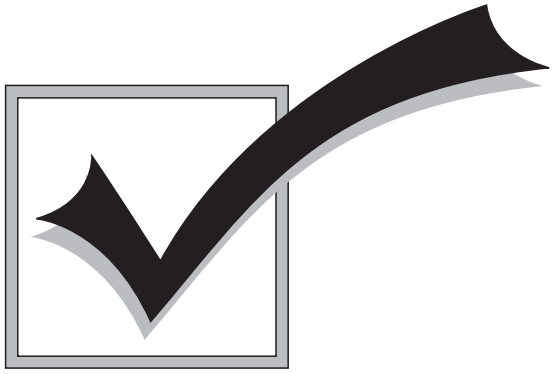
Ensuring Usability for Online Courses



This job aid is designed to help you develop an online course that applies principles of good web design and makes optimal use of WebCT tools. It will:

- ☑ define what is meant by usability in the context of an online course
- ☑ explain how to ensure that your online course is usable by students
- ☑ describe the process of a usability review
- ☑ provide tips on improving the web design of your online course
- ☑ provide checklists to use when reviewing your online course.

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Usability and your online course

Usability refers to the user's experience of a product whether it is a light switch, a car, a chair, or a website. In the case of an online course, usability addresses the question, "Can students accomplish what they set out to do in your course?" This can range from anything as simple as contacting their instructor to doing collaborative assignments online. By applying the principles set forth in this job aid, your online course development will account for the users' (students') experiences and attend to their needs before they are compelled to call for help.

An online course environment should not pose a barrier to learning. This can only be achieved by tight organization, clear unambiguous instructions and directions, and assiduous course maintenance. As an online course developer, you can use this job aid to *anticipate* troublespots and act upon them accordingly before a course is launched for delivery. This will not only save time in the development process itself, but also in the actual delivery, as students will spend less time figuring out how to interpret the learning environment and more time learning the content of and participating in the course. It is challenging enough to take any course; the fact that it is online shouldn't add to the workload. Good usability ensures that the challenge remains with the course itself, not the web-based environment used to deliver it.

Process of a usability review

There are two ways to review your online course for usability.

1. You can use the checklists in this job aid while developing your online course.
2. You can also have someone conduct a review of your course to get a more objective view of your work.

If you choose the latter method, contact the Learning Resources Unit to get in contact with an appropriate reviewer. The reviewer will scan the entire course, touching on all of the items in the attached checklist. The reviewer will take the student's perspective and follow the flow of the course as a student would be expected to do.

If an independent usability review is requested, recommendations will be made based on the desire to decrease student frustration and increase completion rates as well as customer satisfaction. However, the final decision will be left to you as the course developer to implement those recommendations or not.

Best use practices

This job aid is based on the experiences of:

- countless online course developers throughout the world
- more than one hundred developers at BCIT over the past seven years, including instructional development consultants, instructors, and technical support staff.

Checklists are provided, covering both the standard principles of web design that you should be aware of as you develop your online environment and the technical implementation of some of the tools offered in WebCT.

Web design usability issues

Course content

The usability of course content refers to the written materials in the course in terms of organization and presentation. Reading on the screen is much less effective than reading printed materials. Therefore, applying principles of good web design will maximize the effectiveness of your content for students.

Organization

1. Page titles accurately describe the contents ..... ❑
2. Labels, titles, and subtitles for repeated information are consistently employed throughout the course ..... ❑
3. Information is "chunked" appropriately to allow for easy scanning..... ❑

Writing

1. The tone is personable and friendly ..... ❑
2. Writing is free from errors of spelling and grammar ..... ❑
3. Writing is neutral in terms of age, sex, racial origin, religion, etc. ..... ❑
4. First person writing is avoided in the content pages and used only in the dynamic areas of the course (e.g. the discussion area) ..... ❑

Learning Outcomes

1. Learning outcomes are clearly stated..... ❑
2. Outcomes are provided at the course and module, unit, or lesson levels ..... ❑
3. There is a clear link between outcomes and course contents ..... ❑

Resources

1. Web-based resources are reliable, trustworthy, and up to date ..... ❑
2. Resources have been chosen discriminately (i.e. avoid information overload) ..... ❑
3. External web links are annotated for easier and more selective browsing ..... ❑
4. External web pages are set to open in a new browser window ..... ❑

Copyright

1. Course ownership and copyright status are indicated..... ❑
2. Copyrighted information has been cleared for use in the course ..... ❑

Instructions and directions

This refers to information about the course itself, not the actual content. Instructions and directions help the students work through the course and guide them through technical processes. Therefore, it is essential to keep this information accurate and up to date.

Early in the course, navigational instructions are critical. Finding a specific location in the course or accessing a tool must be clearly indicated and repeated in different parts of the course where appropriate. As certain activities reoccur in the course, it is less important to repeat instructions. The students will hopefully understand how to navigate and access different parts of the course by this point.

It is helpful to consider two questions that students may ask themselves on any given web page:

1. What do I do first?
2. What do I do next?

1. Instructions are clear, concise, and up to date ..... ❑
2. Advice is provided for completing specific activities ..... ❑
3. Expectations have been set for the course ..... ❑
4. Directions are provided for completing online activities ..... ❑
5. Assessment criteria are provided for assignments, exams, quizzes, etc. ..... ❑

Screen design (style and layout)

Browsing is the primary activity on the web. For this reason, it is important that the content be organized for students to find and retrieve information without wasting time. Success in this type of design involves knowing what you want your students to see in order of importance. At the same time, care is required not to overload or distract students with an excess of visual clues and prompts or by overusing and thus diluting the effects of typography, colour, and graphics that a good screen design can provide. A good navigational interface is clear, intuitive, and enhances access to content and contributes to an attractive, professional layout that creates a good impression.

1. Information is scannable using the following techniques:
   - Instructions and directions stand out from the body text with the course contents, using tables, colours, or font styles ..... ❑
   - Font sizes and styles are used appropriately to distinguish titles, subtitles, body text, etc. ..... ❑
   - Colours are used to improve the layout of the screen (titles, important text blocks, etc.) ..... ❑
   - White space is used to visually separate information ..... ❑
   - Indentations and bulleted lists help to organize specific content... ❑
   - Text, images, and background are contrasted for easy reading ... ❑
2. Images are of good quality and illustrative of ideas, directions, and other text explanations ..... ❑
3. There is accommodation for various needs of students with sight disabilities – colour blindness, jaws readers, transcripts of audio files, etc. ..... ❑

Site design

Along with good screen and content design, a website's usability will increase with sound overall organization and information architecture. Good site design ensures consistency and enables students to move easily through the site.

Information architecture involves the "back end" of a course. i.e. how you structure the course files. This includes naming conventions for your files. For example, your course web pages may have names such as "3455_a9s4bteb84d.html." That may be intelligible to you, but if a new instructor takes on your course or a technical support person needs to upload new pages to the server, these people will likely have trouble knowing how to work within your course. In this example, using descriptive titles will work better.

1. The design is flexible for developers and instructors to accommodate the changing needs of the course ..... ❑
2. File naming and the directory structure of the course are intelligible to others who may need to work on the course ..... ❑
3. Information is presented in a sufficiently nonlinear organization so that students can reach their destination in as direct a manner as possible ..... ❑
4. Help information is clearly indicated (e. g. tech support, admin questions) ..... ❑

Technical issues

Usability is meaningless if nothing works or students aren't able to use the technology. While there are general standards for file sizes and types for the web that need to be followed, the most important aspect of this section is that students are aware of the technical requirements of the course before registering and that they are not surprised with additional requirements upon registration.

1. All the links within the course are in working order ..... ❑
2. File sizes are kept to acceptable standards for sending, downloading, and viewing ..... ❑
3. Files are compatible with the software used by widest range of users or according to prescribed hardware/software requirements ..... ❑
4. Hardware/software requirements are in accordance with previous expectations ..... ❑
5. The course is functional using both Netscape and Explorer, PC and Mac ..... ❑
6. Multimedia components of the course are functional for the widest range of students ..... ❑
7. Technology is incorporated for the widest range of users, and alternatives provided ..... ❑
8. Access to support (Online Student Help) is indicated for the use of technology within the course ..... ❑