

Exploring Evaluation Techniques for Children's Websites

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EXECUTIVE SUMMARY

Children are an important target group on the web and assessing their user experience presents a unique challenge. Special consideration when conducting sessions with children includes: their difficulty articulating their thoughts, getting shy children to open up, keeping their attention focused on the test activities, understanding their non-verbal cues, and providing enough encouragement without “leading” the participant. Additionally, children have a broad range of cognitive skills, reading skills, and vocabulary comprehension, which makes it difficult to ascertain whether they understand the given task and difficult to ensure their responses are valid. Usability tests for children not only need to be designed to effectively solicit subjective preferences and objective content comprehension, but also to assess how well they are able to use the site. Verifying their understanding of the task activities (to ensure the efficacy of their response) is critical for the validity of the data. This study reports on a two-phased testing approach and the lessons learned in redesigning an agency's web portal for science content targeting 5-12 year olds.

ORGANIZATION BACKGROUND

The organization for this study was a federal government agency that develops web content for children as part of its overall education and public outreach strategy. This agency (like many agencies within the United States federal government) has a complex organizational structure with multiple branches, divisions, and departments. Efforts to develop web content, particularly for unique audiences such as children in primary grades (ages 5-12), are executed at the department or individual project level, and less at the agency-level. As a result, these projects are spread across multiple websites throughout the agency with different navigation styles, look-and-feel, and content – which makes it difficult for younger children to navigate and locate content.

The type of web content developed for children spans a variety of physical science topics and includes games, image galleries, videos, printable activities, and stories. Accessing these different products requires wading through various departmental websites with navigation more focused on the organizational structure than content. Additionally, assessing the success of these products is also difficult without a single location to highlight and promote the content. Thus, the development of a portal specifically designed for children could increase the organization's return on their investment in educational web content.

SETTING THE STAGE

The challenge for this organization has been to develop a web portal that would help school-aged children (as well as adults) locate content developed for children by different organizations within the larger agency. Prior to this project, agency-level websites were developed to provide access to content for all audiences from one location. The team that developed these sites consisted of designers, web developers, an information architect, and a usability expert. The testing effort employed a variety of methods and included funding for testing in a usability lab. While these sites had sections specifically designed for kids, the testing tools were primarily targeted for the adult audience and as a result were tested on just a handful of children.

The ultimate goal of the project was to design and develop a website focused on earth and space science content that appealed to the broadest scope of the target audience -- without alienating any one segment of that audience. Children respond similarly to adults, in that they leave a site if it does not immediately meet their needs or expectations (Kamishlian & Albert, 2011). This science site needed to appeal visually and engage children in the science content, but also must allow children

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