# Usability Test Report: Accreditation Reports, LMS, Faculty Qualifications

Date of Test: June 12 – 13, 2013

Location of Test: AT&T Conference Center, Austin, TX
Prepared by: Natalie Hill and Elizabeth Lovero

Phone Number: x 844

Email: <a href="mailto:nhill@Tk20.com">nhill@Tk20.com</a>

# **Summary and Functionality Tested**

At the June 2013 Tk20 User Conference usability tests were conducted with eighteen participants on the LMS as well as the Accreditation Reports and Faculty Qualifications pieces of Assessment Product. In addition to performing scripted tasks dictated by a test proctor, participants took pre- and post-test surveys. These surveys aggregate demographic data, assess the usability tasks and gauge users overall experience with Tk20 outside of the testing session.

By testing seasoned Tk20 users' responses to new functionality, this study not only helps the design and development of these new features, but also sheds light into the broader mental models and interaction designs at work in Tk20.

Surveys conducted on other functions like Field Experience and Portfolios suggest that users have a positive to neutral position on the software but do not express excess satisfaction. Administrators responded positively to the new functions and designs shown at the user testing sessions, however, they expressed reservation that learning the new interactions could confuse an already resistant faculty base. While Tk20 continues to offer improved functionality in our products, we must also stay in touch with the needs of the infrequent Tk20 user.

Accreditation Reports users emphasized that each institution performs the process differently. They looked to Tk20 to focus on collaborative work across shared documents and to stay up-to-date with changing accreditation requirements. With LMS, users responded positively to the new designs, particularly in the Gradebook. Test results suggest that interactions and navigation may need further standardization throughout the LMS.

#### Methodology

#### **Participants**

Eighteen participants, representing twelve Tk20 user institutions and a mix of faculty and administrators, participated in user testing. Over two-thirds of participants had administrative experience on CampusWide or HigherEd. Demographics were consistent with the broader

Tk20 user base. 13 women and 5 men sat for user tests and over half were aged between 50-64. iPad users were younger; the majority between 35-49.

## Survey

All participants completed a brief pre-test survey designed to capture background information, experience with Tk20, and familiarity with web, online, and mobile technologies. iPad users were asked additional questions related to their familiarity with tablets and mobile technology.

After completing the task-based test with a proctor, participants completed a post-test survey that focused on rating their perceptions of look and feel, ease of use, and overall satisfaction with the functionality they just tested, and the Tk20 user experience as a whole.

Quantitative data was aggregated into reports. Agree/disagree and satisfaction/dissatisfaction were rated on five-point scales with a sixth option for "Not Applicable." Standard deviation is run at a 95% confidence interval. All figures cited in this report are derived from these surveys.

#### **Qualitative data**

Screen recorders documented keystrokes and video of the user during the testing process. These recordings were reviewed extensively and patterns across testers were logged in Morae. Finally, recorded data was supplemented by note taking during user tests. Because the user interfaces tested are still in the mock state, I did not administer a timed usability test with error or completion rate measurements. User testing performed on mocks and prototypes will almost always yield qualitative data, exclusively.

#### **Accreditation**

I tested three accreditation tasks with those users that had familiarity with the process as a member of an administrative team or committee tasked with accreditation at their university. Tasks included drafting a narrative, saving their work, communicating with committee members and adding evidence.

#### Major test findings:

- Users want accreditation software that will stay up to date with changes in accreditation requirements and interface seamlessly with accreditation bodies.
- We need to design an intuitive interaction pattern for adding evidence to the evidence room (Fig.1), then adding that evidence to a standard (Fig. 2).
- Some faculty members are participating in the accreditation reporting process for the
  first time; it's unfamiliar to them. We should definitely consider adding
  prompts/boilerplate text as well as background info in some areas to aid these users.

- Some users were not clear on the Feedback function (Fig. 3), its purpose seemed vague and it raised many questions, including:
  - Is this Feedback from or to the Accreditor?
  - Committee or internal Feedback?
  - How is chat or email different than Feedback?
- Users believe that evidence room/evidence needs to be viewable while navigating between standards. People need to see a preview of the evidence while they are typing their narrative (Fig. 4).
- Committee chair or head of reporting process needs to be able to have access to read
  all sections of the report to ensure narrative flow between sections. This is very
  important. This person also will need access to all evidence.
- Users need to be able to create anchors within PDF evidence documents.
- Charts and graphs are updated yearly. Wherever we allow for a chart/graph, we need to allow for previous versions to be accessed.
- Users need a variety of file types for evidence. We may not be able to offer embedded doc preview for all file types, however.
- Accreditation piece needs to allow for maximum communication between committee
  members, and between the chair and the committee. AR should seamlessly foster
  collaboration and communication between lots of users. This is especially important for
  institutions that perform much of their accreditation reporting process through face-toface meetings.
- Every institution may perform the accreditation reporting process definitely some use technology more than others, some prefer to schedule lots of face-to-face meetings.

#### Recommendations based on findings – Accreditation Reports

- Implement document preview in various areas of the system, especially where users are drafting narratives.
- Expand shared use of documents and shared evidence room. Give administrative access to view and edit all evidence and narratives to a group leader.
- Add boilerplate text and text guides for new users.
  - For example "What is evidence?" or "Insert Chart Here"

• Allow for a flexible system. Focus on how to meet the needs of NCATE or HLC users who may be working with their accrediting body's propriety system. For example, in these cases users may wish to employ our Accreditation Reports piece to schedule meetings, communicate, and share/view evidence.

#### LMS

Users acted out a scenario in which they were faculty members setting up a class in the LMS. All users had familiarity with competitor products such as Canvas, Blackboard, D2L, and Moodle. They were first invited to investigate the Tk20 LMS and offer general impressions. They later completed tasks to add an assignment, schedule an assignment, enter grades, and assess discussion responses.

#### Major test findings:

- Users were impressed with the look and feel of the site. One user exclaimed, "Ooh, beautiful!" Users reacted positively to the chat feature (Fig. 5) as well, particularly users who teach online courses.
- Users unanimously liked the instructor bio/information panel (Fig.6) on the course home screen and wanted this view to always be available to their students. But they did not feel it was necessary to see their own information in the same capacity.
- Many users requested annotated document preview functionality for a wide range of uses including field notes or grading student assignments.
- Users said that grading and Gradebook functionality was their highest priority for an LMS system (Fig. 7). Users want a running totals column, as well as the ability to view points/percentage/letter grade side-by-side in some places. Users wanted grade entries to automatically overwrite the placeholder "- -" characters (Fig. 8). Users also wanted confirmation that discussion grades are saved upon entry.
- Users found scheduling the assignment in a pop-up after creation very disorienting. Scheduling should occur on the same page as assignment creation (Fig. 9). One user commented "scheduling is not an afterthought."
- Users were frequently misdirected by labels (Fig. 10). Most went to Lessons and Syllabus before going to Coursework Manager when attempting to schedule an assignment. One user asked: why can't I grade discussion replies in "Gradebook"?
- Faculty also expressed some confusion with icons, which is to be expected upon seeing a complex system for the first time (Fig. 11). They were happy to learn and use new and

intuitive icons, however, they were reluctant to learn "too many" new things or to have to "relearn" icon meanings. They also wanted a clear location to learn meanings of icons.

- The two-column layout in the discussion section was very popular (Fig. 12). Users felt this met a need not well-met in other competitor software to grade while looking at student work. Discussion participation is often graded by check/check-plus/check-minus. Users requested a way to grade discussions as pass/fail or check system.
- Faculty often doesn't inherently understand the assessment process. They think of assessment as grading, and the two are different. Assessments generally happen over longer periods of time, and consider multiple grades. Grading is more of a short-term, micro-level behavior.

#### Recommendations based on findings –LMS

- Upon clicking a cell in the Gradebook the dashes should highlight automatically so
  when the user starts entering a value it automatically types over the dashes. Having to
  manually delete the dashes is cumbersome and frustrating to users. Hitting the Enter
  key in a Gradebook cell should take the user to the cell directly beneath, just like Excel.
  Further, users want to be able to use the Tab and arrow keys in the Gradebook just like
  they would in Excel.
- Organization/labeling of left navigation bar should be reconsidered to clarify what is student-facing, what is related to grading, what is related to assignment creation, and what is related to course setup. We should reconsider how left side navigation items are grouped.
- Provide constant confirmation of saves upon performing an action and consider moving timestamp to a more noticeable location, or making the text stand out more clearly (Fig. 13). (Look at Qualtrics to see how they use save and autosave.)
- Scheduling a piece of coursework should be available within Lessons, or contained on a single page when creating an assignment.
- Explore options for infinite scrolling, especially in Discussion Forum. Truncate Replies
  (View more/View less) in future Discussion Forum design iterations. One user
  commented that his discussions often contain dozens of replies, which would call for lots
  of scrolling in our system.
- Consider structuring **Discussion Forum** (Fig. 14) replies/comments to more clearly differentiate the beginning of a discussion and the subsequent replies. Using indents or coloration might work for this.

 Display meaning of icons at the bottom of pages where they are used and/or include text that encourages users to hover over icons to determine their meaning. Provide a contextual and centralized icon key.

# **Faculty Qualifications**

Faculty Qualification tasks were added on the second day of user testing. These tasks were reviewed with a few more experienced users, including one with a background in usability. Users were asked to enter new books, edit, and update existing entries.

## Major findings:

- Faculty Qualifications employs several terms that one user found misleading. In particular, Status History was problematic (Fig.15).
- Users found the cancel link (Fig. 16) to be confusing and behave in ways they didn't
  expect; they suggested that clicking this link should take you to the uneditable version of
  the page rather than going back. (Simulate a switching on/off of an editing function.)
- Users also found "Back to the list of books" confusing (Fig. 17). Echoing the larger problem of mental models, this suggests that users need to anticipate a directionality or flow of the documents.

#### Recommendations based on findings – Faculty Qualifications

- Diagnose the problem with the flow when users click the "Back to list of books" link.
   Often a user could arrive at an activity details page without coming from the list of books.
   There is an issue with the information hierarchy here.
- Underline the section titles (Books, Journal Articles, etc.) on the My Activity Portfolio
   (Fig. 18) screen to indicate these are clickable links.
- Reconsider the title "My Activity Portfolio" (Fig. 19). One user was confused as to how this piece related to Tk20 Portfolios (which it doesn't).
- When clicked, direct the Cancel link to an uneditable version of the activity details page (toggle-like).
- Some labeling issues need to be addressed through more user testing.

# **Figures**

#### **Accreditation**

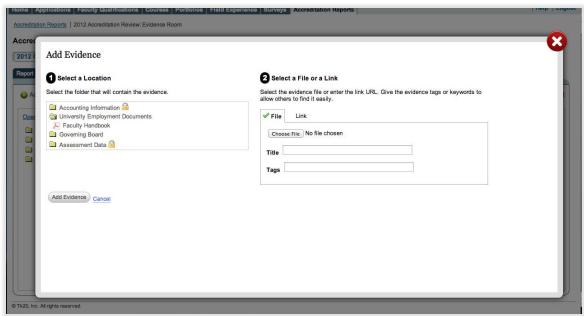


Fig. 1 – Add Evidence from Evidence Room

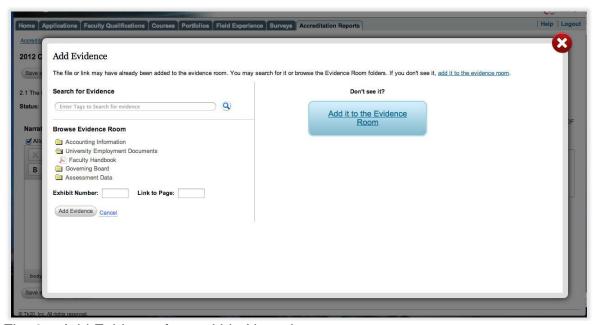


Fig. 2 – Add Evidence from within Narrative

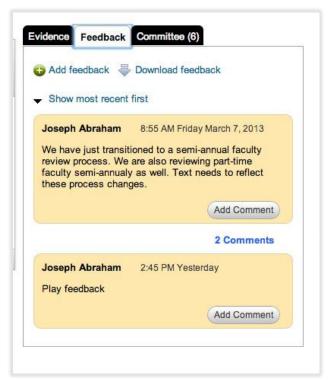


Fig. 3 - Feedback

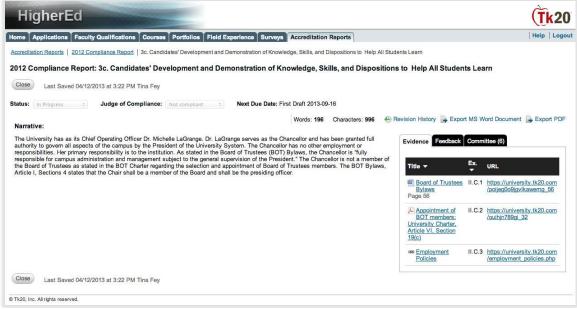


Fig. 4 – Evidence within the Narrative

## **LMS**

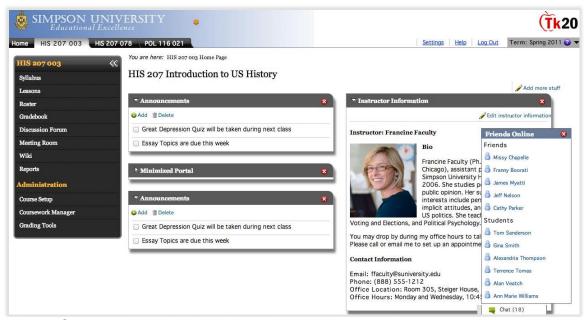


Fig. 5 - Chat

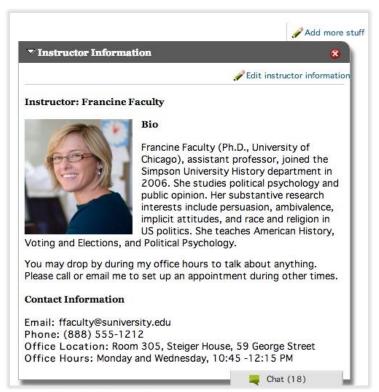


Fig. 6 - Bio panel

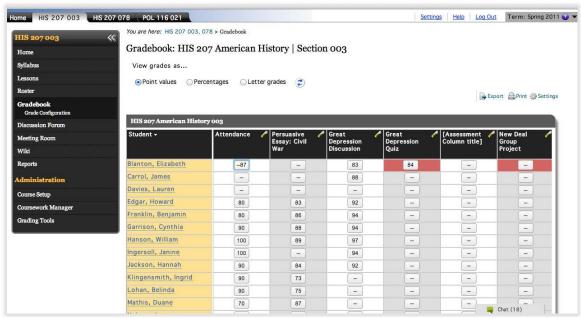


Fig. 7 - Gradebook

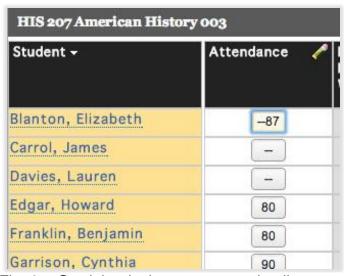


Fig. 8 - Gradebook character entry detail

Grading Tools (Optional)	
Select the grading tools that will be used to evaluate this assignment.	
Student Professionalism	
Schedule Assignment Title	<b>4</b> 1
Display in lesson unit: None ‡	
D Assignment Details	
Schedule	
Start allowing student submissions:	
Start date/time: 01/11/2011	
✓ Include start date/time in calendar	
Stop accepting student submissions:	
Due date/time: 05/13/2011	
☑ Include due date/time in calendar	
☐ Allow submission after due date (will be marked late)	
Ston accenting late works	
Save Assignment Discard changes Autosaved at 10:23 am	
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Fig. 9 – Schedule Assignment

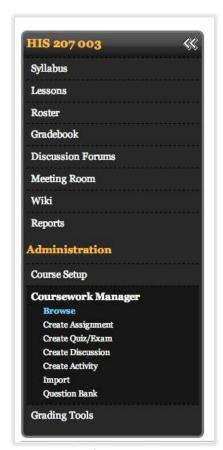


Fig. 10 – Left side navigation bar

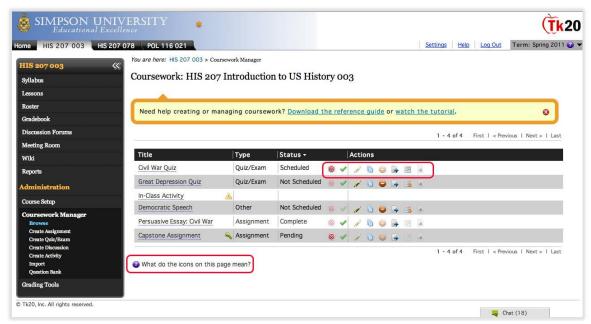


Fig. 11 – Icons

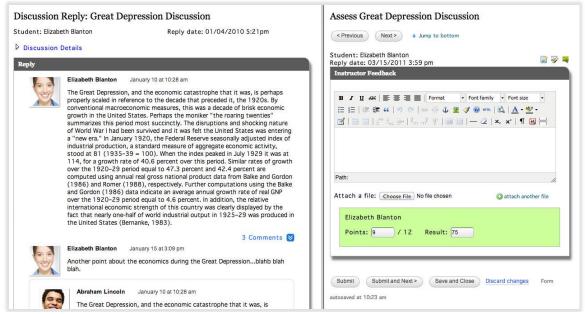


Fig. 12 – Discussion assessment illustrating two-column layout

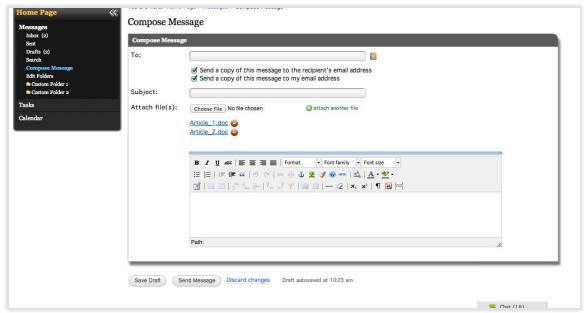


Fig. 13 – Compose message illustrating autosave timestamp

	Topic	Author	Replies	Comments	Last Post
î	Great Depression Discussion 😜	Francine Faculty	4 (1)	3 (1)	By: James Ellen on 18/10/2010,11:10 AM
Î	Study Groups	Joan McGregor	2 (1)	3 (1)	By: Jannie Louis on 25/11/2010,12:15 PM
Î	In a Different Light	Lisa Lopez	4	3 (1)	By: James Ellen on 24/09/2010,09:10 AM
Î	Chapter 2	Joan McGregor	0	0	By: Linda Ellis on 19/08/2010,11:10 AM
Î	In a Different Light	Joan McGregor	0	0	By: Linda Ellis on 18/10/2010,11:10 AM
Î	Chapter 2	Joan McGregor	0	0	By: Linda Ellis on 19/08/2010,11:10 AM
Î	Great Depression Discussion	Joan McGregor	0	0	By: Linda Ellis on 19/08/2010,11:10 AM
Î	Study Groups	Lisa Lopez	6	12	By: Linda Ellis on 18/10/2010,11:10 AM
Î	In a Different Light	Joan McGregor	0	0	By: Linda Ellis on 18/10/2010,11:10 AM
Î	Study Groups	Lisa Lopez	6	12	By: Linda Ellis on 19/08/2010,11:10 AM

Fig. 14 – Discussion forum – showing lack of hierarchical structure of threads

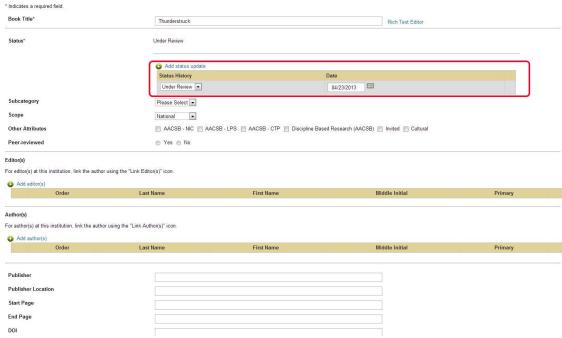


Fig. 15 – Status history



Fig. 16 - Cancel without saving

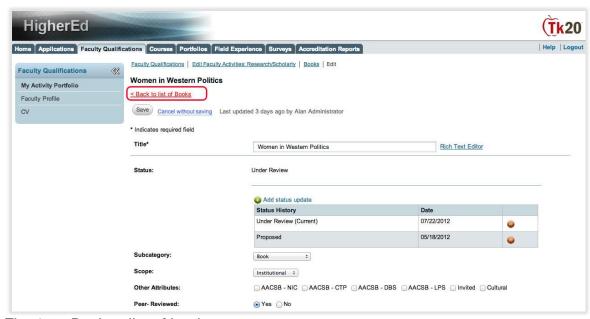


Fig. 17 – Back to list of books

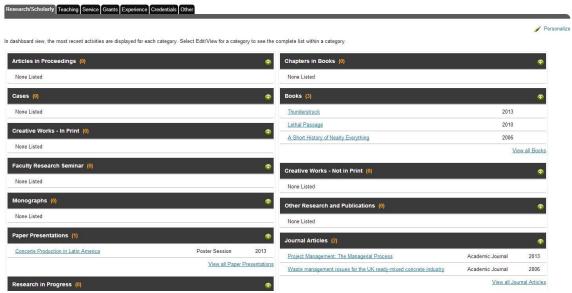


Fig. 18 - Overview



Fig 19 – My Activity Portfolio

#### **Texas State User Test**

