Expert Review

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Executive Summary

An expert review was conducted of the sampleclient.com website, examining the Product 1.1 and Product 1.2 modules as well as the other pages that comprise the website. The inspection focused on identifying any and all usability issues, while also pointing out strengths of the website that should be maintained.

The most significant usability issues identified in this evaluation include:

- **Location within modules should be clarified and navigation within modules supported more fully.** Proposed interface changes clarify the user's location within the modules as well as facilitate navigation from topic to topic.

- **The relationship between pages and topics within a module is not always clear.** This is primarily an organizational structure issue, although some of the difficulty is due to interface design. Recommendations include ways to restructure module content for improved usability, as well as ways to present that content more effectively.

- **Inconsistencies exist in page layout that hinder navigation and potentially confuse users.** Varying page layouts are found within Product 1.1, as well as in the global navigation pages outside the modules. Implementing a consistent page layout, with the same elements always in the same locations, would resolve this issue.

- **Web conventions are not always observed, such as coloring unlinked text blue.** Users expect that blue text will be linked, which is not the case in the Product 1.1 module. Blue should be avoided for non-linked text.

- **Not supporting effective printing of module content.** Providing a printer-friendly version of the module content will be beneficial to many users, who could find reading from a screen uncomfortable or would like to be able to see more of the module content at one time.

- **Potentially unclear labels.** Numerous label revisions are recommended, including re-labeling 'help' as 'faq' and modifying labels within the modules.

While these issues are among the most pressing usability concerns for the sampleclient.com website and modules, a number of additional usability issues that also deserve attention are detailed in the analysis, with recommended solutions.

Terminology & Conventions Used

Different terms are often used when referring to the same part of the browser window or web page. To facilitate understanding of this analysis, one term was used consistently for each browser/web page element. The terms are:

Field name: Field names are the labels that go with text input boxes, drop-down menus, and other form elements.

Global navigation: Links/buttons available from every page, leading to major sections of the website and/or significant pages.

Link label: The label in this case is the word or words that are linked. These words can be in graphical form (such as the graphical buttons at the top of the sampleclient.com interface) or HTML text that is linked.

Local navigation: Links/buttons for moving between pages within a section of the website (such as within a module).

Page name: The primary heading for the page, often shown in larger text and located between the global navigation buttons at the top of the layout and the text content of the page.

Window name: The text at the upper left of the browser window, specified through the (X)HTML <title></title> tags.

Single quotes are used to indicate link labels, page names, and window names. Double quotes indicate non-linked body text, field names, alt text, and are used when generally referring to a page. Any divergence from these conventions is noted in the analysis and is done for the purpose of improving clarity.

Priority Levels

The issues identified in this evaluation are grouped into three levels of priority:

High priority: These issues are likely to impact a large number of users significantly. They should be resolved as quickly as resources allow.

Medium priority: Issues at this priority level are also likely to affect a large number of users but generally are less disruptive to the user experience, relative to the high priority issues. If resources are available to address these issues, they should be addressed.

Low priority: Low priority issues typically impact a small subset of the overall user base, although they may impact a larger group. Regardless of the number of users affected, these issues carry only a minor negative impact. Low priority issues are generally easy to resolve. There is less time pressure to fix low priority issues, compared to medium priority issues and especially high priority issues.

Usability Guidelines

Efficient Navigation

Navigation refers to browsing a website, clicking links to move from page to page. Navigation should be an intuitive experience, so the user does not take the wrong path, get lost or disoriented, or have difficulty retracing their steps on a future visit.

Practices to Continue

- **Supporting navigation within modules.** Providing 'previous' and 'next' buttons are helpful in navigating the modules and the local navigation listing of all the module pages (for Product 1.2) and most of the pages (for Product 1.1) are very helpful in allowing users to move rapidly to the desired page.

Suggested Changes

High Priority:

- **Clarify and reinforce the user's location in the website and within a module.** At the global navigation level, this is accomplished by creating a pressed graphic for 'my page' as well as these changes:

  - **Alter the text color and/or background colors of the graphic for the current page.**

  - **Unlink the graphic.**

  Local navigation for the modules would benefit from similar changes. These include:

  - **Display an arrow next to the navigation item for the page currently being viewed.**

  - **Create a pressed version of the graphic or the text link that is displayed when the user is on that page.**

  - **Unlink the pressed version.**

- **Provide consistent local navigation options.** The Product 1.1 and 1.2 modules maintain consistent local navigation, which is very helpful in facilitating navigation. The 'My Page' | 'My Transcript' | 'My Profile' local navigation, however, is found only on "My Page". This local navigation would be much more useful if it were extended to the other two pages in that navigation bar, the "My Transcript" and "My Profile" pages.

Medium Priority:

- **Indicate when a user has moused over a navigation button and/or text link by using JavaScript for an image rollover or CSS to modify text link appearance.** These changes reduce navigational confusion, specifically situations where the user wonders what they clicked to reach a certain page.

  The image rollover would be useful in Product 1.2, where the local navigation links are graphical. CSS is recommended for the Product 1.1 module, where text links are used for local navigation. The text should change to the pressed color during mouseover or when given keyboard focus.

  Modifying the mouseover and keyboard focus color for links in the body text and the right-hand column would also be appropriate, as long as one consistent color was used for those mouseovers.

- **Provide additional 'previous' and 'next' text links within the modules.** To further enhance navigation between pages within the modules, provide both 'previous' and 'next' text links following the body text. The 'previous' link (if there is a previous page) should be placed at the bottom left of the body text area, while the 'next' link (if there is a next page) should be placed at the bottom right of the body text area. The 'next' link replaces the current 'Continue' link and is more consistent in labeling with the 'previous' and 'next' graphics in the top right of the page.

  Users are more likely to notice these links, since they follow the text. The text links are also likely to be closer to where the user last positioned the cursor, which makes clicking to the next page quicker by reducing mouse movement.

Organizational Clarity

Organization refers to how content is chunked (broken up into sections and discrete units), sequenced, and grouped. The quality of an organizational system is dependent on how well content is divided, as well as how easy it is for the user to see and understand the system being used. The modules developed by sampleclient.com rely heavily on effective organization to ensure their usability.

Suggested Changes

High Priority:

- **Clearly indicate the sequencing of pages/topics within a module by numbering each topic.** Product 1.2 uses numbering to excellent effect, with each page/topic numbered in the local navigation and one page per topic. This helps to clarify the organizational structure being used. Product 1.1, however, presents a confusing organizational structure because only some of the pages/topics are numbered and the relevance of those numbers is only known if the user reads the "Overview" page.

- **Provide one link in the local navigation for each 'page' in the module.** Product 1.2 provides seventeen separate local navigation links, one for each of the 17 pages. This is the recommended approach, as the organizational structure (one link for each page and one page per topic) is apparent to the user. The organizational structure of Product 1.1 is not as clear, as there are 25 pages in the module and only 12 links in the local navigation. The location of the remaining 13 links (pages) is not obvious to the user.

- **Chunk the module content into no more than 20 pages.** A list of twenty links is approaching the limit of vertical space for the local navigation before vertical scrolling begins to occur. Scrolling to view navigation is never a desirable action for a user. Twenty pages is also a good cap for module size, as it is short enough that length (and the associated time and effort required for reading that many pages) is not likely to become a deterrent for most users. Even though users can stop and return to the module later, they may not consider that or realize that they can return to the same spot in the module on future visits.

- **Re-purpose the more interactive content (e.g., questions), case studies, and supplemental readings so that they exist outside the core organizational structure.** This content should not be located in the local navigation. In essence, the local navigation links form the core organizational structure, both in terms of what they contain (factual information and guidelines) and how they behave (loading up in the same window and layout/format and displaying their content in the same way in the body text area).

  The questions, case studies, and supplemental readings should be located in the right-hand area of the module pages and behave differently, spawning in a new window to show that they exist outside the core organizational structure. Because they represent content on the same topic but with some different qualities (in terms

of how users interact with them and their layout/format), it is appropriate to separate that content in this manner.

Perhaps most importantly, this separation provides more flexibility in chunking the local navigation pages, as then the only content under consideration for local navigation is the factual information and guidelines.

Clear Labeling

The choice of labels is vital to website usability. Most online activity involves reading, so the name given to part of a page or a link label is crucial to accurately understanding and using the website. Poorly chosen and/or vague labels confuse users, leading them down the wrong paths on websites or causing them to leave the website because none of the labels appear to represent the desired content. Labeling issues that pertain to other guidelines may be mentioned under that guideline and are therefore not mentioned here.

Suggested Changes

High Priority:

- **Re-label "Learn more…" as "External Resources" and "Think about it…" as "Tutorials" to more accurately represent their content.** The current headings offer a limited context.

Consistent Design

Consistency pertains to all aspects of a website: layout, labeling, error messages, whether something is (X)HTML text or graphical text on all pages, even the choice of colors. Widespread (multi-page) inconsistencies are noted here, with issues specific to a given page provided in Additional Usability Issues by Page & Section. As the module content is still in development, inconsistencies in style (such as capitalization and punctuation) are not mentioned.

Suggested Changes

High Priority:

- **Use one layout for all module pages, with three distinct columns on the page.** The Product 1.1 module uses three layouts:

    - **Standard layout:** Three columns, consisting of local navigation, body text area, and right-hand area.

    - **Two-Column Span layout:** The local navigation column is intact and stands alone, but the examples given in the body text span both the middle and the right-hand side of the page.

    - **Mixed layout:** Combines the first two layouts, presenting three columns with some content from the body text area spanning into the right-hand area. Other content is located just in the body text area or just in the right-hand area.

    The drawbacks of the Two-Column Span and Mixed layouts are that they reposition page elements, requiring users to relearn the page layout, while introducing additional interface design issues. The recommended approach is to maintain the Standard layout for all module pages.

- **Establish one text color for clickable links in the body text area, right-hand area, and for glossary terms.** Link colors differ from Product 1.1 to Product 1.2. Consistency in link color is very important so users know which links have been clicked in the past (multiple sets of link colors make determining this difficult). Using the same color for glossary terms (the definition appears when the term is moused over), and not underlining the term, may help users associate the term with an additional action that does not involve clicking.

Medium Priority:

- **Increase consistency between link labels for local navigation, page names, and window names.** This recommendation is difficult to implement, given the limited space in the local navigation area. Provided these interface constraints, it is fine to have a slight discrepancy exist between the local navigation link label and the page name, as long as the page name contains all the words in the local navigation link label (and most likely some additional words). Page name and window name should

match, however, as there are not as limiting interface constraints on their length. More details concerning these inconsistencies are given in the Additional Usability Issues by Page & Section.

- **Locate 'Close this window' and 'Close' links at the bottom right of the window or box in which they appear.** At present the link location varies, from the top of the page to a position just after the body text and left-aligned with that text. The bottom right is the standard location for links that move the user to the next step in a process. In this situation, the next step is to close the window or box after reading the content.

- **Re-label 'Continue' as 'next' for improved consistency.** Re-labeling this link would increase consistency with the 'next' graphic in the upper right corner of the modules. Having these link labels differ may cause users to wonder if the links accomplish different results.

Low Priority:

- **Standardize how the 'view details' link is presented by enclosing 'view details' in parentheses, as (view details).** The parentheses serve to separate the link from the surrounding content and also establish a unique visual signature for these links that users will learn to associate with that type of link. This approach could also be used for (view answer) in the Product 1.1 module.

Matching User Expectations

The Web has been in existence long enough for users to develop consistent, widespread expectations concerning web page behavior, such as what underlining and colors represent. Underlines are interpreted automatically as indicating a link and the color blue is interpreted automatically as indicating a link.

Suggested Changes

High Priority:

- **Avoid blue text for anything that is not a link.** The use of blue for regular text in Product 1.1 is very confusing, as the user's assumption is that the text is clickable.

- **If possible, avoid having pages scroll. If scrolling is absolutely necessary, make sure that the scrolling is worthwhile, so that the user is not scrolling to see just a few lines more of text.** Given how the sampleclient.com modules are set up, using a specially sized window targeting a certain screen resolution, having all the content visible within that window is of paramount importance. If content goes just outside the viewable area and the user has to scroll, that individual may legitimately wonder why they are in a specially sized window that is too small for its content.

  This issue also relates to the recommendations concerning chunking and module size given in the Organizational Clarity section of this analysis. Ideally, content is chunked to a size where no scrolling is needed. If scrolling is necessary, it is best to make the scrolling worth the user's effort, containing at least one more page of content. Again, given how the sampleclient.com modules are constructed the avoidance of scrolling is the preferred approach.

Effective Visual Design

Visual design concerns the 'look and feel' of the website, specifically how well interface design principles have been applied or followed. Adherence to these principles improves both aesthetics and functionality, because users are able to locate desired information more readily. This section covers widespread (multi-page) interface design issues; consideration of interface issues that are unique to a given page are provided in Additional Usability Issues by Page & Section.

Suggested Changes

High Priority:

- **Improve alignment of interface elements.** This recommendation includes:

    - **Left-align local navigation links and the 'my page' global navigation button within the modules.**

    - **Left-align page content and the 'my page' global navigation button outside the modules.**

    - **Left-align the page name and the body text within a module.**

- **Create three distinct, non-overlapping columns on the module pages.** At present there are three columns (local navigation, body text area, and right-hand area), but the body text frequently spills into the right-hand area. The three columns should be separated by negative space horizontal gutters, which help users to visually group and distinguish the content in those areas.

Medium Priority:

- **Establish separate boxes in the right-hand area for different types of links.** The current approach does not meaningfully distinguish between the various types of links in the right-hand area. While they are grouped into "Learn more…" and "Think about it…" categories, some links open to supplemental sampleclient.com materials and tutorials while others open to external websites. Links should be visually grouped (and labeled appropriately) based on their destination and the type of link they represent.

- **Maintain a consistent width for elements in the right-hand column.** The elements in the right-hand column include the 'previous' and 'next' graphical buttons, the indication of current page and total number of pages, photos or clip art, and the "Learn more…" and "Think about it…" links. These elements should maintain an equal width that fills the entire column, to visually reinforce the third column and provide a more uniform structure to that part of the page.

Low Priority:

- **Shrink the vertical height of the graphics for "Learn more…" (the open book), "Think about it…" (the thinking person), and "Guiding Principles" (the lightbulb).** The height of these graphics creates additional vertical space on the page without a corresponding benefit. The larger size of the graphics also creates a visual imbalance with the smaller text to its side.

- **Align graphical 'bullet points' with the top of the corresponding text.** The graphical bullets in this case are not exactly bullets, but rather the graphics of a pointing finger and checkbox used in Product 1.2. Users look to these graphics to find the beginning of the bulleted text, so vertical alignment assists in that process.

Supporting Readability & Scannability

Most of the time users spend online is spent reading and a good portion of that reading is done by scanning through pages, looking for headings and links to follow. The sampleclient.com modules, however, require reading for comprehension, which is a much more careful process than most web surfers typically follow. The extra time required for this type of reading, combined with the fact that reading from a screen is slower and more taxing than reading from a printed page, suggest that the sampleclient.com content should be designed for optimal display both online and in printed format.

Practices to Continue

- **Providing good text color/background color contrast.** Optimal contrast is black text on a white background, which is generally used for the body text area. The other color choices (for the global navigation, local navigation, and right-hand area) also provide good contrast.

- **Using bullet points to facilitate visual scanning.** Bulleted items are much quicker to read than the same text presented in paragraph format.

Suggested Changes

High Priority:

- **Create a printable version of the module content in PDF format that can be accessed from 'my page' as well as any page within the module.** This printable version will contain all the module pages in one file. Where appropriate, the printed version can include questions, case studies, and other supplemental materials or direct the user back to the website for that information.

Facilitating User Tasks

Web users are task-oriented and users of the sampleclient.com modules are certainly no different in that regard. Websites that support these tasks by facilitating access and reducing the time required for the task are best positioned to keep visitors returning and satisfied with the experience.

Practices to Continue

- **Providing easy access to start a module over or resume a module from 'my page'.** If users always had to start at the beginning of a module, that would be a deterrent to using the website. If, however, they wished to start over that can be quickly accomplished from this page.

Suggested Changes

High Priority:

- **Remove the sampleclient.com splash page and launch the module window from the login link.** The splash page seems to be an unnecessary step and is one more click for users.

Providing Help

Even the most carefully designed website may need a help section, especially if the site functionality is fairly complex and users are expected to step through various processes. Unfortunately, the label 'Help' is generally off-putting to users, who resist visiting that area of the website because of previous 'Help' experiences with desktop software or other websites that were not satisfying. Users may also associate 'Help' with only technical problems and not visit that area for more content-based questions, such as where to find something or what module to complete next.

Practices to Continue

- **Providing a list of within-page links and links back to the top of the page.** This approach to presenting frequently asked questions is very helpful for the user, as it facilitates the navigation process.

- **Spawning a new window for the frequently asked questions.** This allows the user to move around within the sampleclient.com modules while still being able to access the frequently asked questions, potentially saving that individual a significant amount of time and effort.

Suggested Changes

High Priority:

- **Re-label 'help' as 'faq'.** An even better label would be the fully spelled out 'frequently asked questions', but the horizontal space at the top of the page might not allow for such a long label. Given the shortness of the other labels in the global navigation such a long label might also appear out of place. Changing the label will clarify the nature of that content and encourage more users to visit the page.

Low Priority:

- **Use different text sizes to distinguish sub-categories from questions, with a larger text size instituted for the sub-categories.** For example, the "Logging in to sampleclient.com" and "Logging out and returning to sampleclient.com" sub-categories only use indentation to show visual hierarchy and that may not be sufficient.

Additional Usability Issues by Page & Section

Further usability issues specific to a page, module, or section within a module are indicated. Some repetition may occur with issues noted in the general analysis, if the page or section in question requires significant and/or specialized assistance with that issue. Only the pages, modules, and sections with further issues are considered.

My Page

High Priority:

- **Change the 'Resume' and 'Start' links to buttons to increase visibility.** Buttons suggest actions more clearly than links, so they are especially appropriate in this situation.

Medium Priority:

- **Provide specific headings for all columns in the table.** Currently the "Modules" heading spans three columns. Having separate headings (from left to right) of "Priority", "Module", "Length (pages)", "Actions", and "Date Completed" would more precisely identify all the information provided. The "Actions" column would contain the 'Start', 'Resume', and 'Take Test' buttons, as well as potentially a 'Print Module' button.

- **Link the references to 'My Profile' and 'My Transcript' in the body text.** Linking draws attention in the same fashion as boldfacing text and provides direct access to those pages.

Low Priority:

- **Include "ID:" before the number that follows the user's name.** This clarifies the nature of that number and improves consistency with how that number is shown on other pages (e.g., 'My Profile').

My Profile

High Priority:

- **Display the local navigation and global navigation on this page.** This page should have the local navigation bar containing 'My Page', 'My Profile', and 'My Transcript', with 'My Profile' bolded and unlinked. If possible, including the global navigation would also be beneficial.

Medium Priority:

- **Include a left-hand margin to improve readability.** Adjusting the margin property of 'body' to a value greater than zero would provide the necessary margin space.

- **Modify the appearance of the two buttons at the bottom of the page to use the standard styling of buttons elsewhere in the website.** The large size and visual style of these buttons is not consistent with the other buttons/graphics on the website.

Process for Establishing Profile

Medium Priority:

- **Position the 'Continue' button in the bottom right of the pages.** This positioning follows the flow of reading and the bottom right position indicates forward movement to a greater extent than other locations.

- **Provide a 'previous' button on the second and third screens.** This improves navigational flexibility. Users do not have to rely on the browser Back button or have to finish the process before being able to go back and make changes. Instituting this change would also involve re-labeling 'Continue' as 'next'.

- **On the last page, re-label 'Submit' as 'Create Profile'.** The new label clarifies the action being taken.

Low Priority:

- **On page 1, the contents of the far right column should be vertically aligned to the top of their cell.** This makes the appearance consistent with text in the other cells.

- **Include the colored background behind the form elements on page 3.** This improves consistency with the previous pages.

- **Left-align the page 3 content/options under the number '3'.**

My Transcript

High Priority:

- **Follow a similar layout to the 'My Profile' page, using a two-column layout at the top of the page and adding an icon for email.** This is a very clean, efficient way of presenting the page's information and functionality.

- **Maintain the local navigation on this page.** This page should have the local navigation bar containing 'My Page', 'My Profile', and 'My Transcript', with 'My Transcript' bolded and unlinked.

- **Include a page name.** Providing an easily seen page name is essential so users know their current location.

E-mail Your Transcript

High Priority:

- **Reduce the size of the textarea box or enlarge the window size.** At the default window size (using the dimensions already established without enlarging the window), horizontal scrolling is required to see the entire textarea box.

Medium Priority:

- **Re-label the "Comments:" field name as "Message:".** Given the purpose of this form, labeling the field as "Message" would more clearly indicate the type of information the user should provide.

Bug Report

High Priority:

- **Change the select menus to text input boxes.** Text input boxes are the standard elements used in forms of this type.

- **Do not show the non-essential, pre-filled fields to the user.** This includes all of "The Application" and "The System" (with the exception of "Reference URL"). This information does not seem to be of value or interest for most users. Removal of these fields will also significantly shorten the form.

Medium Priority:

- **Re-label the graphic and page as 'Report a Bug'.** The current label of 'Bug Report' sounds like it could be a list of known defects in the program, so 'Report a Bug' more accurately represents what the user will be doing.

- **Move "Reference URL" to "THE BUG" area and rename the field as "Bug Encountered At:".** This new terminology is more direct.

- **Consider removing or re-labeling the "Title" field name.** The nature of the information requested in unclear. Is this a name for the bug? A subject for the message being generated?

- **Re-label the 'Submit' button as 'Send Bug Report'.** The new label reinforces and clarifies the result of clicking that button.

- **Remove the 'CANCEL' button and replace it with a 'Close window' link at the bottom right of the page.** The result of clicking this button (the window closes) cannot be undone and that outcome is not made known to the user.

Low Priority:

- **Include a subheading of "What is a bug?" before the first paragraph.** This subheading helps to set up the content that follows.

- **Rename "Comments:" as "Additional Comments" to further reinforce that they are optional.**

Glossary

High Priority:

- **Include the standard icon toolbar at the top of the page.** This is especially useful if the user follows a link from the glossary to an outside website, because at that point they have no easy way to get back to the glossary.

Medium Priority:

- **Reduce visual clutter and noise.** With the large amount of information displayed in the glossary, any reductions to visual clutter and noise are beneficial. The recommended steps are:

    - **Remove table borders.**

    - **Increase the text size of the letters (e.g., 'A', 'B') so they draw visual focus more effectively.**

- **Add more white space vertically between the clusters of terms starting with the same letter.**

- **Add more white space horizontally between a term and its definition.**

- **Include links back to the top of the page.** The recommended implementation would be similar to the 'help' page and should be done in a restrained fashion, with only one of these links per each screen of content.

- **Left-align the page title.** This should be done for consistency with the other pages on the website.

Low Priority:

- **Move the within-page links all to one line, rather than two lines.**

Feedback

Medium Priority:

- **Change page name from 'Send us your feedback - 3 Easy Steps' to 'Feedback'.** This improves consistency between page name and the link label in the global navigation.

- **Modify form content to achieve a one page layout that does not require scrolling.** The following changes will assist in that process:

  - **Remove the 'SPECIFY', 'COMPOSE', and 'SUBMIT' headings**

  - **"1. Type of Feedback:" should have a drop-down menu containing options for: 'Please choose', 'Sharing an opinion', 'Reporting a technical problem', 'Asking a question', and 'Other'.** If it is clear which feedback option in the "Type of Feedback" drop-down menu is the most common, set that as the default and remove 'Please choose'.

  - **Remove the text input box for entering "Other" information, since that can be done with the textarea box for "Your Message".**

  - **The next item is "2. Your Message:" with the textarea box following that field name.**

  - **Following that is "3. Your Email Address:" followed by a text input box.**

  - **Then have "4. Would you like a response?" with radio buttons of "yes" and "no", with "yes" as the default.**

- **Re-label the 'Submit' button as 'Send Feedback'.** The new label reinforces and clarifies the result of clicking that button.

- **Remove the 'Cancel' button and replace it with a 'Close window' link at the bottom right of the page.** The result of clicking this button (the window closes) cannot be undone and that outcome is not made clear to the user.

Product 1.1

High Priority:

- **Remove "Length: 25 pages" and "Topics: (pages)" from the left-hand navigation area.** The length of the module is available in many different places and these graphics take up vertical space. It is also not clear whether these are links or just graphics, since the linked graphics on the page have a similar appearance. Simply having the name of the module is sufficient.

- **Provide a 'previous question' link during question sequences.** There is currently no way to step back to previous questions without starting that section of the module over again. This link should be located at the bottom left of the body text area, with 'next question' at the bottom right.

- **Avoid having 'view answer' links show content further down the page.** This is especially troublesome on longer pages where scrolling is required and clicking 'view answer' can move the user to the top of the page when the answer is at the bottom (and potentially out of view). The recommended approach to presenting questions/answers is provided in the Usability Guidelines.

Medium Priority:

- **Improve consistency of alternate text for "PRODUCTS", "Length: 25 pages", and "Topics: (pages)", if the latter two graphics continue to be used.** "PRODUCTS" and "Length: 25 pages" have alternate texts of "The Fundamentals", while "Topics: (pages)" has alternate text of "overview".

- **Inconsistencies exist between local navigation link labels and page names/window names.** While these discrepancies can be hard to address in the local navigation because of the limited space available, they should still be noted. The format is 'local navigation link label' → "page name/window name":

  'Responsibilities' → "Your Responsibilities"

  'Overview' → "Module 1: Overview"

  '1. Publication & Authorship' → "1. Publication and Authorship"

  'software' → "Intellectual Property: Non-Traditional Works"

‘inventions’ → “Intellectual Property: Research Inventions”

‘4. Data Fabrication’ → “4. Data Fabrication and Falsification”

‘Fed./SC Policies’ → “Federal Policies”

‘Fed./SC Policies’ → “Sample Client Policies”

‘Additional Areas’ → “Synopsis of Additional sampleclient.com Modules”

- **Have the ‘(Details)’ link on the “Reporting Misconduct” page display its contents above the fold, so that scrolling down to see the contents and close the window is not required.**

Low Priority:

- **Add bullet points to the items on the “Your Responsibilities” page.**

- **Change the ‘module outline’ links to ‘(module outline)’ on the “Additional Areas” page.** This helps to visually separate the link from the text on the same line.

Product 1.2

High Priority:

- **Remove “Length: 17 pages” from the left-hand navigation area.** The length of the module is available in many different places and the graphic occupies vertical space that could be used for local navigation.

Medium Priority:

- **Place the box containing definitions in close proximity to the link that opens the box.** To cite two examples, the ‘IRB’ definition on “Research Example 1” and the ‘SSC’ definition on “Research Example 2” are too far away from their respective links. Closer proximity would make their shared relationship clearer to users.

- **Locate ‘Resources’ before ‘Conclusion’ in the local navigation or include ‘Resources’ as a link on the ‘Conclusion’ page.** The “Conclusion” page is intended for individuals ready to leave the module, so “Resources” fits better as the page before “Conclusion”. Another option would be to remove ‘Resources’ entirely from the local navigation links and have it as one of the links from the “Conclusion” page, spawning in a new window if clicked.

- **Multiple-page case studies should have menus of text links always available for navigating between the pages.** The sampleclient.com Case Study “Sample

Study 5" is an excellent example of a case study that would benefit from an always-present menu of links for moving between the pages.

- **Have definitions of terms always available on mouseover, instead of sometimes requiring clicking to see the definition.** This inconsistency in how definition links are activated is likely to cause confusion. The "Federal Policies" and "Sample Client Policies" pages provide a good example of how the two styles (mouseover and clicking) are used in a sequence of pages, when using just the mouseover would be sufficient.

Low Priority:

- **Maintain a common bullet point color within a page and across pages.** The changing bullet point colors on the "Research Example 2" page are confusing, as there is no indication why the colors were changed or the significance of one color relative to the other.