ACCESSed PROJECT

Test and Test Item AUDIT

Version 1.6b

Kathy Longenecker Rust; Denis Anson, MS, OTR; & Roger O. Smith, PhD

Manual last updated January 23, 2009

COMPATIBILITY

All AUDITs have been tested for compatibility with Excel 2004 in Mac OS X and Excel 2003 in Windows XP and Windows Vista.

Note: If you are a PC user in order to use the AUDITs, Macro Security must be set to Medium (recommended) or Low (not recommended). The AUDITs will run on a Mac system without needing this adjustment.

BACKGROUND

Universal design (UD) is a process that ensures that a newly created product is useful to the broadest possible array of people, particularly those with disabilities. UD of testing allows all students to have a better opportunity to express what they know through a system that allows for a variety of learning styles and abilities.

DIRECTIONS

To perform an AUDIT:

- Open the Excel file: click on "enable macros".
- The AUDIT will open in "Page Break Preview" view. You may change to another view mode if you wish.
- Save your file with a new name.
- Identify the test for audit and clearly label it (along with your name and date) at the top of the worksheet by double clicking on "AUDIT Target", "AUDIT Date", and "Auditor" to enter data in these cells e.g the AUDIT Target, could be "Art Hx 365 midterm spring 2009".
- Print a copy of both the Accessibility and Usability worksheets, (or, you may enter scores into the AUDIT directly on your computer).
- You may use the print features of Excel, or you may click on the buttons at the bottom of the page to print individual sheets or the entire workbook.

- Carefully review the test. Having both paper and electronic versions is most helpful.
- Score the AUDIT/enter data.
- You can move from sheet-to-sheet by using the buttons across the top or by clicking on the Excel worksheet tabs at the bottom.
- Examine and interpret the graphical data.
- Write comments about the route, or specific issues related to the Test AUDIT, in the comments section.

For most AUDITs (e.g. doing an AUDIT of an architectural feature) it is easiest to print a paper copy of both the accessibility and usability worksheets. Take the paper copy to the location, score the items, and then transfer your scores to the computerized spreadsheet. Some AUDITs may be scored directly on the spreadsheet. The method you use depends on the item you are auditing and the computer you use.

The AUDITs are formatted in an Excel workbook with 3 spreadsheets. You may use arrow keys to facilitate the entering of data. Double click on the boxes where you will enter text (e.g. "Comments", "Auditor"). The spreadsheets for both the accessibility and usability sections will tally the scores and provide a numerical score based on the degree of demonstrated accessibility or usability. Graphical data are presented on the 3rd sheet.

Trichotomous scoring (e.g. "Yes", "Partial", "No") is used to rate each item in the AUDIT. The spreadsheet converts these to numerical scores.

A **"Yes"** score indicates the item is present and effective
. This should not be selected if there is any doubt if the item is present.

A **"Partial"** score indicates that the item is present to some extent. If the item is only present in some cases, or is present but not in an effective way, you mark "Partial".

A **"No"** score indicates that the specified item is not present. If a feature is present, but not readily "discoverable," the typical user will not benefit from it. If you are not sure that an item is present, it should be marked "No."

"NA" will remove the item from scoring.

The Accessibility and Usability scores compute the "demonstrated" levels of accessibility and usability. Thus, items that are not scored are considered not to have been demonstrated. If you do not score all items the final score will be lower because the spreadsheet will interpret any unscored items as zero.

CLARIFICATION ON INDIVIDUAL ITEM SCORING

Accessibility Items

Section 1, item 2: The test is available in a large print format. (The recommended standard for large print is at least 16 point type with a sans-serif font.)

- The American Foundation for the Blind recommends an 18 point type.
- Sans-serif fonts (from the French word "sans" that means without) are all those fonts which have letters with straight lines and no curls or appendixes. Their letterform is neat, defined, clean. Arial, Helvetica, Futura, Tahoma, and Verdana are examples.
- Sans-serif fonts are generally easier to read for individuals with limited vision or low literacy.

Section1, item 7: Lines of text are about 12 words or less to improve ease of visual reorientation to the next line.

- There is a reason why newspapers are formatted in columns. Shorter lines of text are easier to read.

Section 1, item 9: The response fields clearly associate with the test items (e.g. items line up to response blanks, line spacing clearly separates questions. Scantron response formats are an example where this is not the case.)

- Related to this is that the test question and response items/space are on the same page.
- However, traditional "blue book" format is acceptable because it assumes a sequential response format.

Section 2, item 2: Alternative text descriptions are provided for test items that are based on tables, graphs, or pictures.

- "Equivalent Text Description" (EqTD) is the terminology that the ACCESS-ed Project uses to describe the method to provide access to graphic items that cannot be used by people with visual or perceptual difficulties.
- For details on providing EqTD, see the ACCESS-ed documents EqTD Posterette, EqTD AUDIT and EqTD AUDIT Instructions.
- www.access-ed.r2d2.uwm.edu

Usability Items

Section 1, items 1 & 2: The test is available in a form that allows the student to change font size and type face to match personal needs and preference.

The student is able to adjust line and character spacing (kerning) to meet personal needs and preferences.

- If all students are provided with an accessible electronic version of the test, then this would be a UD implementation.
- If only students with declared disabilities are provided this option, this becomes an accommodation strategy. In many cases, students with disabilities resist being singled out as "different" from their peers. When possible, tests should be available to all students in electronic format.

Section 1, item 3: The student is able to select an answer format that meets personal needs and preferences (e.g. use short answer instead of multiple choice; for e-tests comment boxes are made available for fixed response questions.)

- For example, all students are given the option to explain their multiple choice answer, or why none of the answers seem appropriate to them, by writing in margin or whitespace on the test.

AUDIT SCORE SHEET

The AUDIT summary graphs display the accessibility and usability scores for both parts of the AUDIT. The graphs help determine the perceived levels of accessibility and usability for the item under review based on the percentage of possible points. Behind the scenes a score of "Y" = 2 points, a score of "P" = 1 point and a score of "N" = 0 points. A score of "NA" removes the item from consideration, reducing the total number of possible points for the section of the AUDIT.

Accessibility interpretation: A one hundred percent score suggests full, basic access to people with disabilities. Any "no" or "partial" scores indicate that some people with disabilities will not be able to use the AUDIT target. They flag major problems.

Usability interpretation: The usability scores illustrate the "friendliness" of the AUDIT target. This usability affects all users, including people without disabilities, but difficulties are often amplified for people with disabilities. The higher the "yes" and "somewhat" scores, the more usable the AUDIT target is for everyone. "No" responses signify less access for everybody.

The score sheet **"comments"** section is provided for your notes and/or recommendations.

The ACCESS-ed Project considers all AUDITs to be live/working documents. Please share any comments, feedback or suggestions that you may have through the "Contact Us" feature of our website.

R_2D_2 Center, Enderis 135
University of Wisconsin-Milwaukee
PO Box 413
Milwaukee, WI 53201-0413
voice (414) 229-6803
fax (414) 229-6843
TTY (414) 229-5628

Email: access-ed@uwm.edu
www.access-ed.r2d2.uwm.edu