

Blackboard Course Design for the SkillsCommons Website

Andrew Torr, Xiaolu Bai, & Kim-Phuong L. Vu, PhD





Introduction

- SkillsCommons is an open source digital library of workforce training materials.
- The target population is individuals looking for occupational training materials in a variety of fields.
- The instructional materials are designed to help users gain new skills that are important for employment.
- This project is funded by the Trade Adjustment Assistance
 Community College and Career Training (TAACCCT) project.

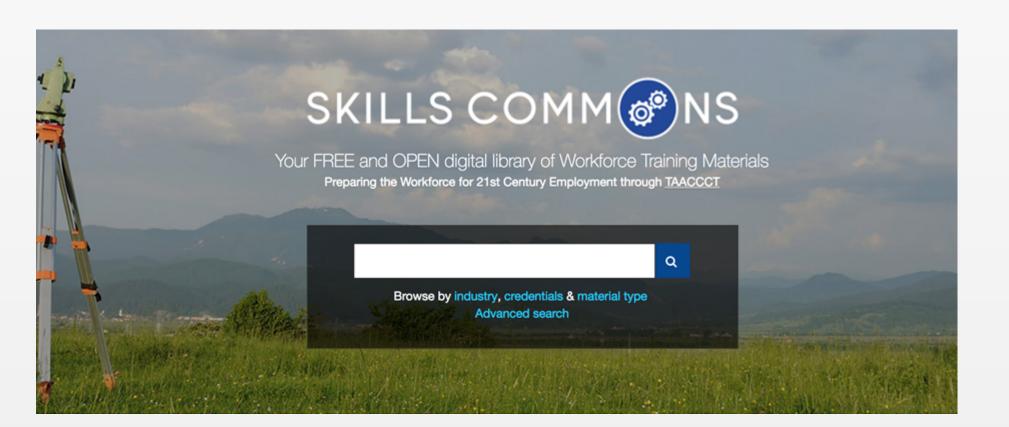


Figure 1. SkillsCommons website

Rationale

The goal of this project was to improve the usability and accessibility of the online course materials provided by SkillsCommons that have been imported into Blackboard for course management.

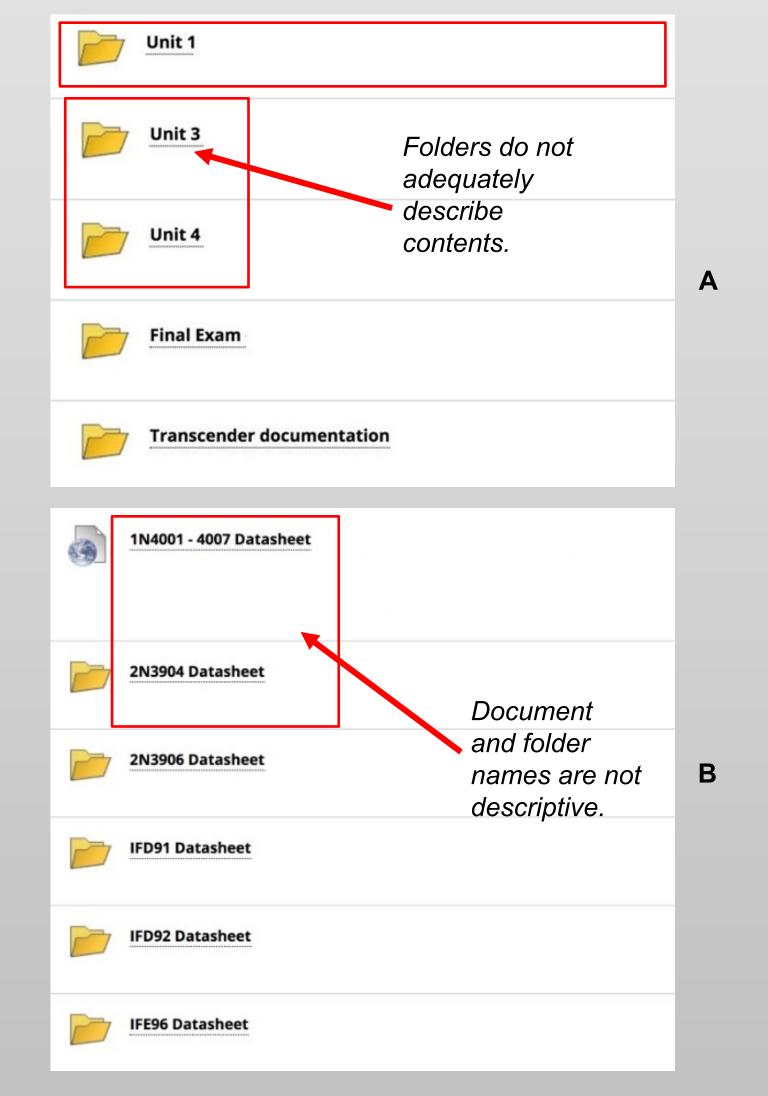
Below are the top usability and accessibility problems:

- Inconsistent use of overview sections describing course expectations
- Disorganized content
- Inconsistent layout, page formatting and file formats
- Non-descriptive links and non-functional links
- Unit sections did not adequately describe content
- Lack of clear instructions for many courses

Figure 2A and B.

Examples of common problems encountered prior to our redesign and management of the 270 SkillsCommons courses.

The red boxes highlight some of the specific problems to be addressed.



Methods

To address the usability problems, many specific changes were planned and executed. We went through 270 courses and added descriptions, organized content, standardized and formatted the layout, and provided clear course instructions and instructor expectations. For each of the 270 courses, the following changes were implemented to the three major sections below:

- Announcements page
 - Welcome Message
 - Frequently Asked Questions
- Syllabus/Overview section
 - A brief but adequate description of the course and topics covered
 - Time it takes to complete the course
 - Type of certification awarded (if listed)
- Course Content/Lessons section
 - A link to download the course materials
 - Remove unnecessary nesting of folders within folders
 - All links open in a new tab/window (see "how to" folder for instructions)

- Course Content/Lessons (continued)
 - Descriptions for each folder listing the topics covered, the contents of the folder and the format of the content (e.g., video, PDF).
 - Each lesson, unit, and module includes a descriptive title.
 - Content inside each unit folder contains the unit number *in* its title.
 - All lessons, units, modules, links, and file names must be descriptive (e.g. "Unit 1 Reading Assignment: What is Permaculture?")
 - Documents that download automatically are converted to PDF format that are open in a new window.

Results

The following are examples of course content after changes were implemented:

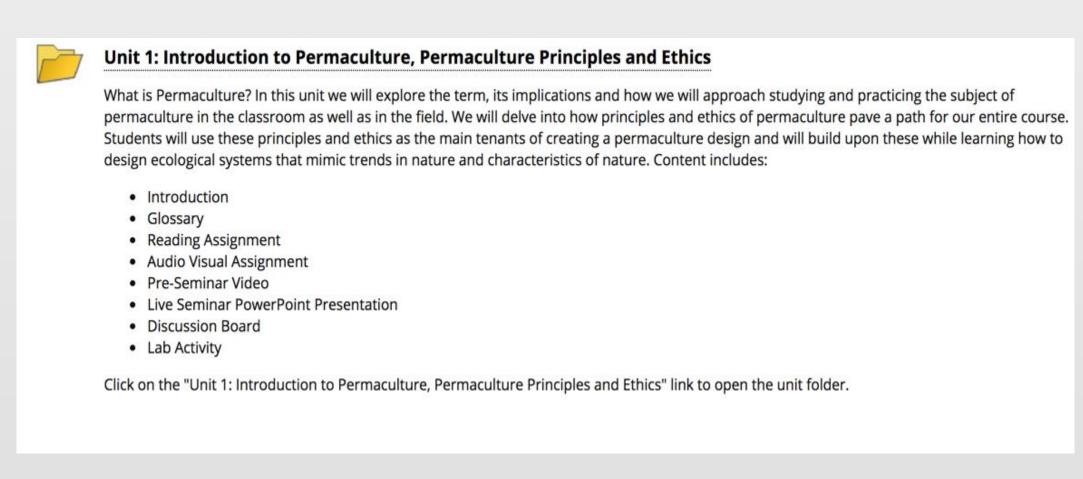


Figure 3. Section of Course Content/Lessons page after descriptive titles were added to all unit folders. Each folder includes a description of its contents and instructions on how to access the contents.

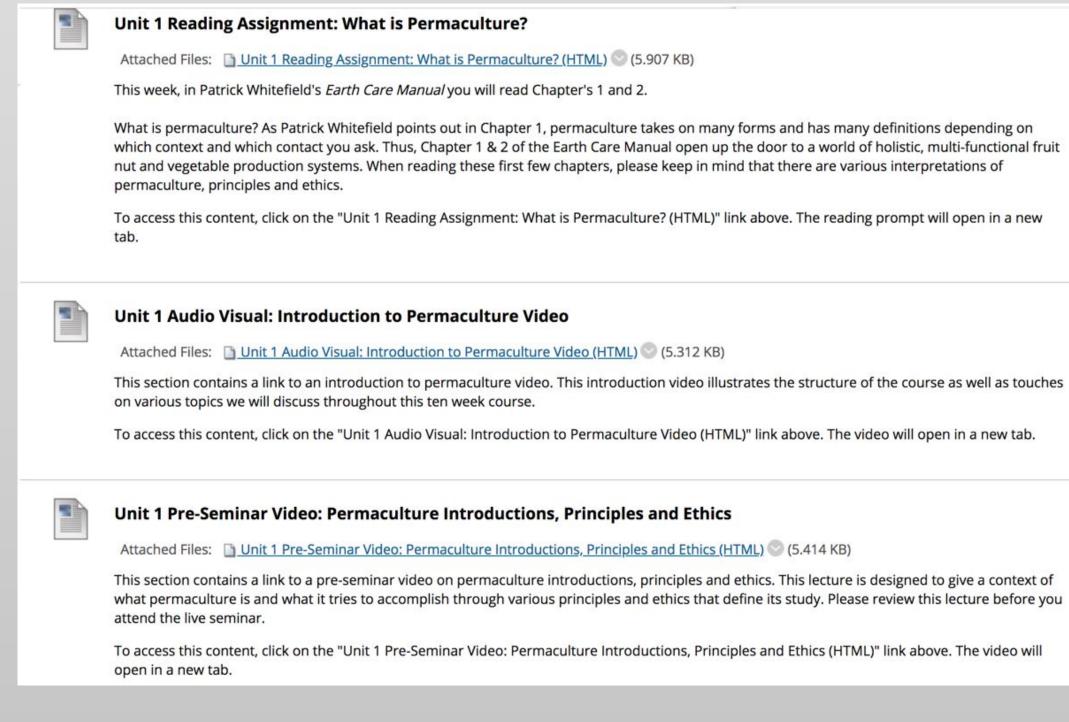


Figure 4. Unit page after modification. File names are descriptive, and each includes a description of what content it covers as well as instructions on how to use the materials. There is no longer unnecessary file nesting in folders.

Conclusion

With the changes implemented by CUDA, users should be better able to:

- Locate course materials easier
- Understand the subjects discussed in the course
- Understand expectations for each assignment
- Understand expectations for each course
- More easily access course content and media
- Understand how to use course content and media

Acknowledgements

- We would like to thank Dr. Hanley and the rest of the SkillsCommons and MERLOT teams for providing us with the resources required to carry out the project.
- A special thanks to Amber Latham, Andrea Flores, Timothy Diep, Jonathan Van Luven, Jaime Sanchez, Nicole Mok, and Ryan Fandetti, who worked on these course.

References

- [1] Nielsen, J. (2002). Top 10 Guidelines for Homepage Usability. Retrieved January 10, 2018 from https://www.nngroup.com/articles/top-ten-guidelines-for-homepage-usability/
- [2] Nielsen, J. (1995). 10 Usability Heuristics for User Interface Design. Retrieved June 23, 2016 from https://www.nngroup.com/articles/ten-usability-heuristics/
- [3] Olson, J. (2004). Quick Methods: Checklists, Heuristic Evaluation, Cognitive Walkthrough. SI 622 Evaluation of Systems and Services Power Point Presentation.
- [4] SkillsCommons Repository. (n.d.). Retrieved January 10, 2018, from http://skillscommons.org/