

APPENDIX A: TEN USABILITY PRINCIPLES

H1. Visibility of system status

The system should always keep users informed about what is going on through appropriate feedback within reasonable time (e.g., if there will be a long response time, tell the user). The site should keep users informed as to where they are in the site.

Example: If a patron cannot access a particular database because of a licensing agreement condition, this should be clearly stated rather than simply denying access without an explanation.

H2. Match between system and the real world

The system should speak the users' language, with words, phrases and concepts familiar to the user, rather than system-oriented terms. It should follow real-world conventions, making information appear in a natural and logical order.

Example: Is there too much "library speak"?

H3. User control and freedom

Users often choose system functions by mistake and will need a clearly marked "emergency exit" to leave the unwanted state without having to go through an extended dialogue. Support undo and redo transactions and make it hard to perform irreversible actions.

Example: Functions such as undo and redo should be clearly marked.

H4. Consistency and standards

Users should not have to wonder whether different words, situations, or actions mean the same thing. Throughout the site the same words/commands should perform the same functions; same information should appear the same place throughout the site. In addition, functions/labels should conform to widely accepted standards.

Example: Search options (such as keyword, Boolean, etc.) should function as expected.

H5. Error prevention

Even better than good error messages is a careful design that prevents a problem from occurring in the first place. The site should provide enough detailed information to help users make good choices. E.g., people tend to misspell words so let them choose from a pull-down/list rather than type in their own terms.

Example: Links should clearly indicate to the user where they will end up in order to prevent errors.

H6. Recognition rather than recall

Make objects, actions, and options visible. The user should not have to remember information from one part of the dialogue to another. Instructions for use of the system should be visible or easily retrievable whenever appropriate.

Example: The options for features such as search or help should be readily available so the user does not have to remember how to navigate to them.

H7. Flexibility and efficiency of use

Accelerators -- unseen by the novice user -- may often speed up the interaction for the expert user such that the system can cater to both inexperienced and experienced users. Provide shortcuts for experienced users to perform frequently used operations.

Examples: Does it offer both simple and advanced searches? Other desirable features include allowing the user to save search results, review and re-run past search results.

H8. Aesthetics and minimalist design

Dialogues should not contain information that is irrelevant or rarely needed. Every extra unit of information in a dialogue competes with the relevant units of information and diminishes their relative visibility. Group like features/functions/items ("chunking"); overuse of caps is distracting; do not use color to give information, just use it to highlight information; put important information "above the fold." There is no clear consensus but many feel that sans serif fonts should be used at all times.

Example: The site should not contain distracting graphical icons.

H9. Error recovery

Error messages should be expressed in plain language (no codes), precisely indicate the problem, and constructively suggest a solution.

Example: Does the system suggest search strategies when it retrieves a few or a lot of search results.

H10. Help and documentation

Even though it is better if the system can be used without documentation, it may be necessary to provide help and documentation. Any such information should be easy to search, focused on the user's task, list concrete steps to be carried out, not contain jargon.

Example: Is the documentation readily available on each page or is it just a page away.