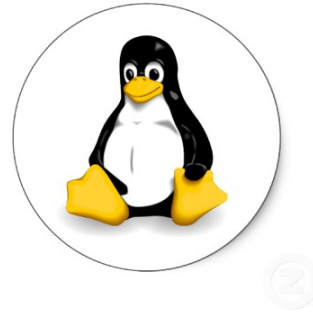# Stage 2

A. Evaluation Report

1. Goals of evaluation

1. Find out which parts of Connect users find difficult to use.
2. Find out how users feel about the capability to create groups within classes or within themselves in Connect. Also find out what functionality they expect to have.
3. Find out if users ever have trouble transferring knowledge bases from previous years to current.
4. Find out how users feel about using Connect as a tool for collaboration of projects as well as a means of communication between one another.

2. Rationale for type of evaluation

Semi-structured Interview:
   We have decided to use semi-structured interviews as our internal evaluation tool. The problems currently faced with Connect are fairly broad in nature. It is too difficult to capture such issues with a questionnaire. Also the process of the interview allows the interviewee to give their full input as to how to improve the system. As the changes we hope to implement on the system involved a paradigm shift in how Connect is fundamentally implemented, observational interviews are not currently possible as no prototype exists for this type of system.

3. Participant pool

Our participant pool will consist of UBC students and professors. We do not want to restrict the pool to only include students who have used Connect before because Connect is still a new program that got introduced this term. Most students have used Vista, which was replaced by Connect, and their experience and opinion are equally resourceful to us. We also would like to have inputs from professors to better improve the professor view in Connect. Thus, we will conduct two interviews with students and two interviews with professors.

4. Brief overview of evaluation protocol

Our face-to-face semi-structured interview will be conducted in a quiet environment so the interviewee can be free from interruptions or distractions. It will be conducted in the office of the professor we are evaluating and in a school lab for the students.

Since we do not have enough participants to produce any quantitative data, we will take each individual response and analyze them as qualitative data. Since we are asking the same questions to different interviewees, we can evaluate the same question from different perspective. We are expecting the interview length to be about 20 to 30 minutes.

5. Summary reporting of results

Through our interviews of several professors and students, we have determined for the most part, the problems in our task examples have been confirmed rather than revoked. Most students have never done an online test or quiz. Based off the data we collected in the interviews of professors, we found out that the process of creating an online quiz is cumbersome, which is why they don't do it. In terms of group management, most users don't even know if it even exists in Connect, but would find it very useful. Things they would like to be able to do include collaborating on a document in real time (think google docs) and being able to submit that document directly. Currently, students would rather use email, text messaging, or facebook to collaborate rather than Connect. When it comes to course inheritance. almost everyone we interviewed has tried to inherit content from previous offerings of a course, whether they were running a course or enrolled in it. Professors can inherit entire sites directly from other professors, while students like to ask their friends for content or search for resources online (old course website, UBC wiki, etc...).

6. Conclusions

Based on the interviews, our subjects does not have any opposing comments towards the task examples. A major problem is the recallability and recognizability of the user interface.
Users of this type of system expect it to be a tool to share course materials and collaborate with others. However, they are unwilling to use Connect because the interface, directly and indirectly, prevents others from easily accessing information they are looking for. As some subjects suggest possible solution and desire features that solve or work around this issue,
we will take these ideas into consideration and incorporate them into stage 3 Redesign.

APPENDIX A1
Evaluation Instruments

Professors:

1) Do you currently use connect for any of your classes? Why do or why don't you use connect for your courses?
(if Q1 answer is any number > 0)
2) How do you feel about Connect's current implementation?
3a) Are there any features that you would expect in Connect?
3b) Are there any feature that you feel are unnecessary?
4a) How do you feel Connect handles group management?
4b) How do you feel Connect handles project Collaboration?
6) Have you ever inherited a website or course material from another professor?
7) How did you feel about such a process?
8a) Do you currently have your own course website as well as a Connect/Vista course page?
8b) If you have both, how do you decide between which information goes on which page?
9) Do you currently host a discussion board within your connect course? If so, what level of usage do you see from your students?
10) Why do you think this is?
11a) Have you ever tried to create an online quiz using Connect?
11b) How did you feel about the overall process?

Students:

1) Do any of your classes currently use Connect?
2) How do you feel about Connect's current implementation
3a) Are there any features that you would like added?
3b) Are there any features that you feel are unnecessary?
4a) How do you feel Connect handles group management?
4b) How do you feel Connect handles project Collaboration?
5) If you had the ability to organize groups, what kind of functionality would you expect?
6) How do you feel about the usage of Connect as a means of communication amongst other students?
7) How do you currently communicate between other students (email, chat, facebook, etc...)
8) Do you ever look up information from past offerings of your courses (notes, sample examinations, etc...)
8b) If so, how do you do it?
9) Have your professors ever administered an online test or quiz using Connect?
9b) If so, how was your overall experience taking the test framework?

APPENDIX A2
Task Examples

Task 1: Test Creation and Implementation

Evan is a UBC Computer Science professor and wishes to create an online test for his CPSC344 class to do. Since CPSC344 consist of 12 student groups and each group works on a different project for the term. Evan wishes to create the online test in a way that each team would receive a unique test specifically designed for the team. There are different question types (MC, short answer, long answer, true/false) and Evan wants to be able to specify which question type he can use. Not only does Evan want to specify the question type, he also wants to be able to set the release date of the tests he creates.

Summary of Revision:
Revised to be more design independent.
This task was supported by the interview we conducted with the professor. The professor would like to have the easy-to-use test creation functionality within Connect so we did not revise the task example to a completely different task.

Task 2: Group Creation and Management

Jeff is a UBC Connect user and wishes to start a collaborative group within a CPSC344 class. Jeff goes to the CPSC344 group page and chooses to create a sub-group. He invites his project group from his lab section to join his group. His group receives an email notification and promptly accepts the invites. Upon acceptance, the users will join the group and be able to see whichever documents, announcements, wikis, etc... which are shared amongst the group. Before the day the assignment is due, all members log on to Connect to edit their assignment live. Once they're done, they submit the assignment directly. Later on in the term, Jeff gets busy with other courses and is unable to manage the group himself, so he promotes another user to group owner and group management rights will be shared amongst them. Jeff posts regular updates as announcements on the groups page as well as start IRC style livechats with one another to collaborate on ideas.

Summary of Revision:
Revised to accommodate recommendations made by our interviewee's.
Some users wish to be able to collaborate on documents that they upload to a group in real time, as well as hand in that document directly in Connect. Neither of these tasks are able to be accomplished in Connect's current state.

Task 3: Group Inheritance

Sandy, a UBC professor who has been teaching CPSC344 for the past 3 years and is about to stop teaching is approached by Weifon, the new professor taking over as teacher of CPSC344, asking for any useful data on the course which may aid him on teaching the course. Not wanting to lose all the past statistical course data, wikis, notes and other useful information accumulated on the course group over the years, Sandy wishes to transfer CPSC344 material ownership to Weifon. Sandy will simply have to access the CPSC344 administrative tool and add Weifon to have professor permission with his school/account ID to this course or change the material owner on some user management tool. Weifon will inherit the materials and be able to see all past information of previous year subgroups (ie; 2011W, 2011S, etc...).

Summary of Revision:
Changed to be more design-independent. The interviews conducted support the step similar to this task.

APPENDIX A4
Raw Data

1) Do any of your classes currently use Connect?
- Yes, we use Connect and Vista together.

2) How do you feel about Connect's current implementation?
-Comparing to Vista, it is very wordy. The colour choice of connect is very horrible, making it very hard to see and find materials. It would be the best to have configurable or even implemented icons besides each tasks.

3a) Are there any features that you would like added?
- Hope I can use different skins or set the colour / thumbnail icons I like.
- Hope I can create the view structures I like, as i manage my own file folder management

3b) Are there any features that you feel are unnecessary?
- Many features on the main screen are not necessary. For example, the task bars has quick link to all the assessment/assignment/forum...update. maybe b/c it is hard to find stuff so it becomes very useless anyways.
For the forum update, all classes are clustered up together and if one forum is more active than others, the update system become useless.

4a) How do you feel Connect handles group management?
- I don't manage group on connect

4b) How do you feel Connect handles project Collaboration?
- I tried to find my teammate but it seems like no one is on connect. So i switched to use emails.
- Connect does have good email list feature but it is way too difficult to find. I only found that because my friendtold me about it.

5) If you had the ability to organize groups, what kind of functionality would you expect?
- email, chat, task, share doc and schedule.

6) How do you feel about the usage of Connect as a means of communication amongst other students?
- the forum is very difficult to read.
- one post on the thread at a time? Seriously?

7) How do you currently communicate between other students (email, chat, facebook, etc...)
- email and facebook

8) Do you ever look up information from past offerings of your courses (notes, sample examinations, etc...)
- Yep

8b) If so, how do you do it?
- I just google it. If not found, ask it on the forum or send prof an email

9) Have your professors ever administered an online test or quiz using Connect?
- Yes

9b) If so, how was your overall experience taking the test framework?
- The AutoSaving answer is not too bad, but assessing the result of the quizzes are not straightforward

Student 2:

1) Do any of your classes currently use Connect?
    Yes. COGS 300, CPSC 322

2) How do you feel about Connect's current implementation?
    Compared to Vista, not a big improvement. Not worth it for a UI change. New learning curve required
        BACK in discussion group takes you back to course homepage (not proper page)
            He was using assignment discussion boards

3a) Are there any features that you would like added?
    If Calendar showed due dates for assignents and things of that sort.

3b) Are there any features that you feel are unnecessary?
    Homepage widgets: Prof's don't really update them. (Calendar etc.)
    Generally lots of things he doesnt use.

4a) How do you feel Connect handles group management?
    Doesn't know what group management is

4b) How do you feel Connect handles project Collaboration?
    Doesn't know what project Collaboration is

5) If you had the ability to organize groups, what kind of functionality would you expect?
    Something like google doc with shared documents. Privacy concerns. Direct Hand-in (he feels this would be the only benefit over google doc)
    *3 of his 4 courses has used google docs so he feels that shared document functionality is in high demand

6) How do you feel about the usage of Connect as a means of communication amongst other students?
    It's good because 70% of time spend on connect is on discussion board. For his courses the boards are pretty active.

7) How do you currently communicate between other students (email, chat, facebook, etc...)

      For friends he wouldnt use discussion board. (Email, text, etc...)

      For People he doesnt know, Discussion board

8) Do you ever look up information from past offerings of your courses (notes, sample examinations, etc...)

      Yes

8b) If so, how do you do it?

      UBC wiki, the cube website

9) Have your professors ever administered an online test or quiz using Connect?

      No

9b) If so, how was your overall experience taking the test framework?

      N/A

Student 3:

1) Do any of your classes currently use Connect?

Yes, CPSC 312 and CPSC 410 (CPSC 410 for grade only)

2) How do you feel about Connect's current implementation

Not user friendly, interface loads very slowly. Directories are very confusing.

3a) Are there any features that you would like added?

Not that I can think of.

3b) Are there any features that you feel are unnecessary?

I feel like most of the features are pretty unnecessary. I don't know how to describe it. It is very bad in general.

4a) How do you feel Connect handles group management?

I have never really used it. Never participated in a forum discussion. Reason for not using the discussion: laziness.

4b) How do you feel Connect handles project Collaboration?

Not really used collaboration before. I don't think I need it.

5) If you had the ability to organize groups, what kind of functionality would you expect?

I guess I would expect I would be able to participate in different group studies, schedule group meetings or raise/answer questions by different groups.

6) How do you feel about the usage of Connect as a means of communication amongst other students?

I feel Connect should give better notification system, therefore informing the user of new threads and messages.

7) How do you currently communicate between other students (email, chat, facebook, etc...)

Well, I currently use email, chat, and phone, and I think Facebook is useless academic wise.

8) Do you ever look up information from past offerings of your courses (notes, sample examinations, etc...)

Yes.

8b) If so, how do you do it?

I ask them from my friends.

9) Have your professors ever administered an online test or quiz using Connect?

Nope.

9b) If so, how was your overall experience taking the test framework?

N/A

Professor

1) Do you currently use connect for any of your classes? Why do or why don't you use connect for your courses?

I currently don't use connect as it simply too confusing to use for the functionality I need it for. All i really need are to make announcements and post lecture notes; nothing major.

(if Q1 answer is any number > 0)

2a) How do you feel about Connect's current implementation?

Hate it, its really slow for what it does and I get lost really quickly trying to do simple tasks like manually add students to my classes. (hence why I don't use it [laughs])

3a) Are there any features that you would expect in Connect?

An easy means to store grades as well as send out emails with marks. That's really important. I also wouldn't mind having an easier way to make discussion boards. A lot of my students like to solve problems with each other, and I think making an easier to use discussion board would help a lot. (Plus it would help with the amount of people showing up at my office hours [laughs].

3b) Are there any feature that you feel are unnecessary

I haven't really delved that deep into it. Mostly cause I was too scared to go into anything

else cause it all looked confusing. Although judging by the huge list of options I have in my side panel, I'm guessing yes, many [laughs].

4a) How do you feel Connect handles group management?
From what I know it doesn't.

4b) How do you feel Connect handles project Collaboration?
Again, I didn't think it did.

6) Have you ever inherited a website or course material from another professor?
I got an old website from a previous professor once.

7) How did you feel about such a process?
Not bad, I just got the website and pretty much scrapped it for my own remake.

8a) Do you currently have your own course website as well as a Connect/Vista course page?
I've got a website for my course, but don't currently use Connect; although the course does currently have one.

8b) If you have both, how do you decide between which information goes on which page?
I put everything on my website cause Connect is too annoying to use.

9) Do you currently host a discussion board within your connect course? If so, what level of usage do you see from your students?
I have a forum setup on my website, not Connect. I thought Connect's message boards were way to chunky looking.

Overall my students use it quite a bit. I see a major spike in usage the night before assignments are due [laughs].

10) Why do you think this is?
Students like to help each other. Or should I say they like to minimize the amount of work they have to do [laughs].

11a) Have you ever tried to create an online quiz using Connect?
Once cause I was bored. Stopped after the first screen cause I couldn't figure out what to do.

11b) How did you feel about the overall process?
Seeing as how I didn't make it past the first screen; not very good [laughs].

APPENDIX A5
TPSC Completion
Certificates

Certificate of Completion

This document certifies that

Evan Louie

has completed the Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans Course on Research Ethics (TCPS 2: CORE)

Date of Issue: **21 October, 2012**

Certificate of Completion

This document certifies that

Jeff Chan

has completed the Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans Course on Research Ethics (TCPS 2: CORE)

Date of Issue: **21 October, 2012**

Certificate of Completion

This document certifies that

Sandy Fang

has completed the Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans Course on Research Ethics (TCPS 2: CORE)

Date of Issue: **20 October, 2012**

Certificate of Completion

This document certifies that

Weifon Liu

has completed the Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans Course on Research Ethics (TCPS 2: CORE)

Date of Issue: **21 October, 2012**

APPENDIX A6:
Completed participant consent forms

B. Requirements Definition & Approach

Problem statement:

Design a group oriented project management tool for fast group and project deployment with an emphasis of ease of communication for one or more participants.

Major Requirements for interface revision:

Absolute Must:	- Refinement of test creation framework - Professors - Knowledge base/Previous course transfer between professors - Professors - Streamlined group management protocols for students - Students
Should Include:	- IRC style live-chat - Students - Statistical analysis for online tests available for professors - Professors - Access to previous course pages/notes – Students
Could Include:	- Integrated file sharing system – Students/Professors - Live collaborative file editing with direct Handin - Students - View or skin customization - Students
Exclude	- Homepage Widgets - students - Several sidebar options -Students/Professors

Specified Users:

Absolute Must:	- Students - Beginner - Professors – Beginner
Should Include:	
Could Include:	- Students – Advanced - Professors – Advanced
Exclude	

Because Connect is newly introduced to UBC, we do not really have a pool base for advance users. Thus we put advanced user in to "could include" category and will focus on beginners.

Retention of Current Interface:
Although overall layout of the current interface is cluttered and disorganized, there exist many individual widgets which when viewed alone perform very well at their specified tasks (such as user lists for classes, button styles, and header/sidebar layout). We will try to retain as much as the overall layout as possible by minimizing major changes and

emphasize the minimization of the current (by grouping options together, hiding certain features, completely removing widgets, etc...).

Design Approaches:

Minimization of current UI
Instead of a complete redesign of the UI, we will try to fix the current one by implementing a minimalist reimplementation of the current one. This would be a mix between a complete redesign and a reorganization of current UI.

Complete Redesign
As almost all students specified the liking of the idea of a redesign based on 'groups', the current UI will probably not be fit for such a paradigm shift. As such, a complete redesign from head to toe may be necessary.

Reorganization of the current UI
It might be possible to fix many problems had by users simply by a reorganization of the currently displayed information without disrupting that many users personal experience with adapting to a new UI. However this would prove difficult if the reimplementation is too large for the current UI to support.

Chosen Approach:

Minimization of current UI
The current UI proves to be very powerful, but at the same time very cluttered. With a few major changes and a heavy emphasis on implementing a minimalist version of the current UI, we should be able to deliver a product which current users will be comfortable with as well as enjoy more so because of the added functionality and usability. Not only do we satisfied the user need, we also pleased the developers buy the relatively easy design approach. With minimization of current UI, the developers do not have to completely revamp the whole application and the management level people will be satisfied with the minimal cost required to accomplish the design.