**Usability and Learning Evaluation Report Summary**

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| Melinda James  ISLT\_7361: Introduction to Digital Media  URL Tested: <https://mindyjames1.wixsite.com/website/assignments> (final project tab) |

**Summary of Users and Usability Tests**

The students for the usability observation, usability surveys, and learning evaluation fell within the target audience age range for the learning design, ranging in age from 11-13 years old and currently enrolled in grades 4-7. The usability observation and surveys were conducted with male users and the learning evaluation was conducted with a female. Three of the four participants receive specialized services through an Individualized Education Plan (see Appendix A: Table 1, *unique learner characteristics)*. All participants have an average level of experience and ability using computers and the internet, commensurate with that of their typical peers. Google Chrome was used as the browser by all participants; the observation and survey participants used a desktop computer while the learning evaluation participant used a laptop computer. All participants engaged in the audio lesson used to support the digital image, the drag & drop interactive sort, and the interactive video with a supporting reading passage. Only the observation participant received specific tasks to complete. All other users navigated and interacted with the site and learning activities on their own. Participant 2 received a verbal prompt to refer to section one during the sort activity and Participant 3 received one verbal prompt to listen to the passage prior to completing the video lesson.

**Major Findings and Recommendations**

Issues for Usability and Learning

The first section of the learning experience includes the digital image poster and the audio clip as a lesson to review the poster. Based on the usability observation, I realized calling the digital image the “poster image” in the directions above the audio clip was confusing, an unclear reference.

The second section includes a sort, and the users reported two major issues. The observation participant was not sure whether he could look back; although he said he would have if he wasn’t being watched. One survey participant struggled to realize he was reconstructing the digital poster image of the strategy from the first section. He required a verbal prompt to scroll back up. Once he realized this, he was able to sort it accurately.

The third section houses a passage with audio available and an interactive video quiz. Two of the participants did not see or read the passage, even though it was above the video box. The survey participant who did not read the passage seemed to simply click the video quiz until he got the right answer. One survey participant needed a verbal prompt to read the passage and used the audio feature to gain the information. The observation participant found the passage link and read the text aloud carefully, getting all quiz items correct.

Modifications/Solutions

Adding a clear label above the digital image poster that is stated the same in the directions with the audio lesson will add clarity.

The sort directions should instruct users to look back at the digital image for help if they get stuck recalling the steps. The directions should use the same label to refer to the digital image as found in section one.

Directions should be added to section three to read the passage before completing the video quiz; this would better follow the format of the other sections which include directions. The weight of the passage and audio buttons can be increased above the video box. An interactive pop up can be added to the video to direct students to read the passage and where it can be found.

Usability and Learning to Keep

The participants were all able to flow from one step to the other with clear headings on each section. The observation participant said the site was very clean looking in layout and color. The audio and video elements were easy to locate and worked as expected. Surveys showed the perception that most users could quickly learn to use the page. Participants particularly liked the interactivity of the sort and video and found them effective to support learning outcomes, noting that they were fun and increased engagement and attention where they would otherwise lose focus.

Degree of understanding the content

All participants reported valuing the learning experience and stated they would revisit the site and did not find the content too difficult or the usability too complex. Those not reading the passage reported enjoying the interactive elements, but the observation participant who read the passage performed best on the quiz, getting all items correct on the first attempt. The learning evaluation showed the experience to be stimulating with enough practice to feel confident in having met the objectives.

Rationale for Modifying or Keeping Elements of the Website

Consistency, clarity, and repetition are needed from both a design and learning perspective. Weighing consistent language, clear content, and repetitive structure serve as the rationale behind decisions to change or keep elements of the site the same. Consistent language needs to be added via a clear label above the digital image to carry throughout directions in multiple sections. Repetitive structure mandates adding directions to the video section because there are directions in the other two sections to follow. Clear content persuades me to keep the sort minimally changed, even though one survey participant suggested color grouping pieces according to the acronym letter, the description of the step, and the examples. Because the pieces are cut from the digital image used during the introductory lesson and users are encouraged to look back to help them recall the steps to the writing process, it makes the content more clear to use the elements as they appear on the image.

**Reflection**

I had invested many hours into this project, and I had thought I had combed through it so many times that there would be little to change. After taking the time to do the observation, surveys, and learning evaluation, I am reminded to always take instructional design back to the target learning group for feedback before finalizing it. I had some difficulty deciding what to include, and I made some minor changes and additions to the observations, survey, and learning evaluation provided. I am hoping to cultivate a better skill level in deciding these measures for myself and my projects in the future, but I am thankful for the samples and guidance with this project. If school were in session, I would modify the site and the measures once more for another round of feedback.

**Improvement**

Based on the feedback received by the target users, I added a label above the digital image, *RACES Poster Image*, to have a clear way to refer to it in the directions for the audio lesson and sorting activity. I added a note in the directions for the sorting activity to refer back to the *RACES Poster Image* for help. In the video, I added an additional pop up element through H5P asking, “STOP: Are you ready for this lesson?” which requires a click to proceed; the dialogue box that pops up directs the student to the passage. I added directions to the video section, placing them just under the objective and made the buttons for the text passage and audio larger so they span slightly beyond the video box, adding some vertical visual weight to them to interrupt the eye, hoping to intercept the user to encourage them to read the passage prior to completing the video quiz. These changes were all in response to user observations and feedback to support better usability and learning outcomes.

Appendix A

Table 1

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|  | **Participant 1**  **Usability**  **Observation** | **Participant 2**  **Usability**  **Survey** | **Participant 3**  **Usability**  **Survey** | **Participant 4**  **Learning Evaluation** |
| **Age** | 12 | 11 | 12 | 13 |
| **Gender** | Male | Male | Male | Female |
| **Student Grade** | 6 | 4 | 5 | 7 |
| **Unique learner characteristics** | Perfectionist and meticulous learner; approval seeking | Distractible; ADHD; direct personality | Language Impairment: Dyslexia; audio support and screen reader may be used for schoolwork | Dyslexia; Motivated Learner; direct and outgoing personality |
| **Date of Test** | 03/22/20 | 03/22/20 | 03/22/20 | 03/22/20 |
| **Browser** | Chrome | Chrome | Chrome | Chrome |
| **Tasks** | Audio supported digital image: Drag & drop sort; Interactive video with supporting passage read | Audio supported digital image: Drag & drop sort (prompt given to scroll back); Interactive video (did not read passage) | Audio supported digital image: Drag & drop sort; Interactive video (listened to audio of passage with prompt) | Audio supported digital image: Drag & drop sort; Interactive video (did not read passage) |
| **Overall** | Previewed the site carefully and read each objective and set of directions. Reported a positive experience finding it an engaging way to learn about writing which he doesn’t really like to do. He usually loses focus during videos, so the interactive helped him pay attention. | Would use page again. Found it easy to navigate and features easy to use. The different parts worked well and were not too complex. Most users could learn to use the page quickly. The audio and video were easy to use. Felt confident using the page. | Would use page again. Found it easy to navigate and features easy to use. The different parts worked well and were not too complex. Most users could learn to use the page quickly. The audio and video were easy to use. Did not feel confident using the page (needed prompt). | Did not understand prerequisite language in first few questions. Strongly met expectations; relevant material; stimulating with enough practice; appropriate difficulty and pacing; felt successful in objectives; self-paced positive experience; image, audio, and video helpful. |
| **Comments** | Passage not opening in separate window caused confusing navigation (necessary to open in current window for the SISLT VR grid); Unsure of what the “poster” was and if he could look back; Wished popup quiz did not cover text in video. | Are there features that could be added to make this easier to use? *Yes. The second section.The words overlap on the small sections.* | Are there features that could be added to make this easier to use? *No. It's pretty easy.* | **Improvements**: *More interactive elements*.  **Least valuable**: *The audio*. (For her. She understood why it was there and valuable for others.)  **Most valuable**: *The interactive learning practice was fun and engaging.* |