

# Fluid Content Management Research



Check out the [Content Management Research Models](#), where you can find the [Personas](#) and [Use Cases](#) derived from the research.

We are iteratively engaged in user research to understand how users think about and manage their content around teaching, learning and research. This work ties into the [UX Walkthroughs](#), which help us identify existing "pain points." Some of these will likely be well understood (and solution components can begin to be developed), but others will require more in depth understanding of why, what and how users need to work with content. This research can help us with that understanding.

## Content Management Scope (in the context of Sakai, uPortal, Moodle & Kualii)

**Content management is being loosely defined as authoring, maintaining, organizing, viewing and sharing content...in this case digital content.**

As we [worked on the plan for this research and further tried to define content management](#) in the context of Sakai, uPortal & Moodle, in the end we came to the conclusion that most of the use of these applications has to do with managing content...**not in the sense of Content Management Systems but rather with specific goals in mind.**

For Sakai and Moodle, both collaborative learning environments, the high level goal is to engage with content in a way to encourage teaching, learning and in Sakai's case, research. We can think of course material, assessments, research artifacts, email, announcements, etc. as content that is managed within a course and/or project site.

For uPortal, we are defining the content as both the portlets themselves and the content within the portlets. A user is concerned with which portlets they use and how they are configured to work together. They are also engaged with the specific content within each portlet.

In all cases, our [current hypothesis](#) is that many users think of the entire system as an application and such it should support their activities as such rather than expect them to work under the constraints of tools or portlets. They want to manage their content in the system as a whole and so expect to be able to seamlessly work with it across the system -- across sites in Sakai for instance.

## Research Goals

### Short-term

- Identify component candidates for helping users manage their content.
  - We envision many of these components to be cross-cutting across uPortal, Moodle, Sakai & Kualii
- Inform component design through understanding users goals and work practices
- Inform several problem space assessments/analysis: file management & navigation
- Begin gathering Sakai user profiles to help understand the user community and inform the persona work during later phases.

### Long Term

- Create a long term vision of the UI architecture/conceptual model in Sakai which in turn can help answer the higher level navigation questions
- Comprehensive set of [Personas](#) defined and refined (some personas exist for both Sakai and uPortal already).

## Problem Statement

*The Problem of:*

- Heavy use of Resources tool and related activities to manage content in course and project sites
- Resource tool is problematic: it has many usability problems, it reflects underlying implementation, it tries to do too much
- We need to better understand: 1) goals that users have regarding content, 2) multiple paradigms (publishing, document management, file sharing, etc.)
- The diverse and distributed nature of open/community source development lends itself to tools being developed in silos. In many cases, user's activities require moving across those tools to get their work done.

*The impact of which is:*

- A confusing and frustrating user experience: 1) resources does not have a clear function, 2) common functions are difficult to find, 3) misleading system behavior (ex. hiding files in one site may still be available in others)
- Unclear how to implement content-related functionality
- Knowing how and when to integrate tools with resources is difficult

*Leading to:*

- Lower adoption rate (long term use)
- Increased training & support costs
- Increased design and development time
- "Spaghetti" code

*Affects:*

- Students
- Faculty
- Teaching assistants
- Staff
- Researchers
- Training and support of systems
- Designers & developers of additional tools

*A successful solution would:*

- Allow us to understand how users think about and engage with content
- Create views of data that make sense to users
- Define long term UI architectural vision for Sakai (ie. repository behind the scenes, content management activities happen in the context of the work)
- Identify, design & develop candidate components
- Communicate clear picture of above to community

*Note:* The first round of the problem statement is focused on Sakai and specifically the Resources tool. We will either generalize it in future iterations or define separate statements for Moodle & uPortal.

#### Content Management Research Process

- [Content Management Research Project Plan](#)
- [Content Management Research Meetings](#)
- [Content Management Research Models](#)

#### Contextual Inquiry Guides

- [CI Guide for Students](#)
- [CI Guide for Instructors](#)
- [CI Guide for TAs](#)
- [CI Notes Form \(MS Word\)](#)

#### CI Results Summaries

- [Student CI Results Summary](#)
- [Instructor CI Results Summary](#)

#### Related Links

- [Contextual Inquiry](#)
- [Contextual Inquiry - Practical Guide and Checklist](#)
- [Content Management - uPortal Usability and Accessibility](#)
- [uPortal Content Management Scenarios](#)