

# **Introduction to Embedded help and Examples applied to dotLRN**

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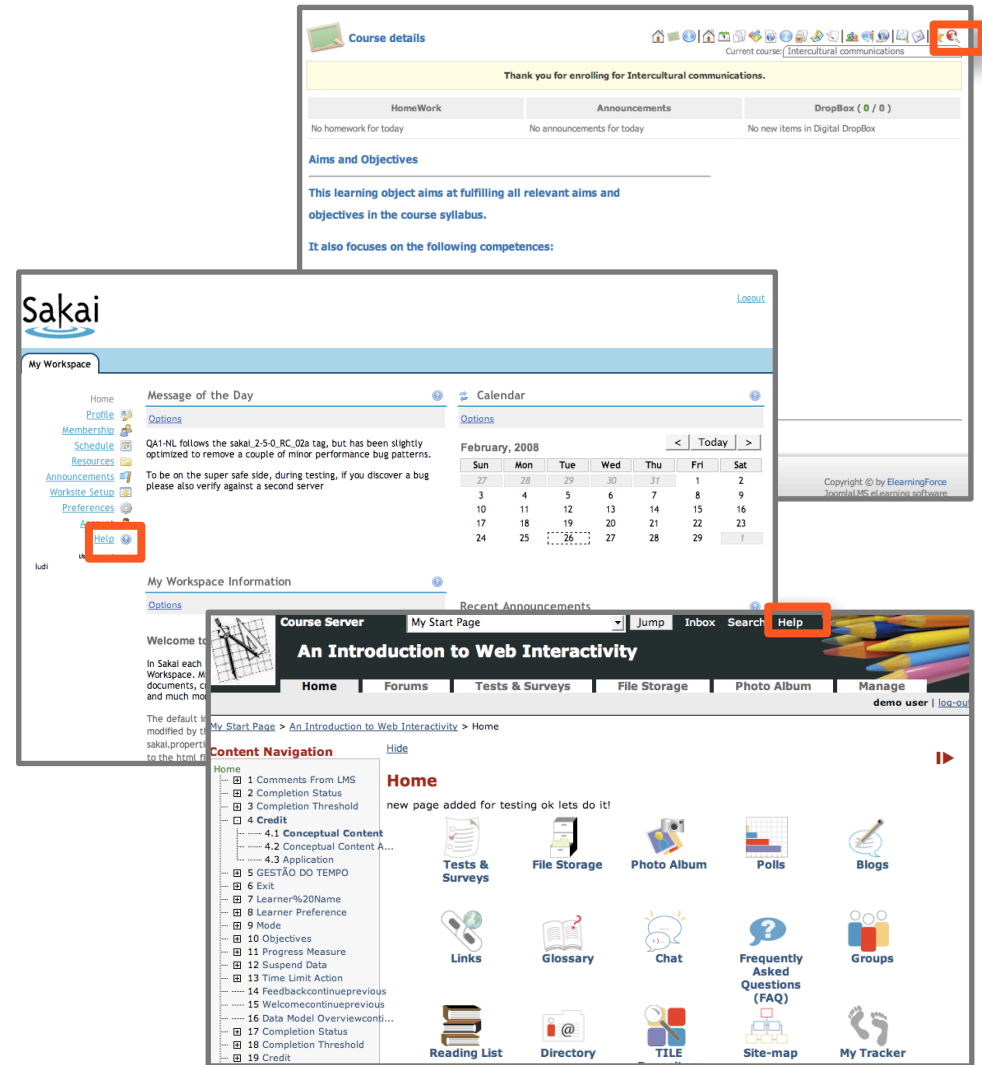
Tue Mar 18 2008

# ABOUT THE HELP SECTION

## Help is the last resort

- People don't use the help section, or they use it at a minimum. The users have to realize they need assistance, open the help, locate the relevant information, and return their focus to the application. For many, this process feels like too much effort for the perceived benefit. As a result, users, and ironically especially novice users, do not use the help systems
- Most applications continue to provide unified, external online help, online manual or any kind of tutorial but people don't use them.
- Studies show that
  - \* Users avoid online help because of the time spent in using it, in that there is not a return on that investment of time.
  - \* Traditional format of user assistance is ineffective.
  - \* Switching back and forth between the application software and the related help system is an important source of difficulties, especially for novice users. (The effects of such 'attention- splitting' situations have been thoroughly investigated in the scope of the cognitive load theory. )
  - \* Users are in general dissatisfied with online help systems

References: [1] [2] [3] [4] [5]



Exemples of LMS with links to a help section

▶ People don't use the help section

# CONTEXTUAL HELP

## Contextual help works better than regular help

### - Definition

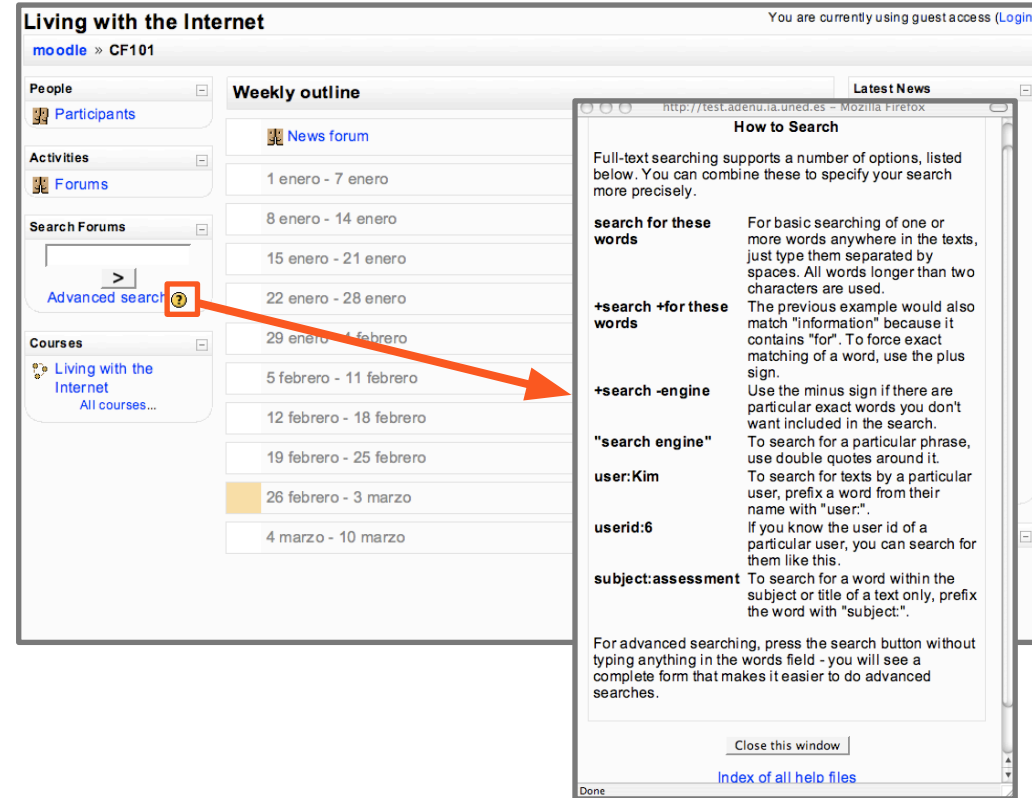
Contextual help provides specific information about the condition or mode the application is in at the time help is sought.

Contextual help, or context-sensitive help, as opposed to general online help or online manuals, doesn't need to be accessible for reading as a whole. Each topic is supposed to describe extensively one state, situation, or feature of the software.

- contextual help is more effective than non contextual help as regards successful task execution

- But still, contextual help often happens in a new window and although it diminishes the attention splitting, it doesn't remove it.

References: [2] [6] [7]



Exemples of contextual help in Moodle

▶ Contextual help doesn't always avoid attention splitting

# CONTEXTUAL HELP

## Contextual help and domain information

- Studies show that:

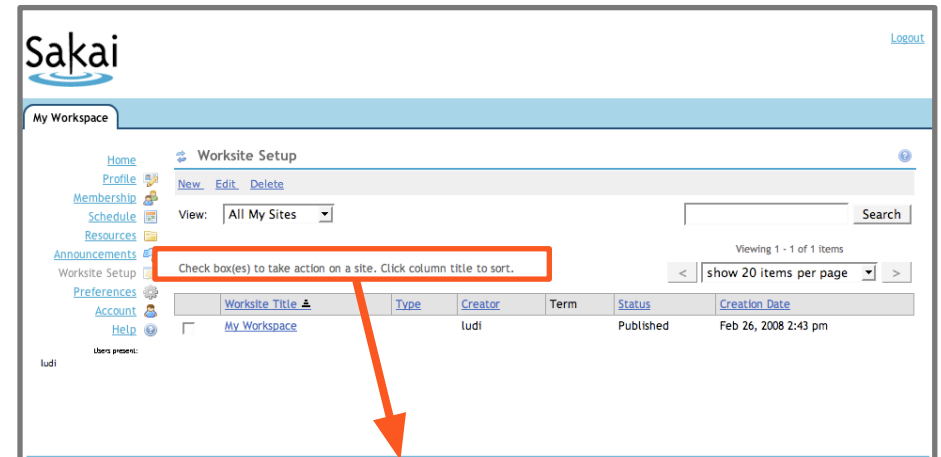
- \* it is important to present certain key information up-front, before users start on a task.

- \* domain information (key concepts, definitions, rules, conventions, etc.) is a critical element of help for web applications, and is potentially more useful to users than procedural information. But users don't tend to look for it within a help section or anywhere else. This critical information should be provided to the user without him having to look for it.

- \* embedded help is an effective technique to provide domain information

- In recent years, more sophisticated formats of user assistance have evolved. Help files are no longer the "total" help solution but merely one of many types of user assistance.

References: [4] [8]



Check box(es) to take action on a site. Click column title to sort.

*Examples of domain information in Sakai*

- ▶ Contextual help is not so efficient if outside the task flow
- ▶ Contextual help provided within the task flow = embedded help

# EMBEDDED HELP

## What is it?

### - Definition

Embedded help, or "nested help", or "embedded user assistance" provides the user with assistive instruction aside the interaction. It is easier for the user to relate the instruction with how it applies to the web application's functionalities than a disconnected FAQ or help section.

Information is moving out of the separate online help systems into the interfaces.

### - How it works

Embedded user assistance

- \* integrates information into the interface.
- \* is like using the interface itself as a help.
- \* can often be the best context sensitive help (i.e., replacement for popups).

The closer you get the information to the user, the better.

*References: [3] [9] [10]*

▶ **Embedded help integrates information directly within the interface**

# EMBEDDED HELP

## Why using embedded help?

- **It gives users the information they need to perform a task correctly the first time**

- **It gives answers to the user questions at the point of use** (or at the point of confusion)

- **It is more efficient**

New usability study and concluded that instead of revising the existing online help system models, writers must improve the user interface and then work to provide an extremely context-sensitive, embedded user assistance system.

- **It doesn't have to be permanent**

That is, we need to implement some tools that stay around long enough to help users learn what they need to know, but then disappear once their purpose has been served.

- **Web user demographic has changed**

The Web is now used by all ranges of technical and most of all non-technical users.

Many developers think that a help section will suffice for teaching users how to operate any application, but this is not the case. The proper way is to bring the help section to them and in a format that can easily be understood.

- **User is more likely to use the help section after**

After using embedded assistance, users are much more likely to click on help links and spend more time using the external help system.

*References: [1] [3] [9] [11]*

- ▶ **Embedded help better serves a wide range of users**
- ▶ **Embedded help provides large benefit for user with practically no effort**
- ▶ **Users are more likely to refer to the help section after that**

# WARNING

## Hide it

- For users who are familiar with a specific web application, embedded Help could be counter-productive because it tends to clutter the UI with information that is unnecessary for experienced users.
- We have to be particularly careful regarding this last topic, considering that typical user of dotLRN will use the interface on long time-scales (to follow a course over a semester for exemple), and therefore become experienced
- A solution is to offer an option to hide the help boxes. It could be managed within the User preference and settings with an option such as "Show/Hide all help boxes"  
It could also be set to disappear automatically after the 10th login or so.

*References: [8] [10]*

- ▶ **Beware of not cluttering the interface too much**
- ▶ **Always offer a option to hide the extra information**

# IMPLEMENTATION

## Offer tips

- Tips appear when needed and can
  - \* explain why information is needed
  - \* explain or show how to enter the information
  - \* let the users instantly know what is expected of them
  - \* helps ensure that the data is entered correctly

So users do not have to resort to help documents, use the Contact Us link, or leave the website in frustration.

- Instructive text, for example, can be used in form elements and interfaces in general to guide the user within the context of her current task without being intrusive.

### Tips

- can show up as roll over or on click
- are short and concise
- offer suggestions and examples (e.g. within form fields)
- are specially useful in forms

### Tips can be

- persistent: they are always there: for information needed by the user to complete the task correctly and efficiently
- visible only on roll over or click: for information not required but helping to provide a good experience to the user

A same page can combine persistent inline tips with the temporary ones.

Link can be provided within the tips to the help section.

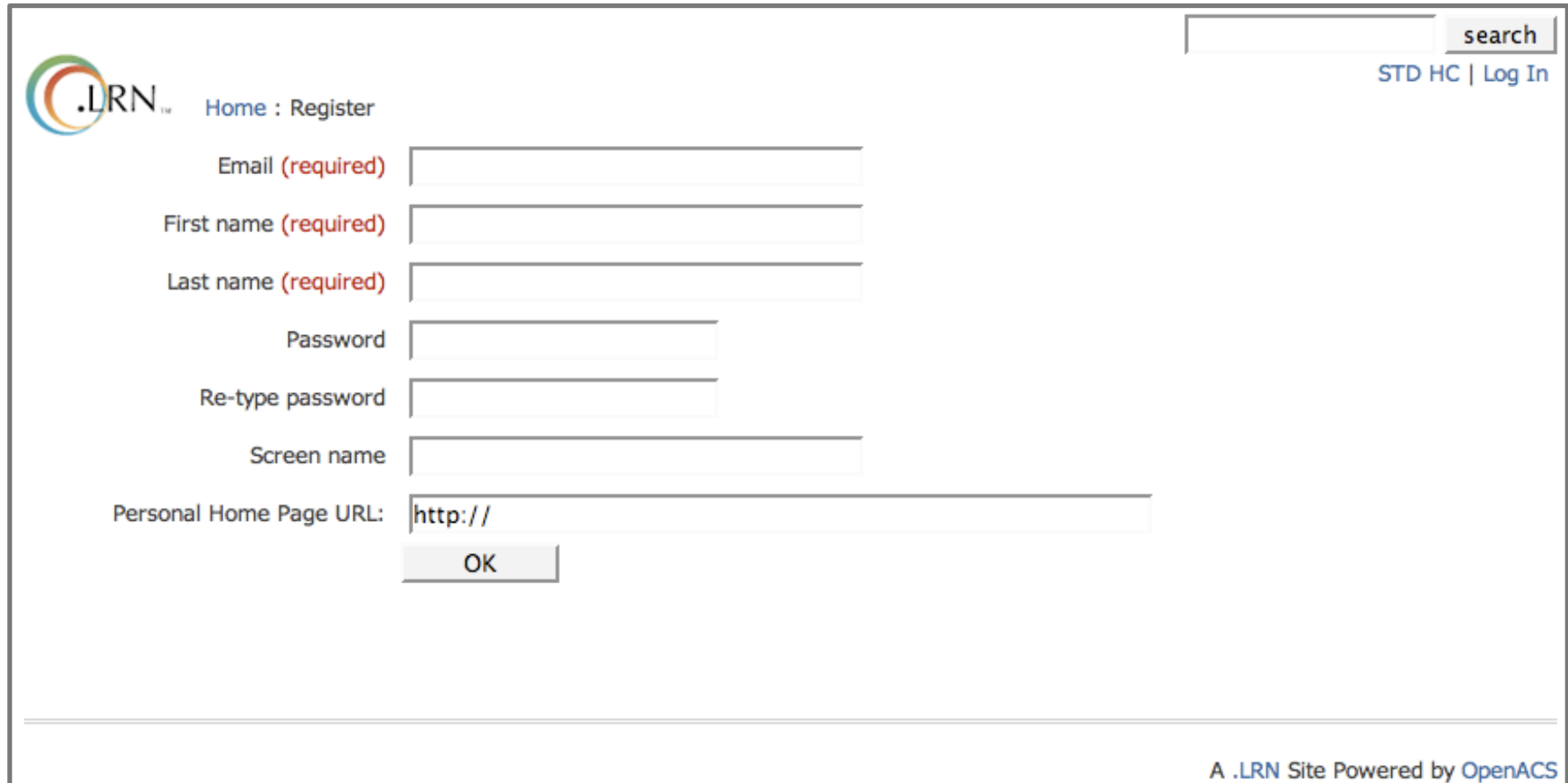
*References: [11] [12]*



# IMPLEMENTATION

Offer tips

## Registration - BEFORE



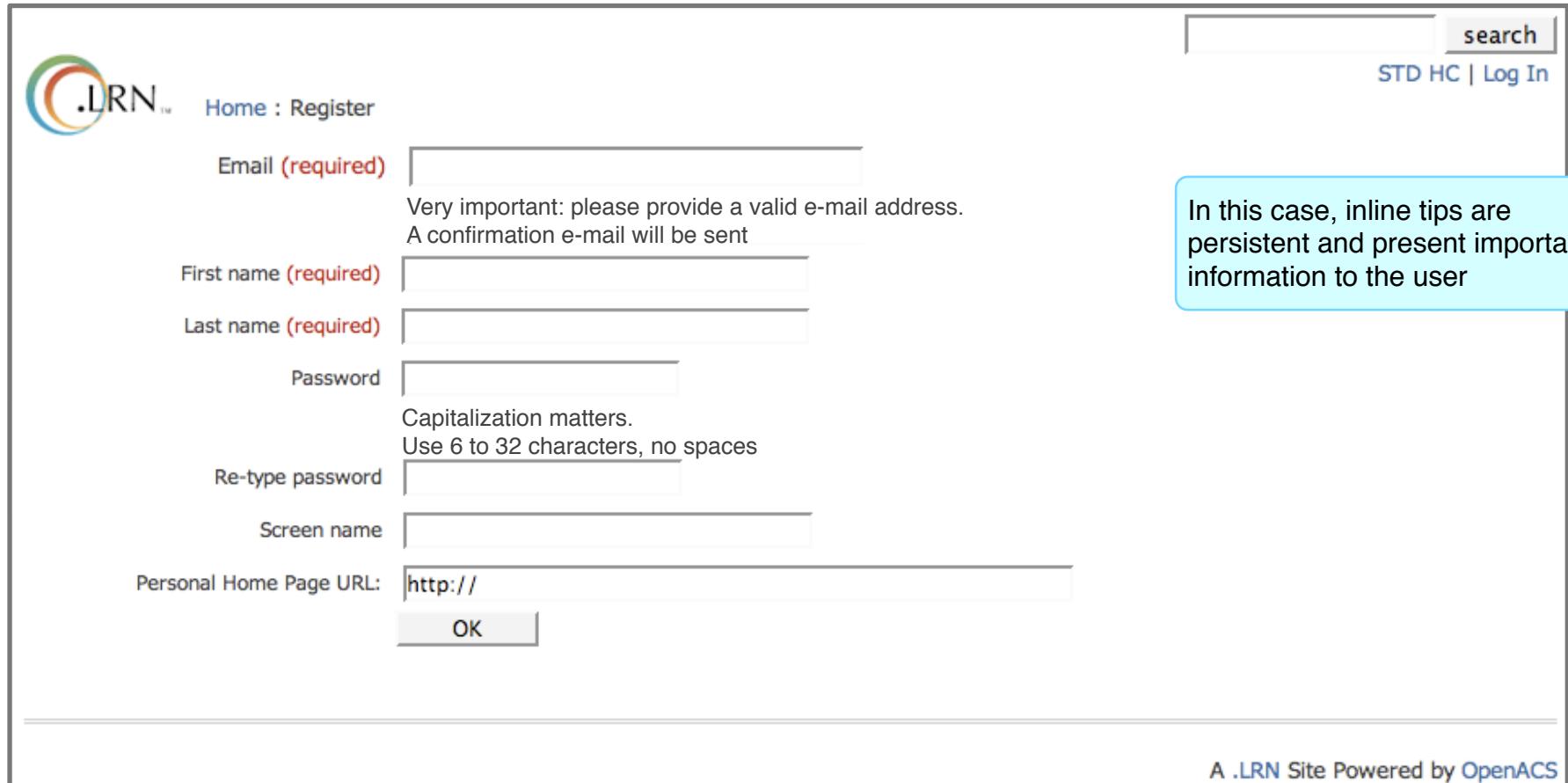
The screenshot shows a web registration form for a .LRN site. The form is titled "Home : Register" and includes the following fields and elements:

- Search:** A search bar with a "search" button in the top right corner.
- Navigation:** Links for "STD HC" and "Log In" in the top right corner.
- Logo:** The .LRN logo is located in the top left corner.
- Form Fields:**
  - Email (required)
  - First name (required)
  - Last name (required)
  - Password
  - Re-type password
  - Screen name
  - Personal Home Page URL: (with "http://" pre-filled)
- Buttons:** An "OK" button is located below the URL field.
- Footer:** The text "A .LRN Site Powered by OpenACS" is located at the bottom right of the page.

# IMPLEMENTATION

## Offer tips

### Registration - AFTER : persistent inline tips



The screenshot shows a registration form for a site named ".LRN". The form includes fields for Email (required), First name (required), Last name (required), Password, Re-type password, and Screen name. A Personal Home Page URL field is also present, with "http://" entered. An "OK" button is located below the URL field. In the top right corner, there is a search bar and links for "STD HC" and "Log In". A light blue callout box on the right side of the form contains the text: "In this case, inline tips are persistent and present important information to the user".

**.LRN** Home : Register

search  
STD HC | Log In

Email (required)   
Very important: please provide a valid e-mail address.  
A confirmation e-mail will be sent

First name (required)

Last name (required)

Password   
Capitalization matters.  
Use 6 to 32 characters, no spaces

Re-type password

Screen name

Personal Home Page URL:   
OK

In this case, inline tips are persistent and present important information to the user

A .LRN Site Powered by OpenACS

# IMPLEMENTATION

## Offer tips

### Registration - AFTER : Bubble when roll over

The image shows a registration form for ".LRN™" with the following fields: Email (required), First name (required), Last name (required), Password, Re-type password, Screen name, and Personal Home Page URL. The form includes a search bar, "STD HC | Log In" link, and an "OK" button. Two callout bubbles are present: one pointing to the password field with a hand cursor, and another pointing to a question mark icon in the password field with a hand cursor. A third callout bubble explains the bubble's behavior.

**To make your password more secure**

- Use letters and numbers
- Use special characters (e.g., @)
- Mix lower and uppercase

[learn more](#)

The bubble appears when the user rolls over the field, or over a question mark (below)  
Only one bubble at a time on the screen.  
Possibility to link to the help section for more info.

# IMPLEMENTATION

## Offer tips

### Registration - AFTER : Tip appears on click

The screenshot shows a registration form for a .LRN site. The form includes fields for Email (required), First name (required), Last name (required), Password, Re-type password, Screen name, and Personal Home Page URL. A search bar and 'STD HC | Log In' link are in the top right. A tip box on the right explains that the tip appears only when the user clicks the field and disappears when clicking on another field, and that only one tip is shown at a time. A list of password requirements is also present: use letters and numbers, use special characters (e.g., @), and mix lower and uppercase. An 'OK' button is at the bottom of the form.

**Home : Register**

Email (required)

First name (required)

Last name (required)

Password

Re-type password

Screen name

Personal Home Page URL:

**search**

[STD HC](#) | [Log In](#)

The tip appears only when the user clicks the field and disappear when click on another field .  
Only one tip at a time on the screen

► **To make your password more secure**

- Use letters and numbers
- Use special characters (e.g., @)
- Mix lower and uppercase

A .LRN Site Powered by OpenACS

# IMPLEMENTATION

## Offer tips

### File upload - BEFORE

 Home : dotLRN : User Folders : Documentos de ludivine martin : Add File

Welcome, ludivine martin | 2 Members online | STD HC | Logout

**Home** | Classes | Communities | Control Panel

My Space | My Calendar | **My Files**

### Upload New File

If you upload a file with the same name as a file already in this folder, we will alter your new file's name by adding an incremental suffix (eg. "mydoc.doc" -> "mydoc-1.doc") and making it a new, separate file.

*Note that this is not the Title of the file, which you can specify as you like. This is the File Name, which must be unique in each folder.*

Upload a file (required)

Title

Description:

Spellcheck:  ▼

Multiple files:  This is a ZIP file containing multiple files. Expect a long upload time for large files. You may minimize your browser while waiting.

# IMPLEMENTATION

## Offer tips

### File upload - AFTER : Show example

Home : dotLRN : User Folders : Documentos de ludivine martin : Add File

Welcome, ludivine martin | 2 Members online | STD HC | Logout

Home | Classes | Communities | Control Panel

My Space | My Calendar | My Files

### Upload New File

If you upload a file with the same name as a file already in this folder, we will alter your new file's name by adding an incremental suffix (eg. "mydoc.doc" -> "mydoc-1.doc") and making it a new, separate file.

*Note that this is not the Title of the file, which you can specify as you like. This is the File Name, which must be unique in each folder.*

Upload a file (required)

Title

Description:

Spellcheck:

Multiple files:  This is a ZIP file containing multiple files. Expect a long upload time for large files. You may minimize your browser while waiting.

Include default data within the form fields to tell the user what kind of information is expected in this field. This dummy content should disappear immediately as soon as the field is clicked

# IMPLEMENTATION

## Welcome screens / descriptive help blocks

- Welcome screens for the main landing page, also called descriptive help blocks for other pages, should help the user situate himself within the interface and guide him through the next steps.
- For example, we can designate an area at the top of an application screen to display information about what to do on that page and what to do next.
- Applied to dotLRN, it could become Welcome "help boxes" that appear by default and that user can choose to hide
- Based on current dotLRN structure, it could apply to the following spaces
  - > Welcome to your space (see example)
  - > Welcome to the community "Name of the community" space
  - > Welcome to the class "Name of the class" space
  - > Welcome to the control panel (see example)

*References: [11]*

# IMPLEMENTATION

Welcome screens / descriptive help blocks

## My Space - BEFORE

Home | Classes | Communities | Control Panel

My Space | My Calendar | My Files

**Groups**

[ Join/Drop a Class or Community Group ]

**Communities** ( ++ | -- )

- EU4ALL
- ⊕ ALPE
- Test
- ⊕ a2DeNu
- Comunidad de atención a la discapacidad

**Forums**


EU4ALL

- Accessibility and Usability in EU4ALL platform
- General Information
- Meetings
- Problems and suggestions
- Technical Discussion/News Forum

Day Summary

Maximize window to display content

**Album de fotos**

Name	Description
 Temas varios	Fotos sobre temas no directamente relacionados con los proyectos

Add Photos



# IMPLEMENTATION

## Welcome screens / descriptive help blocks

### My Space - AFTER

The screenshot shows a user's 'My Space' page. At the top, there is a search bar and a welcome message: 'Welcome, ludivine martin | 3 Members online | STD HC | Logout'. Below this is a navigation menu with tabs for 'Home', 'Classes', 'Communities', and 'Control Panel'. Underneath, there are sub-tabs for 'My Space', 'My Calendar', and 'My Files'. The main content area is titled 'Welcome to your space' and contains a message: 'This space is entirely yours and not visible to others. You can change its content and its layout'. Below this message are three links: '\* change the content and layout now', '\* reverse to default settings', and 'hide this box'. The page is divided into several sections: 'Groups' (with a link to join/drop a group), 'Communities' (listing EU4ALL, ALPE, Test, a2DeNu, and Comunidad de atención a la discapacidad), 'Forums' (listing EU4ALL and several discussion topics), 'Day Summary' (with a maximize button), and 'Album de fotos' (with a table of photo albums and an 'Add Photos' link).

Annotations on the screenshot:

- Offer relevant information to the user regarding this section
- Offer relevant links directly related to this section (and hard to find otherwise)
- Offer the possibility to hide this information

# IMPLEMENTATION

Welcome screens / descriptive help blocks

## Control Panel - BEFORE

The screenshot shows a user control panel for a dotLRN system. At the top left is the dotLRN logo and the text "Home : dotLRN". At the top right is a search box and the text "Welcome, ludivine martin | 4 Members online | STD HC | Logout". Below the logo is a navigation menu with tabs for "Home", "Classes", "Communities", and "Control Panel". The "Control Panel" tab is active. The main content area is divided into several sections: "Your Account" (with fields for First name, Last name, Email, Screen name, Home page, and About you), "Index of Learning Styles" (with a link to "Respond Questionnaire"), "Privacy" (with links for "What other people see when they click your name", "Users currently online", and "Change your email privacy level"), "General Site Help" (with links for "Help" and "Ask a question: adenu@dia.uned.es"), and "Your Portrait" (with a message about a portrait upload and a small portrait photo). At the bottom of the "Your Account" section are buttons for "Change language", "Manage your notifications", "Customize Layout", "Change your password", and "Close your account".

**dotLRN** Home : dotLRN

Welcome, ludivine martin | 4 Members online | STD HC | Logout

Home Classes Communities **Control Panel**

### Your Account

First name ludivine  
Last name martin  
Email ludivine.martin@gmail.com  
Screen name  
Home page  
About you specializing in usability and interaction design

Edit

Change language Manage your notifications Customize Layout  
Change your password Close your account

### Index of Learning Styles

- Respond Questionnaire

### Privacy

- What other people see when they click your name
- Users currently online
- Change your email privacy level

Your online status is currently visible to other users.


- Make yourself invisible

### General Site Help

- Help
- Ask a question: adenu@dia.uned.es

### Your Portrait

On November 21, 2007, you uploaded your portrait.



# IMPLEMENTATION

Welcome screens / descriptive help blocks

## Control Panel - AFTER

Home | Classes | Communities | **Control Panel**

Welcome, ludivine martin | 4 Members online | STD HC | Logout

search

Home : dotLRN

In the Control Panel area you can

- \* manage your account information
- \* customize your Home layout
- \* add or edit your profile photo
- \* manage your privacy information

[hide this box](#)

**Your Account**

First name ludivine

Last name martin

Email ludivine.martin@gmail.com

Screen name

Home page

About you specializing in usability and interaction design

[Edit](#)

[Change language](#) [Manage your notifications](#) [Customize Layout](#)

[Change your password](#) [Close your account](#)

**Index of Learning Styles**

- [Respond Questionnaire](#)

**Privacy**


- [What other people see when they click your name](#)
- [Users currently online](#)
- [Change your email privacy level](#)

Your online status is currently visible to other users.

- [Make yourself invisible](#)

**Your Portrait**

On November 21, 2007, you uploaded [your portrait](#).



**General Site Help**

- [Help](#)
- [Ask a question: adenu@dia.uned.es](#)

Include the most important tasks the user can do within this section

Offer the possibility to hide this information

# IMPLEMENTATION

## Fill the blank slate with something useful

- Whenever some screens are blank or offer few content or options, always anticipate the user next tasks and offer links and guiding cues accordingly.

- For users just getting to know a Web application, a blank slate can be a barrier in the learning process. Instead of knowing exactly what to do first, users can become stalled when faced with the empty canvas.

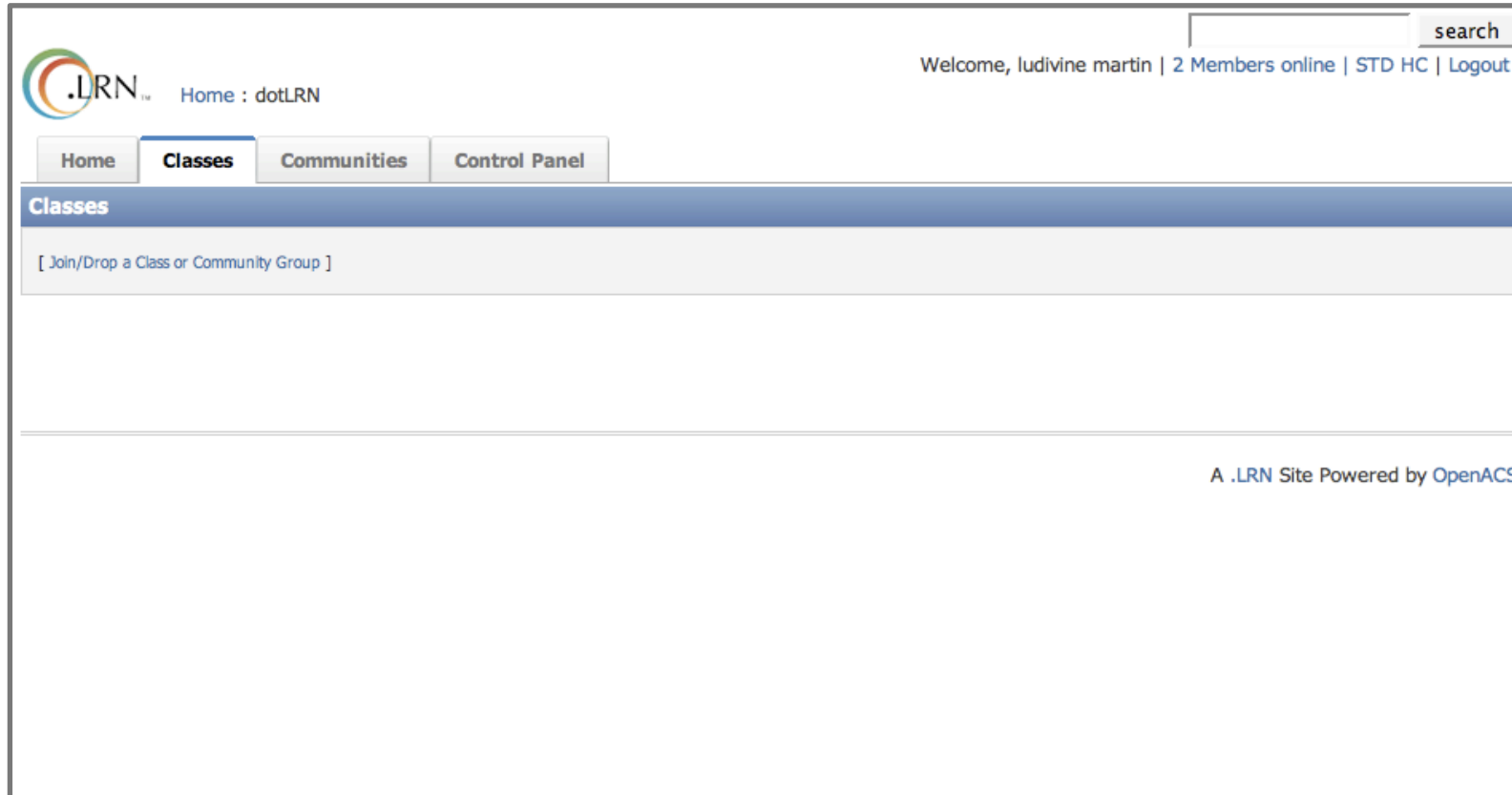
In addition to helping users get up to speed, it can be a great way to compel users to jump in and start using the application, which can be the hardest thing to do otherwise.

*References: [11]*

# IMPLEMENTATION

Fill the blank slate with something useful

## BEFORE



The screenshot displays a web interface for a .LRN site. At the top left is the .LRN logo and the text "Home : dotLRN". At the top right is a search bar and the text "Welcome, ludivine martin | 2 Members online | STD HC | Logout". Below the logo is a navigation menu with buttons for "Home", "Classes", "Communities", and "Control Panel". The "Classes" button is highlighted. Below the navigation menu is a blue header for the "Classes" section, followed by a light gray box containing the text "[ Join/Drop a Class or Community Group ]". At the bottom right of the page, it says "A .LRN Site Powered by OpenACS".

# IMPLEMENTATION

Fill the blank slate with something useful

AFTER

The screenshot shows a web interface for a Learning Record Network (.LRN). At the top left is the .LRN logo and the text 'Home : dotLRN'. At the top right is a search bar and a welcome message: 'Welcome, ludivine martin | 2 Members online | STD HC | Logout'. Below the header is a navigation bar with tabs for 'Home', 'Classes', 'Communities', and 'Control Panel'. The 'Classes' tab is selected, and the page title is 'Classes'. The main content area displays a message: 'Currently, you are not registered to any class'. Below this message are two blue callout boxes: 'Provide account information on current status : No current class' and 'Provide link to next logical action : Browse classes'. At the bottom of the main content area is another blue callout box: 'Provide suggestion to learn more about the topic, offer a guided tour: Link to a tutorial. The screenshot presents a strong visual cue'. Below the callouts is a screenshot of a course page. The course page has a header with a logo and the text 'Principal : dotLRN - Asignaturas : APE | UNED - Tu primera carta y currículo con OpenOffice'. Below the header is a navigation bar with tabs for 'Inicio', 'Cursos', 'Comunidades', 'Panel de control', 'Ayuda', and 'Tu primera carta y currículo con OpenOffice'. The 'Cursos' tab is selected, and the page title is 'Español del curso'. The main content area displays a table with the following data:

Tema	Visto por Última vez	% Votos	Completed
Curso Tu primera Carta y Currículo con OpenOffice	26/02/08	36,67	N/A

At the bottom right of the screenshot is the text 'A .LRN Site Powered by OpenACS'.

Provide account information on current status : No current class

Provide link to next logical action : Browse classes

Provide suggestion to learn more about the topic, offer a guided tour: Link to a tutorial. The screenshot presents a strong visual cue

# NOTE

## Embedded help is great

- Previous examples show the range and the potential efficiency of embedded help and instructive design
- Designer and content producers should consider and focus on embedded help when designing and creating content.

## But a help section is always needed

- Studies show current failures of approaches claiming that "transparent user interfaces" eliminate the need for online help.
- The user should never need the TOC (table of content) or Index. However, this is not an excuse for not writing a good TOC or Index.
- An external help system is needed to provide in-depth conceptual information and procedures.
- Furthermore, and ironically, advanced users tend to look more into the help systems than beginners, and their needs should be addressed as well.

*References: [2] [10] [11]*

▶ **Embedded help should be prioritized, but a help section is always needed**

# References

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