Workflow Problem Space

> ⓘ This is a draft in progress.

Discussion about workflow and what components might emerge.

Workflow Definition

Workflow is a large and broad term with many applications. For the purposes of this concept, workflow will defined as the process and sequence of steps necessary to complete a task or goal. Workflow in broad-strokes can be defined within two contexts of use: 1) document control workflow, and 2) pedagogical model workflow. Document control workflow refers to defining and sequencing a process of creating, editing, review, approving, publishing, managing, archiving, and related document task workflow, incorporating subsequent concepts of sharing, version control, and access control. Related, but very different in goal, is the pedagogical model workflow, which refers to defining and sequencing a process of guiding a learner through learning objectives based on demonstrated understanding. There is both personal workflow (tasks and goals that I can complete by myself) and group workflow (tasks and goals that require more than one person to complete).

Workflow has substantial overlap with the File Management Problem Space.

The Kuali Enterprise Workflow (KEW) is a related community attempting to solve this problem space in the form of a back-end service.

Problem/Pain

Tools are isolated and siloed. Tasks that require more than one tool to complete require a user to halt the main task, leave the tool, navigate to another tool, interface with the other tool to complete a secondary task, and then navigate back to the original tool to proceed with the main task. This halt and interrupt may happen several times to complete the main task/goal. A user may also lose the work on the main task when having to navigate away for secondary tasks, or minimally be forced into some kind of additionally cumbersome Save process when dealing with secondary tasks.

Scenarios

Sarah Windsor - Primary Persona

Learning Objective Creation

Sarah needs to compose a review exam in for her class. The review exam will be created using course assets, discussion/collaboration snippets, and various learning resources. Sarah's goal is to compose the review exam; in order to complete this goal, she will need to locate, find, search, browse, filter, sort, group, categorize, and select the needed resources into a resource pool and then be able to draw from that resource pool in conjunction with composition and editorial functions to create the review exam. Sarah will need to specify the recipients of the review, schedule when it will made active and when it will expire and set how many attempts of the review may be made. Finally, Sarah will need to compose and send (or schedule) a notification to her class(es).

Conditional Release

Conditional Release is part of the pedagogical model, where instructors can direct the learner through resources and activities based on demonstrated understanding.

- Sarah wants to limit the availability of section two of her curriculum until students have demonstrated the desired level of understanding of section one.
- Sarah has created review material for a section of her curriculum. Sarah wants to have the review material become available a week prior to the exam.
- Sarah has created remedial material for a section one of her curriculum, and wants the remedial material made available to students who do not demonstrate the desired level of understanding of section one.
- Sarah wants to create an online discussion session around one of her assignments, but she wants to limit access to the discussion to students who have completed the assignment.
- Sarah wants to limit access to assignment two until students have completed assignment one and participated in a discussion of assignment one.

Synchronization

- Sarah needs to be able to work offline and easily transfer her online work to an offline copy and subsequently transfer the offline copy online to continue the task.

Registration

Ed wants to track his registration documentation through the Admissions and Registrar departments.

Staff

Document Tracking

There are all kinds of back office scenarios that apply here. More research needs to be done.

Blue Sky Vision

In the pedagogical model, instructors could define the learning flow with robust conditional release and prescriptive learning, where learning information and activities are presented to the learner based on demonstrated understanding.

Creation of learning objects (curriculum, exams, reviews, assignments, activities, etc.) would become more free-form. Instructors could assign metadata (taxonomy, labels, tags, etc.) to various pieces of content (documents, snippets, discussion logs, bookmarks, images, etc.) for organization and future retrieval as the instructor is doing other tasks (reading, browsing, grading, monitoring, etc.), essentially building a library of related content. Then, at the time of learning object creation, the instructor could filter resources by metadata to quickly find related content from the library to effectively and efficiently create learning objects. The collection of resources into a library that can be filtered by metadata provides a singular place to retrieve content, thereby reducing interruptions to the main task and reducing the need for forced saving of work.

Workflow Component Ideas

Suspend - Inject - Resume

a.k.a. the lightbox effect (or greybox, or thickbox).
When the need for a secondary task comes up in the main task flow, suspend the main task, dim the main task interface, and present (highlighted and focused) the interface of the secondary task on top of the main task interface. Once the secondary interaction is complete, remove the secondary interface via transition, brighten the main task interface, and resume main task interaction.

Taxonomy

An environment-wide label/tagging system. Primary manifestations would be in adding and application of labels to content, viewing content by label (filtered search), and managing labels (both personal and system level).

Label Drop Box/Automatic Tagging

A ubiquitous hot spot for dropping selected content (documents, snippets, discussion logs, bookmarks, images, etc.), that would apply pre-defined labels to the content dropped into the box. For example, creating an English 101 drop box would apply the label "English 101" to any content dropped in the box (basically an easier form of label application and overall organization). Something in the vein of the bookmarklet.

Save As Draft

Suspend the main task flow indefinitely and provide a means for the user to immediately pick up from that point in the workflow. Drafts would be offered to the user (probably sorted by most recent) when returning to the interface from which they were saved.

Summit Post-It Page

At the Fluid Summit, pain points represented on post-it notes were grouped into problem spaces (such as Feedback), then into (usually very high level) potential components such as the ones below. Each problem area was then rated as to whether it affected 1, 2, or 3/All of the Fluid applications (Sakai, uPortal, Moodle). Each potential component was then rated on the following matrix, which indicated how severe the pain point it helped solve was for users, as well as how frequently the pain point was encountered. It helped us determine how high a priority it was, with 1 being the highest priority and 3 being the lowest.

high severity	1	2a
low severity	2b	3
	high frequency	low frequency

Synch

2A / All
Ability to synch online and offline content. This may be much bigger issue for international locations where bandwidth/connectivity is an issue - allows users to work offline.

Related Links

- Assignments Problem Space
- Identified Pain Points
- Workflow Problem Space
- Pain Points & Problem Spaces
- Feedback Problem Space
- Navigation Problem Space
- File Management Problem Space
- Layout Problem Space
- Terminology Problem Space
- Preferences & Permissions Problem Space
- Wizard Keystrokes
- Design Principles for Components