Sakai Redesign

TEAM JAGUAR

Taylor Brown

Tyler Monaghan

Rebecca Parker

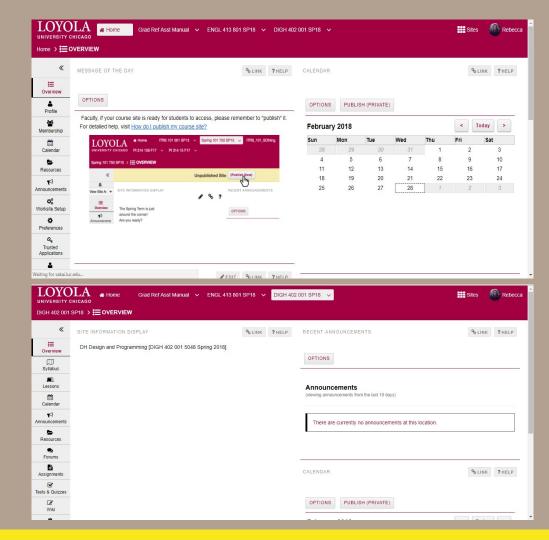
& Ashley Walcott

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Things as they are...

Some of the major problems with Sakai that we identified were:

- A reliance on homogeneously-formatted lists for navigation, forcing the user to read through the list to navigate even the most basic site features.
- A disorganized user interface:
 - a. blank calendars
 - tutorials for other user roles (e.g. a video instructing faculty how to publish their courses on an undergraduate's Sakai site)
 - c. blank white space.
- Too many "places" in the main navigation, many of which are infrequently used.



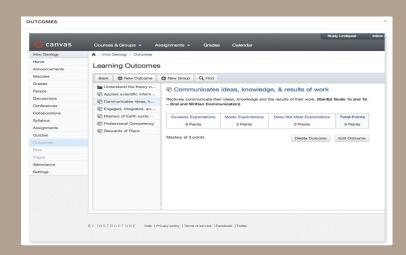
Our plan of action

- Prioritize the user's role in the academic community.
- Place the users' tasks at the forefront of the design.
- Customize news feed and content of site to logged in user.
- Create an easily navigable application with minimalistic design.
- Ensure our application meets accessibility standards and good design principles.



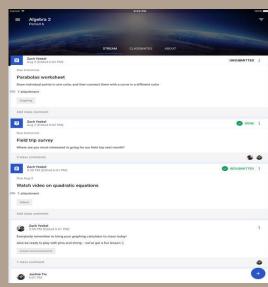
What's out there?

— We looked at other LMS software including Canvas, Blackboard, and Google Classroom. For the most part they suffered from many of the same issues we observed in Sakai: a reliance on long lists of "places" in the software that make it difficult for users to memorize or quickly recognize the items in the



software they use most frequently.







Sakai Redesign Video Tutorial - edited by Taylor Brown

Design Considerations - Color

- The Zen Look:
 - Accessible color selection (user-tested for R&G Color Blindness)
 - Colors are soothing and non abrasive
 - Black text contrasts well with our primarily white backgrounds.
 - Icons subtly change color when selected not overbearing or distracting
 - Messages & notifications are colored green as opposed to "error/angry" red.
 - Links are also green to maintain consistency and flow.

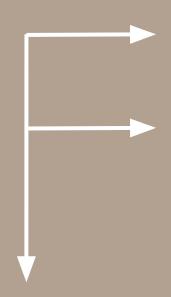
https://www.colorhexa.com/e7ddcb - light tan
https://www.colorhexa.com/857c6c - dark taupe
https://www.colorhexa.com/519657 - dark green

Design Considerations - User Interaction

—— How many "clicks" does it take to get to the tootsie center of an LMS?

We wanted our Sakai Redesign to utilize....

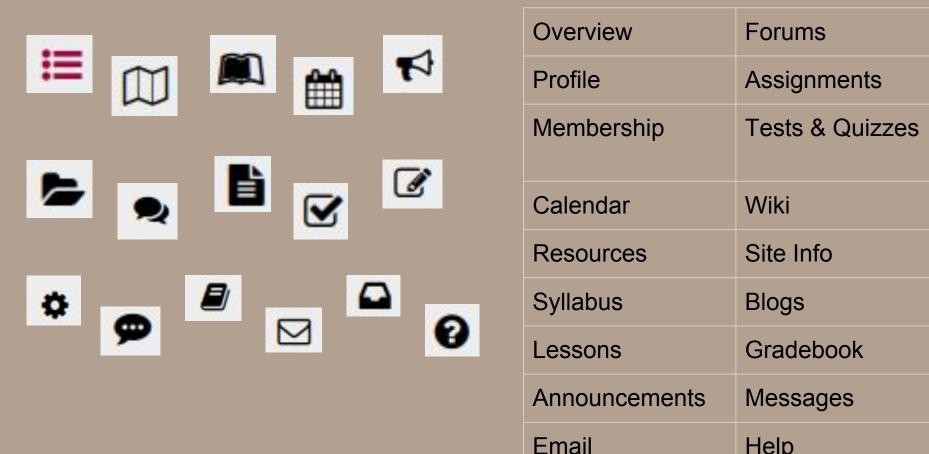
- Minimalistic Design = Seamless User Interaction and Flow.
- An F-pattern for reduced cognitive load among users.
- Subtle use of animation.
- Strategic embedding and linking to external sites.
- A customizable view tailored to logged in users.



Design Considerations - Memory & Cognitive Load

- Most users log into Sakai with a specific goal in mind.
- Determining which tasks and actions will accomplish the goal can be challenging with current Sakai, forcing the user to devote cognition on finding the right page, rather than accomplishing their goal.
- Our redesign reduces user cognitive load by:
 - Removing irrelevant information (e.g. no faculty instructions for student users).
 - Eliminating the "sites" paradigm -- use feature/goal filter views (select courses) instead.
 - Reducing number of "places" in the main site from 16 in Site View to 4.

Can you match these icons from existing Sakai?



Can you match the icons from our redesign?









Tasks

Grades

Files

Connect

A Comparison of the Iconography for the Original Sakai and Our Sakai Redesign

Reducing Cognitive Load - Concepts of Flow

- Our buttons are streamlined and easily recognizable.
- This should reduce user cognitive load by making icons easier to identify and reducing the user time and effort needed to switch tasks.

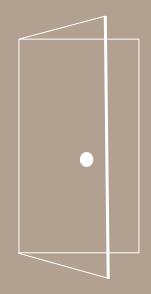
Gestalt Laws

- We use the Law of Similarity with our menus:
 - The top menu elements are all in a strip of color -- easily recognized and found at any time.
 - The side menu elements are all icons enclosed in circles of the same color -- form one coherent list of elements despite the space separating the individual circles.

Existing Sakai		Team Jaguar Redesign	
Function	Icon	Function	Icon
Overview		Main page when user logs in, "user home"	~
Calendar	ش		(or click main Sakai
Lessons		Tasks	Y
Assignments			
Tests & Quizzes	$ \mathbf{Z} $		
Messages		Connect	Q
Blogs	9		
Forums	2		
Wiki			
Email			
Syllabus		Files	
Resources	=		
Gradebook		Grades	A+

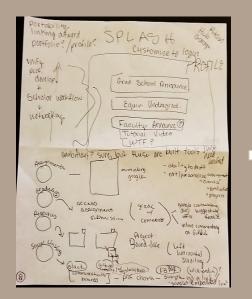
Design and Specification

- Accessibility for all users was paramount.
 - Accessible colors
 - Universal iconography (should be usable without labels)
 - No jargon everything in "plain English"
 - Assistive search
 - Wizard/Tour interface for new users (or after feature updates, long periods of inactivity, etc)
- Wanted simplicity for new users, efficiency for experienced users.
- Needs to be lightweight and load on a variety of platforms/browsers.
- The user should always be aware of "where they are" in the software and the status of the software (e.g. section buttons highlight when using that section).

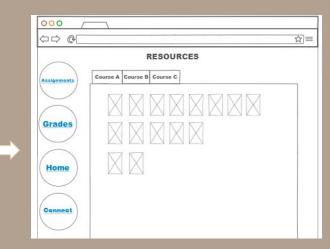


Testing & Iterative Design

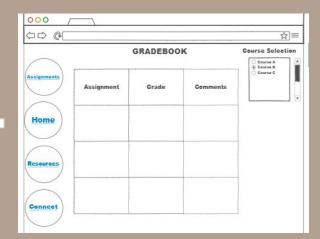
- We went through a number of different design iterations, from low-fi mockups (see next slide) to high-fi prototypes -- what we are showing today.
- Making a functional prototype allowed us to do real testing (for example, KLM-GOMS testing) on our designs.
- One example of something that we changed as a result of user testing was the weight and boldness of the fonts in our prototype:
 - After having someone with R&G Color Blindness look at the site, we realized we
 needed darker and more contrasting fonts where the text appears small on the page.













Robinson's Four Stages of Competence

Unconscious Incompetence: simple, uncluttered design, announcements according to user role, small number of large, clear buttons, "guided tour" for first login

Conscious Incompetence: assistive search, software status indicators (button darkens when using that section), guided tour available to re-run on demand

Conscious Competence: keyboard shortcuts, frequent/recent access cards?

Unconscious Competence: we want users to reach this stage as quickly as possible! Configuring their settings (like connecting accounts) and memorizing icons will help users reach this stage - one-time popups will alert these users to functionality updates

Conclusion

- From separate "sites" to one unified experience for all courses
- From generic to personalized
- From 16+ navigation icons to 4
- From perpetual-intermediacy to expertise

