5. Suggestive style.** In other cases, **a suggestive tone might be more suitable when making content recommendations for a certain situation or genre (e.g. creating a cover letter or personal statement or organizing a research paper).** Here, you could use phrases like “You might” or “Consider how” to offer guideline for your readers, but still allow them the space to make the best decisions for their particular context. One example of this style can be found on the “Tone in Business Writing” OWL page:

Who is your audience? Whether it is an employer or a fellow worker, it is essential that you consider your reader before writing any document. Your message will be much more effective if you tailor the document to reach your specific audience. The message you wish to express must be written in a way that will effectively reach the reader.

The tone that you use to write the document directly affects how the reader will interpret what is said.

Here, we can see a mix of directive and suggestive styles when considering the audience of a business letter. The writer has developed a series of prompts to help direct the readers’ considerations of their particular audience, but has still emphasized the impact of tone on the interpretation of a message.

On the whole, **most OWL content will be a combination of both directive and suggestive styles.** Keeping your audience’s particular rhetorical situation in mind should help you better determine which style to adopt and when.

**6. Consistent formatting.** This likely seems obvious, but you should aim for consistency across your materials in terms of formatting and language. Some elements to pay close attention to include:

- Capitalizing the first word in each bullet point
- Capitalizing “Web” and “Wiki”

- Bolding key words or commands (e.g. **Do not** or **Please note**)
- Italicizing *YouTube* and *PowerPoint*
- Italicizing and capitalizing the type of medium (e.g. *Print* and *Web*)

**7. References to other OWL sources.** When creating your materials for the OWL, you might need to reference another OWL source or page. Should this happen, we ask that you be as clear as possible when referring to another OWL source. In other words, please mention the main title of the source (e.g. “Genre and the Research Paper”). This way, a reader will be able to easily search for this source under the Search box or Site Map. These references will also help to cut down on the need for embedded hyperlinks, which often need to be updated and revised.

**8. Citations.** As mentioned above under “Guiding Development Principles”, we expect you to create original resources, which will be owned by the Purdue OWL. Nonetheless, we understand that you might need to conduct some research on the current literature on your topic(s). Should you need to paraphrase a source and/or bring in an outside example (e.g. a sample sentence), we ask that you clearly indicate these citations within your content. For instance, the first citation should be marked with a single asterisk (\*), the second with two (\*\*), and so on. This will help readers to identify the source in your “Notes and References” section, which should be organized according to the order in which your citations appear in your content. Of course, please make sure that you have permission to use this material. Finally, in the interest of keeping the material as original as possible, **we ask that you keep your citations brief** (about 2-3 total).

## Appendix B: Mock-Up of Timeline Template

Week	Date	Task
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## Appendix C: Mock-Up of Updated Table of Contents

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