Universal Design Tips for Evaluators

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Universal Design is "the design of products and environments to be **usable by all people**, to the greatest extent possible, without the need for adaptation or specialized design" (Center for Universal Design, North Carolina State University). This document presents a set of tips on how to apply the seven principles of universal design to evaluation. These tips were compiled as a handout to accompany an August 5, 2010 webinar on Universal Design for the American Evaluation Association "Coffee Break Webinar" series.

The following tips are based on the seven Principles of Universal Design. The Principles of Universal Design and the accompanying Guidelines were conceived and developed by The Center for Universal Design at North Carolina State University. Use or application of the Principles in any form by an individual or organization is separate and distinct from the Principles and does not constitute or imply acceptance or endorsement by The Center for Universal Design of the use or application.

Principle One: Equitable Use

The design is useful and marketable to people with diverse abilities.

Guidelines:

- Provide the same means of use for all users: identical whenever possible; equivalent when not.
- Avoid segregating or stigmatizing any users.
- Provisions for privacy, security, and safety should be equally available to all users.
- Make the design appealing to all users.

Evaluation tips:

- Think about how to make your design inclusive to all users, even if your evaluation is not specifically focused on people with disabilities or other vulnerable populations.
- Use a variety of data collection methods (interviews, focus groups, observations) to include people with different communication needs, abilities, and preferences.
- Make informed consent materials as simple and accessible as possible to ensure people with limited reading or comprehension skills understand what is being asked of them. Allow time to go over consent materials and make sure participants understand.

Principle Two: Flexibility in Use

The design accommodates a wide range of individual preferences and abilities.

Guidelines:

- Provide choice in methods of use.
- Accommodate right- or left-handed access and use.
- Facilitate the user's accuracy and precision.
- Provide adaptability to the user's pace.

Evaluation tips:

- Allow extra time for interviews or surveys, particularly if interviewees may have cognitive or language barriers.
- In designing your questionnaire or survey, consider how alternative methods of response might be made available. For example, if a survey is offered on-line, there should be a clear way for participants to request to complete it on paper or over the telephone. Conversely, when doing telephone interviews offer the alternative of participating by email, web chat, or in person.

Principle Three: Simple and Intuitive

Use of the design is easy to understand, regardless of the user's experience, knowledge, language skills, or current concentration level. Eliminate unnecessary complexity.

Guidelines:

- Eliminate unnecessary complexity.
- Be consistent with user expectations and intuition.
- Accommodate a range of literacy and language skills.
- Arrange information consistent with its importance.
- Provide effective prompting and feedback during and after task completion.

Evaluation tips:

- Think about providing information in multiple languages.
- Try to write questionnaires, surveys, reports, and other documents to be accessible to people with a variety of reading levels and backgrounds.
- Likewise, try to make questions and response options accessible to a variety of cognitive levels. For example, a three point Likert scale may be easier to understand than a five- or sevel-point scale.
- When interviewing, optional probes or explanations can help make questions accessible to a wider audience.

Principle Four: Perceptible Information

The design communicates necessary information effectively to the user, regardless of ambient conditions or the user's sensory abilities.

Guidelines:

- Use different modes (pictorial, verbal, tactile) for redundant presentation of essential information.
- Provide adequate contrast between essential information and its surroundings.
- Maximize "legibility" of essential information.
- Differentiate elements in ways that can be described (i.e., make it easy to give instructions or directions).
- Provide compatibility with a variety of techniques or devices used by people with sensory limitations.

Evaluation tips:

- Provide alternative modes of presenting information:
 - Verbal
 - Pictorial
 - Braille
 - Large print
 - Video (with captioning)
 - Audio (with transcripts)
- Hold interviews, focus groups, or meetings in a quiet, well-lit space. When meeting with a large group, set ground rules, such as that only one person can speak at a time.
- When presenting information or collecting data on line, keep in mind the accessibility of the sites or tools you are using. Avoid products or sites that rely on particular conditions such as having Java Script or using a particular browser. Providing accessible web information is helpful not only to people with disabilities but also to those with slow internet connections or accessing the site via a handheld device.

Principle Five: Tolerance for Error

The design minimizes hazards and the adverse consequences of accidental or unintended actions.

Guidelines:

- Arrange elements to minimize hazards and errors: the most used elements are most accessible; hazardous elements are eliminated, isolated, or shielded.
- Provide warnings of hazards and errors.
- Provide fail-safe features.
- Discourage unconscious action in tasks that require vigilance.

Evaluation tips:

- Make sure surveys are easy to understand and responses are intuitive, even if people can't or won't read the instructions closely.
- For web surveys, make sure your online survey program is accessible to a variety of users (for example, Survey Monkey presents some accessibility barriers, while Survey Gizmo provides similar functionality in a more accessible format).

Principle Six: Low Physical Effort

The design can be used efficiently and comfortably, and with a minimum of fatigue.

Guidelines:

- Allow user to maintain a neutral body position.
- Use reasonable operating forces.
- Minimize repetitive actions.
- Minimize sustained physical effort.

Evaluation tips:

As much as possible, hold interviews, observations, and focus groups at times and locations
of the participants' choosing.

Principle Seven: Size and Space for Approach and Use

Appropriate size and space is provided for approach, reach, manipulation, and use regardless of user's body size, posture, or mobility.

Guidelines:

- Provide a clear line of sight to important elements for any seated or standing user.
- Make the reach to all components comfortable for any seated or standing user.
- Accommodate variations in hand and grip size.
- Provide adequate space for the use of assistive devices or personal assistance.

Evaluation tips:

 Consider accessibility of sites used for interviews, focus groups, meetings, presentations, or any other project-related gathering. Make sure to have a room large enough for a sign language interpreter and so that individuals who use wheelchairs have ample space to turn around.

Additional resources:

Hoff, D., Varney, E., Enein-Donovan, L., Thomas, C., and Fesko, S. (2009). Access for All Customers: Universal Strategies for One-Stop Career Centers. *Institute Brief* 26. Boston, MA: Institute for Community Inclusion.

http://www.communityinclusion.org/article.php?article_id=268

WebAIM (Web Accessibility in Mind) has a wealth of tools and information for making websites and web content more accessible.

http://www.webaim.org/

State Commissions for the Deaf and Hard of Hearing are a useful resource for finding American Sign Language and CART interpreters:

http://www.idhhc.state.il.us/stateLocal/State_Commissions.htm

YouTube provides tools for captioning your videos:

http://www.youtube.com/t/captions about