

Heuristic Evaluation for BB/MMND Integration

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Executive Summary

Overall the screens flow nicely. Most issues found are of low severity and text consistency issues that may reflect the prototype nature than final wording.

See the [Detailed Findings by Item](#) section for further details.

Explanation of Findings Table

Heuristic: The ten Nielsen heuristics being referenced.
(http://www.useit.com/papers/heuristic/heuristic_list.html)

Visibility of system status

The system should always keep users informed about what is going on, through appropriate feedback within reasonable time.

Match between system and the real world

The system should speak the users' language, with words, phrases and concepts familiar to the user, rather than system-oriented terms. Follow real-world conventions, making information appear in a natural and logical order.

User control and freedom

Users often choose system functions by mistake and will need a clearly marked "emergency exit" to leave the unwanted state without having to go through an extended dialogue. Support undo and redo.

Consistency and standards

Users should not have to wonder whether different words, situations, or actions mean the same thing. Follow platform conventions.

Error prevention

Even better than good error messages is a careful design which prevents a problem from occurring in the first place. Either eliminate error-prone conditions or check for them and present users with a confirmation option before they commit to the action.

Recognition rather than recall

Minimize the user's memory load by making objects, actions, and options visible. The user should not have to remember information from one part of the dialogue to another. Instructions for use of the system should be visible or easily retrievable whenever appropriate.

Flexibility and efficiency of use

Accelerators -- unseen by the novice user -- may often speed up the interaction for the expert user such that the system can cater to both inexperienced and experienced users. Allow users to tailor frequent actions.

Aesthetic and minimalist design

Dialogues should not contain information which is irrelevant or rarely needed. Every extra unit of information in a dialogue competes with the relevant units of information and diminishes their relative visibility.

Help users recognize, diagnose, and recover from errors

Error messages should be expressed in plain language (no codes), precisely indicate the problem, and constructively suggest a solution.

Help and documentation

Even though it is better if the system can be used without documentation, it may be necessary to provide help and documentation. Any such information should be easy to search, focused on the user's task, list concrete steps to be carried out, and not be too large.

Feedback/Issue: Explain the reasons why the interface violates or upholds this heuristic. Be sure to be clear about *where* in the screen you are referencing.

Screen/Scope: Describe the scope of the feedback or the problem; include whether the scope of the issue is throughout the product or within a specific screen or screens. If the problems are specific to a page, include the appropriate page numbers.

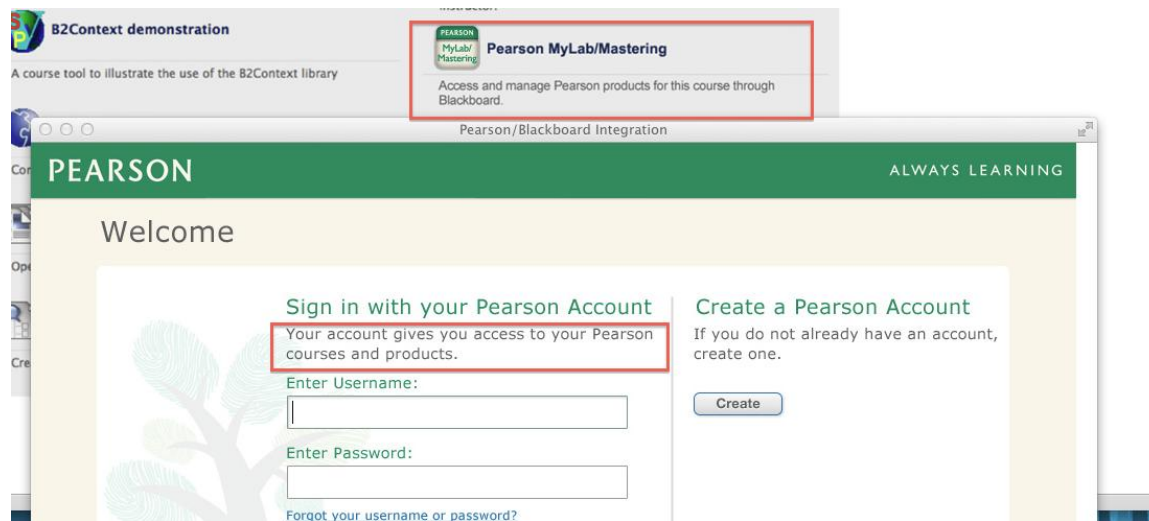
Severity (H/M/L): Your assessment as to whether the implication of the feedback is *low*, *medium*, or *high* severity.

Solutions / Trade-offs: Suggestion for the modifications that might be made to the user interface to address the issue or issues in this row. You **MUST** include trade-offs to be credible. If you can't think of some bad trade-off, say so.

Detailed Findings

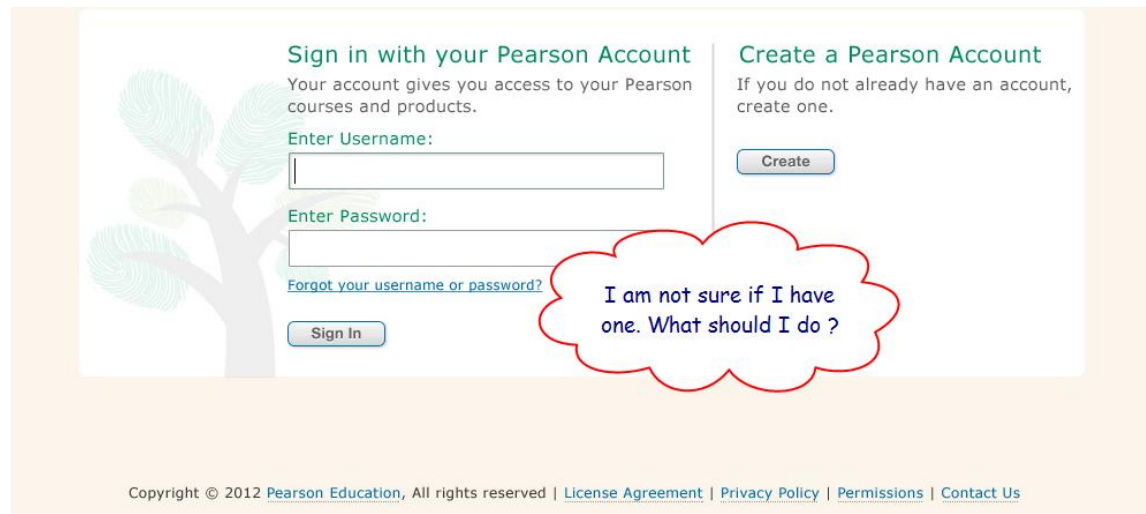
Finding 1: The screen does not indicate the primary task of user

Heuristic(s)	<ul style="list-style-type: none"> • Visibility of System status • Match between system and real world • Recognition rather than recall
Feedback / Issues	<ul style="list-style-type: none"> • The primary task of the user is to “access and manage” their Pearson materials. This is only confirmed in the tertiary level of text not in the primary heading. • For the first time user they may not be sure why they are getting a sign in page
Screen / Scope	Sign in page
Severity	Low
Solutions and Trade-offs	<p>Have the writing team review the language used.</p> <p>Use a primary heading like “Access Pearson Content”</p> <p>Use a secondary heading like “ Connect your Pearson Account –Sign In”</p> <p>Trade-off “Current heading is “Welcoming”.</p>
Screen Captures	See below



Finding 2: Account look-up function is missing

Heuristic(s)	<ul style="list-style-type: none"> • Help and documentation • Flexibility and efficiency of use • Error prevention
Feedback / Issues	<ul style="list-style-type: none"> • Users may not be sure if they have a Pearson account • The reality is this "not sure" path would be is same functionally as the "forgot" path – it is just a different mental framing of the problem • Hints to an account look-up option could reduce the possibility of creating multiple Pearson accounts • Often users will "just try" a variety of username/password combos before moving to any alternate help path.
Screen / Scope	Registration/log in page
Severity	Medium
Solutions and Trade-offs	<p>Consider adding another option for users to check if they have a Pearson account already</p> <p>Consider alternate labeling options for the link that encompasses both situations; keep the phrase as one link and one path. For example, "Not sure you have an account or forgot a username or password?" "Having trouble, here are some options" "Can't remember if you have, or how to access, your account?"</p>
Screen Captures	See below



Finding 3: Confusing messages

Heuristic(s)	<ul style="list-style-type: none"> • Consistency and standards • Error prevention
Feedback / Issues	<p>Users might be confused by the two conflict messages on the confirmation page.</p> <ol style="list-style-type: none"> 1. They can use the course now 2. They will be notify via email when the course is ready
Screen / Scope	Confirmation page after course is created
Severity	Med
Solutions and Trade-offs	Provide accurate message
Screen Captures	See below



Finding 4: Inconsistent Language Used

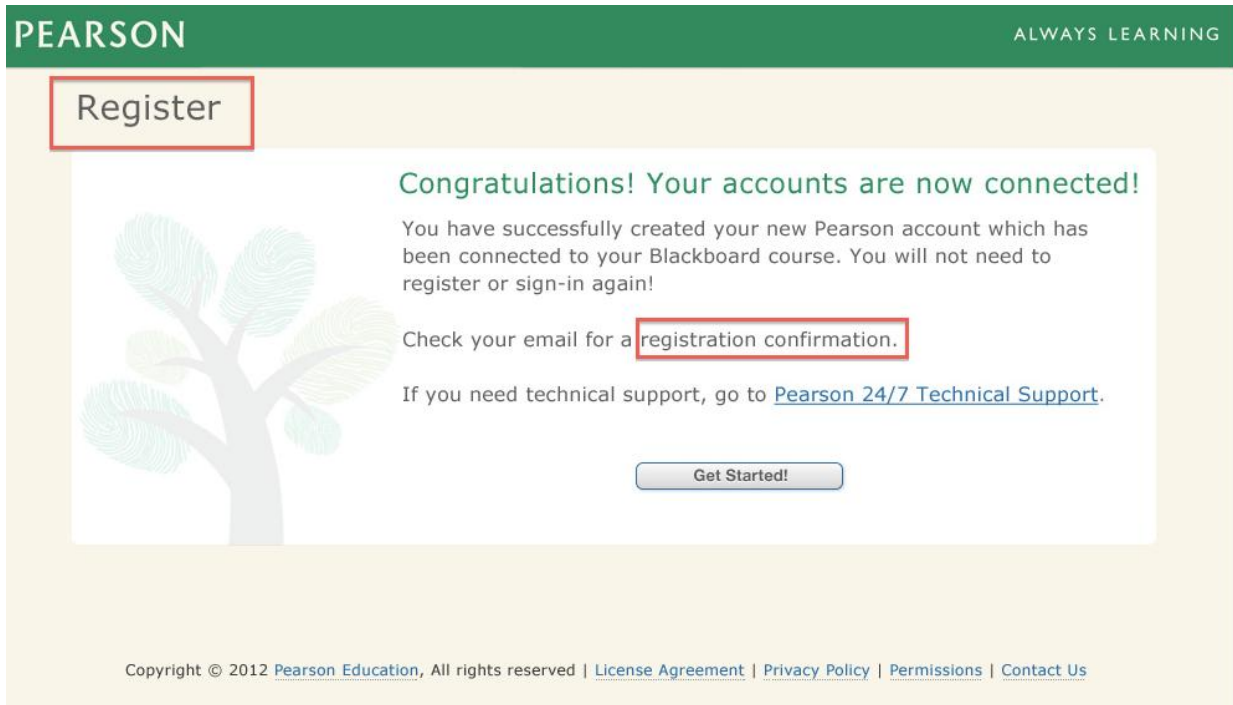
Heuristic(s)	<ul style="list-style-type: none"> • Consistency and standards
Feedback / Issues	<ul style="list-style-type: none"> • In all other screens we refer to this step as “connecting” and this is the only screen we call it “linking”
Screen / Scope	Loading page
Severity	Low
Solutions and Trade-offs	<p>Use consistent language through-out screens.</p> <p>Trade-off: Design can use the work “linking” but then it would have to be used through-out the process more</p>
Screen Captures	See below

One moment as we link your accounts...



Finding 5: We never ask users to “Register”

Heuristic(s)	<ul style="list-style-type: none"> • Consistency and standards
Feedback / Issues	<ul style="list-style-type: none"> • This is the first time users see the term “register” and registration confirmation and then we never use it again. • Possible prototype oversight
Screen / Scope	First time user path – used login credential - Connection Confirmation page
Severity	Low
Solutions and Trade-offs	<p>Use Primary heading like “Account Connected” and a statement that says “A confirmation email of this action has been emailed to you”</p> <p>Trade-off-Users maybe more familiar with concept of “Register” but would have to use in more often through the process if term preferred.</p>
Screen Captures	See below



Finding 6: User does not “create” an account in “Sign in” work-flow

Heuristic(s)	<ul style="list-style-type: none"> • Consistency and standards
Feedback / Issues	<ul style="list-style-type: none"> • Following the “sign-in” workflow the user is never asked to create a new account, they are asked only to connect an existing account.
Screen / Scope	Connection Confirmation page
Severity	Low
Solutions and Trade-offs	<p>Creation text can be removed from the statement and the statement would make more sense and be more concise.</p> <p>Trade-off- Can't think of one</p>
Screen Captures	See below

Register

Congratulations! Your accounts are now connected!

You have successfully ~~created your new Pearson account which has~~ been connected to your Blackboard course. You will not need to register or sign-in again!

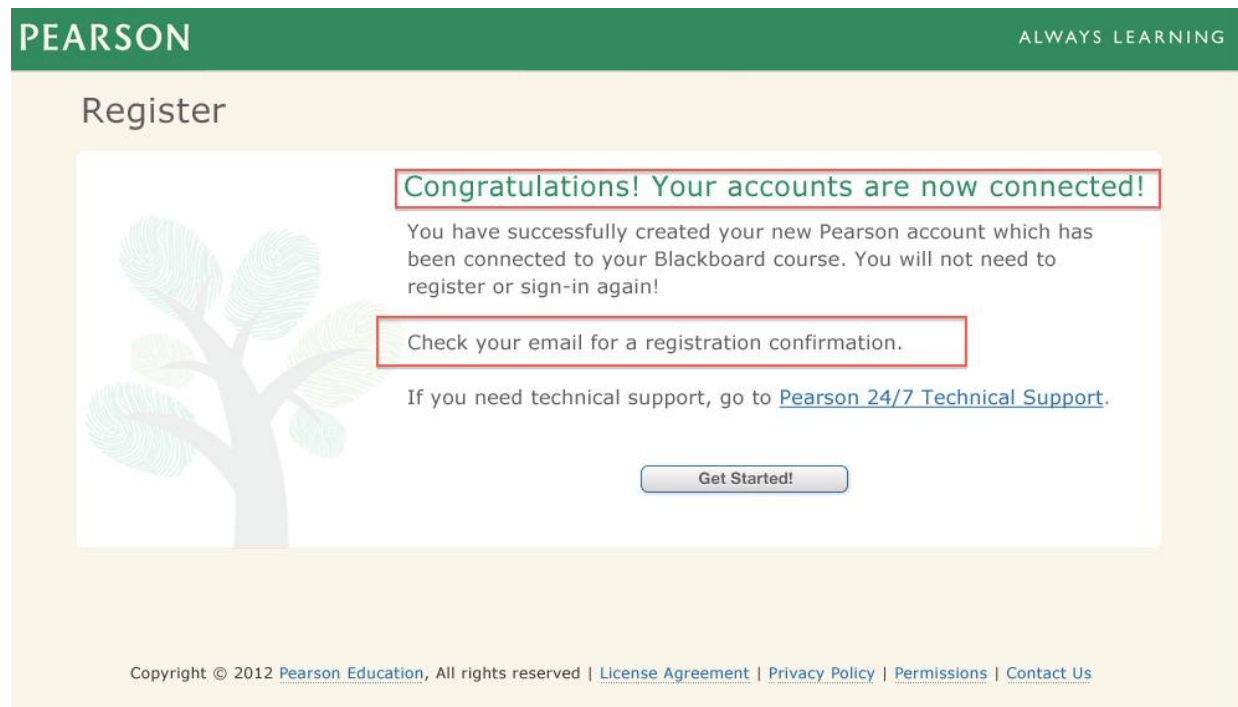
Check your email for a registration confirmation.

If you need technical support, go to [Pearson 24/7 Technical Support](#).

[Get Started!](#)

Finding 7: Congratulations screen too vague

Heuristic(s)	<ul style="list-style-type: none"> • Recognition rather than recall
Feedback / Issues	<ul style="list-style-type: none"> • We tell the user that their account has been successful connected but we never show them any account information. We tell them it's in an email. • What if the user has two accounts, and wants to associate a different account to this course?
Screen / Scope	First time using credentials - Connection Confirmation page
Severity	Low
Solutions and Trade-offs	<p>Place some type of account info in the feedback message to indicate the Bb course being connected too as well as the credentials used; this way they don't have to remember the info they entered or go into email to confirm the account that was connected.</p> <p>Trade-off- Asking for user to confirm correct information is an extra step and creates a loop in the workflow.</p>
Screen Captures	See below



Finding 8: Not enough context around the "Get Started" button

Heuristic(s)	<ul style="list-style-type: none"> • Match between the system and real world • Consistency and standards
Feedback / Issues	<ul style="list-style-type: none"> • There seems to be three steps to connecting Pearson content to a BB course 1.Connect Course, 2.Locate and Review content, 3.create an instance of content to include in course. But the term "Get Started" is used after step 2. The user may select the button and think they are going back to BB course.
Screen / Scope	Connection Confirmation page
Severity	Low
Solutions and Trade-offs	<p>Use term on button that is in line with where the user is, for example "Continue" or "Locate Pearson Content" or "Add my Content" or "Get Started in Blackboard"</p> <p>Alternative is to add more text to the body copy to give better context to the button.</p> <p>Trade-off -"Get Started!" is a very positive message.</p>
Screen Captures	See below

Register

Congratulations! Your accounts are now connected!

You have successfully created your new Pearson account which has been connected to your Blackboard course. You will not need to register or sign-in again!

Check your email for a registration confirmation.

If you need technical support, go to [Pearson 24/7 Technical Support](#).

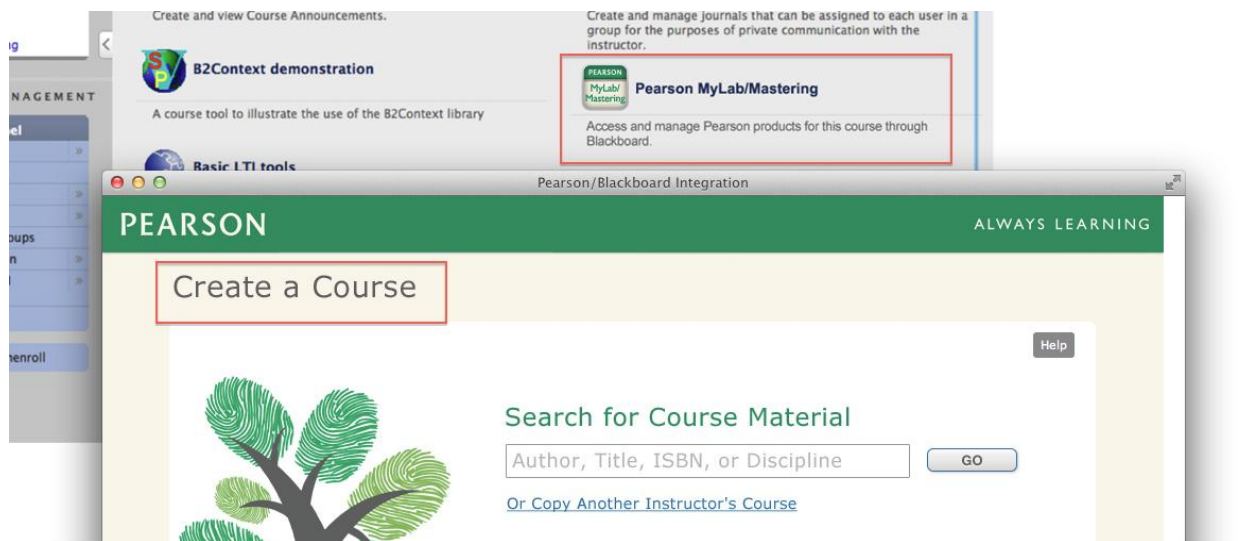
Get Started!

Finding 9: Indicate to the user the workflow and the steps involved.

Heuristic(s)	<ul style="list-style-type: none"> • Visibility of System status
Feedback / Issues	<ul style="list-style-type: none"> • There seems to be three steps to connecting Pearson content to a BB course: (1) Connect Course, (2) Locate and Review content, and (3) Create an instance of content to include in course. Yet we never indicate to the user how long the process is, what the steps are in the process, or the effort involved. • I could potentially see the review of content items taking a while if the user type is a new Pearson client or a user who has the option of picking from several peer created or manipulated content.
Screen / Scope	Entire workflow.
Severity	Med
Solutions and Trade-offs	<p>There could be some type of process indicator for the instructor to follow so that they can know how much time to dedicate to the task. Especially since there is three distinct steps and Step 2 (Locate and Reviewing) might take some time.</p> <p>Trade-off- The process is very simple an established user in the process may not need the indication.</p>
Screen Captures	None.

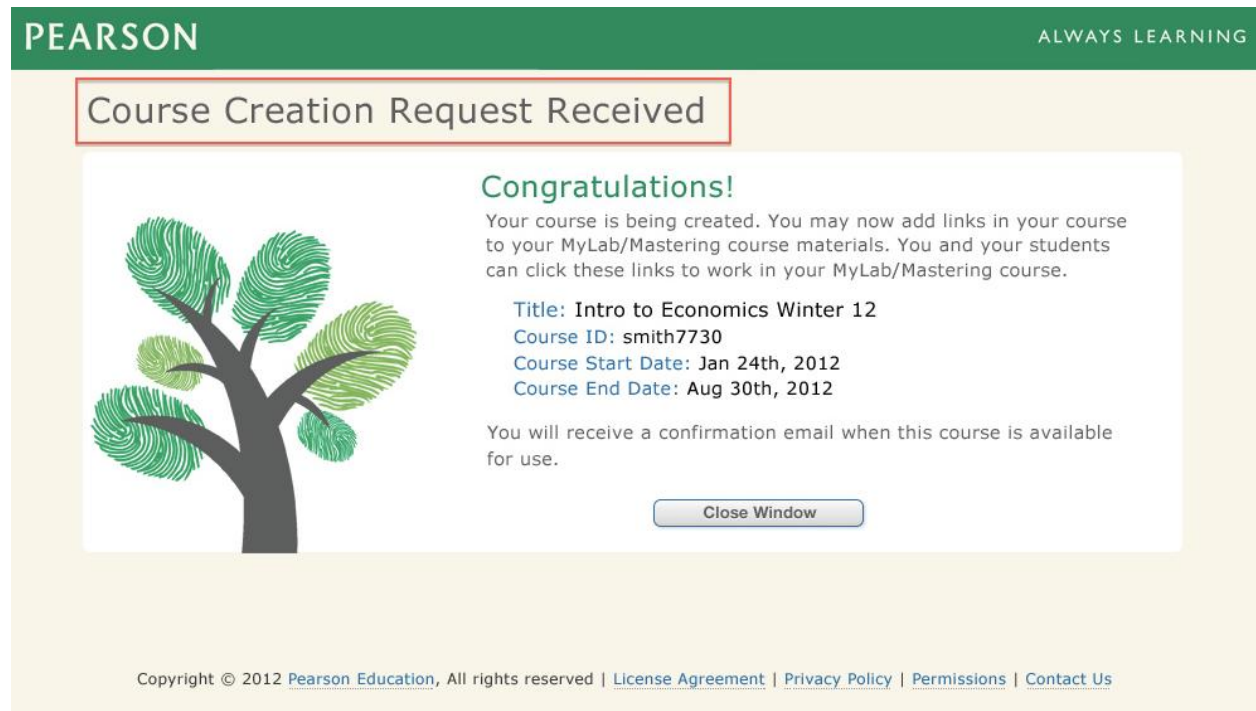
Finding 10: Page title may not match the user mental model

Heuristic(s)	<ul style="list-style-type: none"> • Consistency and standards
Feedback / Issues	<ul style="list-style-type: none"> • We never indicate to the user they need to Create a Course to associate content. • The user isn't really creating a course at this point , they are selecting course materials or course content. • If existing BB user is new to accessing Pearson content, they may be confused by the concept of creating a course inside a course.
Screen / Scope	Search Page
Severity	Low
Solutions and Trade-offs	<p>Primary Heading for this page could be "Select Content"</p> <p>Trade-off- You could offer a concise explanation of what why they need to create a course inside another course.</p>
Screen Captures	See below



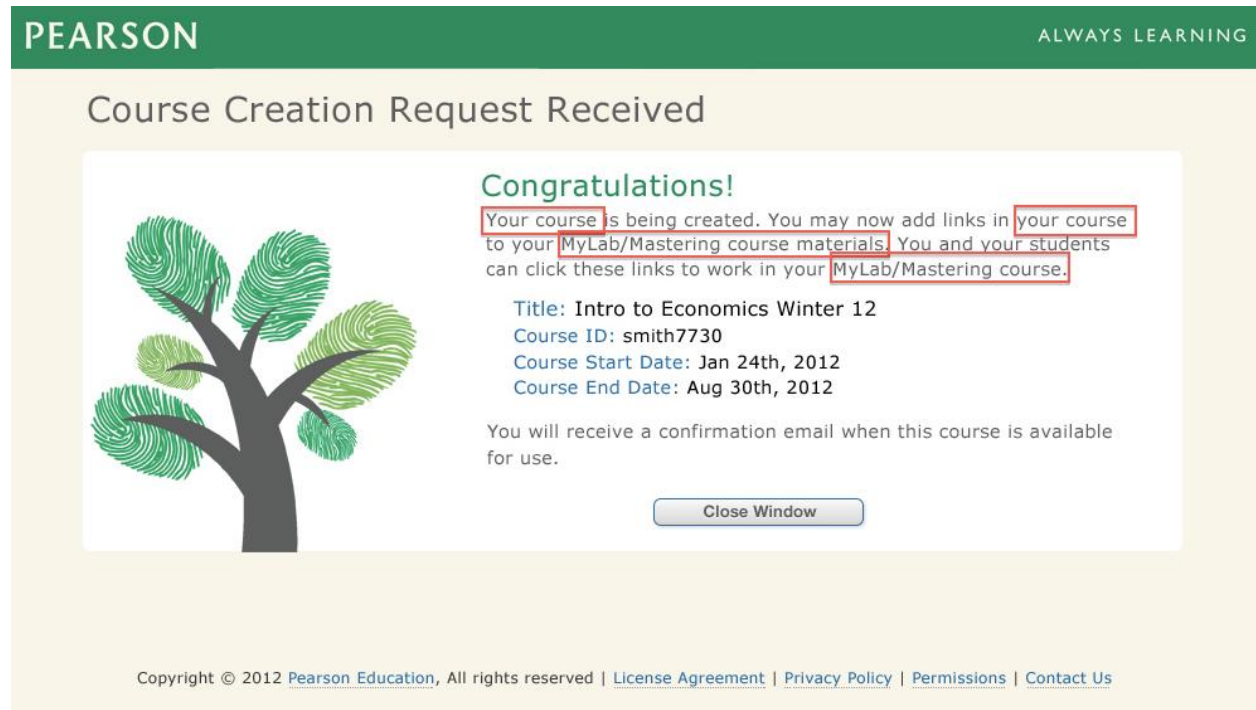
Finding 11: User not aware this is a Request that may be denied

Heuristic(s)	<ul style="list-style-type: none"> • Consistency and standards
Feedback / Issues	<ul style="list-style-type: none"> • Why do we call this process a request in the last window? This indicates that the process of what the user is doing is continuing but we aren't offering a way to track the rest of the process or what to do if the "request" is denied.
Screen / Scope	Confirmation Page
Severity	Low
Solutions and Trade-offs	<p>Change Primary Heading to "Course Materials Successfully Created"</p> <p>Trade-offs- None I can think of.</p>
Screen Captures	See below



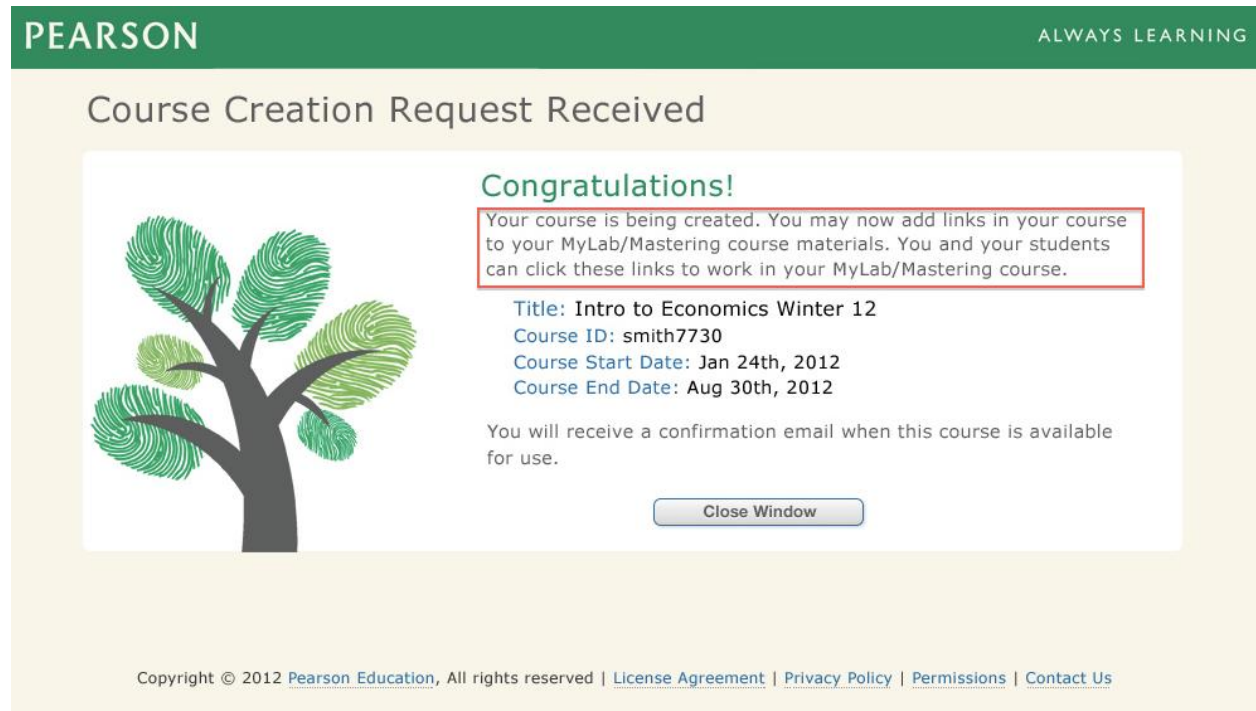
Finding 12: Inconsistent references to course and course materials

Heuristic(s)	<ul style="list-style-type: none"> • Match between system and the real world • Consistency of standards
Feedback / Issues	<ul style="list-style-type: none"> • We don't clarify which course has been created and what course can have links added to it (Pearson course vs. BB course) then we refer to the item as "MyLab/Mastering materials" in one sentence and then "MyLabs/Mastering Course" in the following sentence. •
Screen / Scope	Confirmation page.
Severity	Med
Solutions and Trade-offs	<p>Clarify to user what course you are referring to and the difference between "materials" and "course" if there is one, else use a consistent term for the item you are referring to.</p> <p>Trade offs- Can't think of any.</p>
Screen Captures	See below



Finding 13: Confirmation page text is inconsistent across pages

Heuristic(s)	<ul style="list-style-type: none"> • Match between system and the real world • Consistency of standards
Feedback / Issues	<ul style="list-style-type: none"> • The Confirmation page for "New User" workflow is different form "Returning User" and "Course Copy" Workflows. •
Screen / Scope	Confirmation page.
Severity	Med
Solutions and Trade-offs	<p>Make statements consistent.</p> <p>Trade-offs- Users may never notice differences.</p>
Screen Captures	See below



Course Creation Request Received

**Congratulations!**

Your MyLab/Mastering course is being created. You may now add links in your course to these new course materials. You and your students can click these links to work in your MyLab/Mastering course.

Title: Intro to Economics Winter 12

Course ID: smith7730

Course Start Date: Jan 24th, 2012

Course End Date: Aug 30th, 2012

You will receive a confirmation email when this course is available for use.

Close Window

Finding 14: Possible error in path

Heuristic(s)	<ul style="list-style-type: none"> • Recognition vs. Recall • Flexibility and efficiency use •
Feedback / Issues	<ul style="list-style-type: none"> • Using the "First Time User" path, but I clicked as if I did have a username and password. • Once connected, it presented the screen (below) which only offers the Search option or Copy Another. • Is this a prototype error, or are you saying that the system has the intelligence to know that the credentials used to login do NOT have any classes associated to it? Therefore, default to this screen?
Screen / Scope	First time user – Create a Course search page
Severity	NA
Solutions and Trade-offs	<p>If intelligence is put in place to recognize whether an account has existing courses and present the appropriate Create a Course page, then all is well.</p> <p>Otherwise, an account should be shown the other create page which includes Copy Existing, Copy Another, OR Search.</p>
Screen Captures	See below

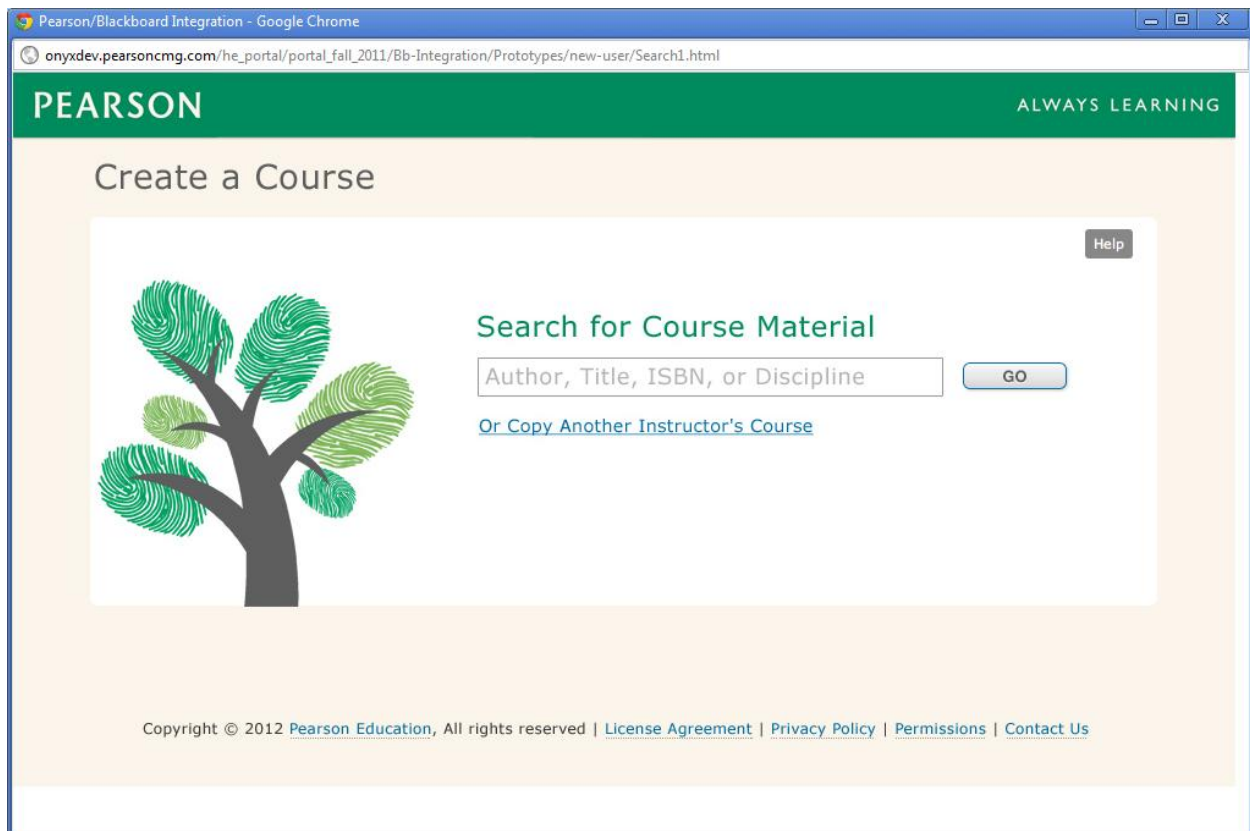
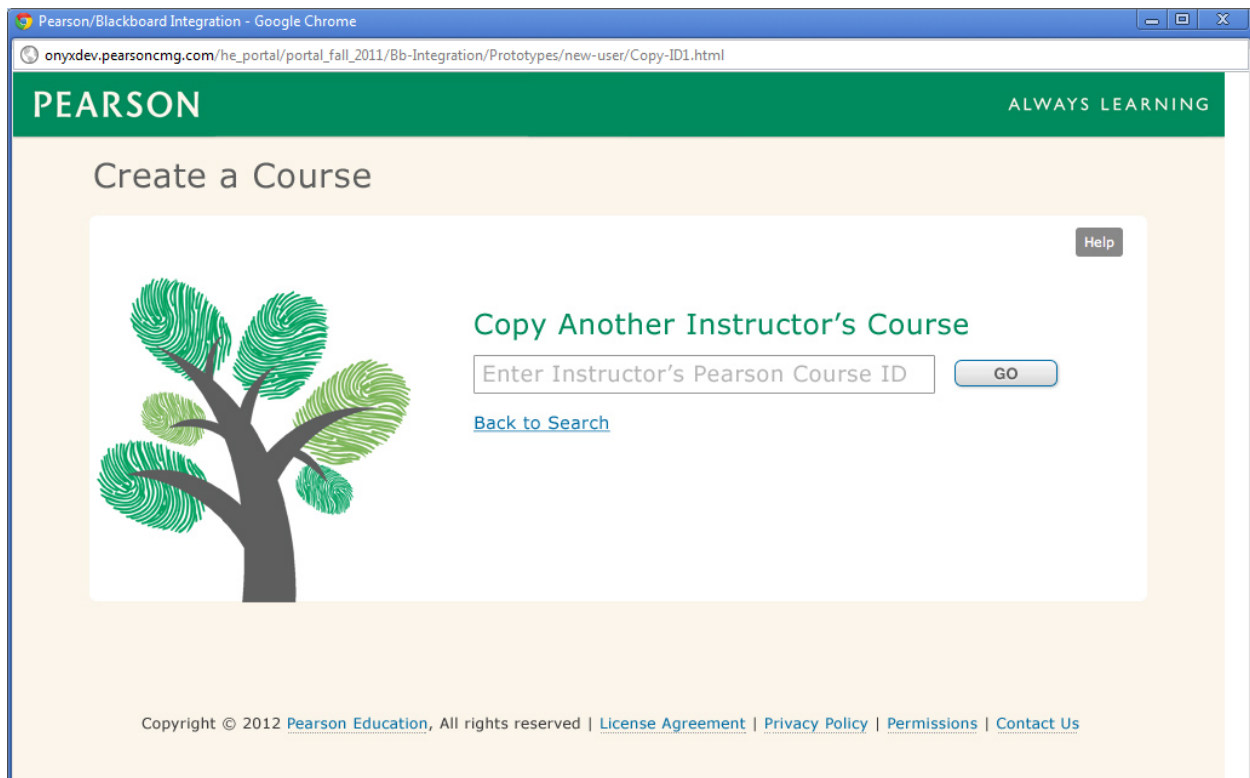


Figure 1: First time user path with only the search or copy another options

Finding 15: Search for “Another Instructor” Clarification

Heuristic(s)	<ul style="list-style-type: none"> Flexibility and efficiency of use
Feedback / Issues	<ul style="list-style-type: none"> Chose the “Copy Another Instructor’s Course” path Can the user search with information other than the course ID (i.e., the instructor’s name)?
Screen / Scope	Copy Another Instructor’s Course search page
Severity	Low
Solutions and Trade-offs	<p>Most likely the issue above is extremely rare. Anyone copying another instructor’s course should have (or can get) the course ID.</p> <p>This would be more an issue of improved convenience for the user at the time – in the unique case they don’t have the info readily available.</p>
Screen Captures	See below



Finding 16: Inconsistent button label

Heuristic(s)	<ul style="list-style-type: none"> • Consistency and Standards
Feedback / Issues	<ul style="list-style-type: none"> • The button labels are different on the Create a Course course info pages between the Copy and the Search paths • One screen uses, "Change Selection" while the other uses "Search Again"
Screen / Scope	Define page or scope
Severity	Low
Solutions and Trade-offs	<p>This is a low issue as both are similar terms, and perhaps this is more of a prototype oversight.</p> <p>Use a consistent label unless a sufficient argument is made that the Search Again label is truly more appropriate since it initially from the "Search" path. However, there is the intermediate results screen where the user makes a "selection."</p>
Screen Captures	See below

