LON-CAPA 3.0
Sneak Preview

Gerd Kortemeyer
May 2011
Overview

- Guiding ideas for new release
- Things already (almost) working
- Things to be done
- Questions
Guiding ideas for new release

Two design ideas:

- Idea 1: Move basic course management to the foreground
- Idea 2: “Flight Management”
Idea 1 - Background

- History: CAPA started as a pure assessment system
  - Course Management added later
  - Currently still reflected in the interface

9900 individual students
1/4th of MSU’s undergraduate population actively uses LON-CAPA
Idea 1 - Background

- Used to be just natural science
  - Not anymore
- Requirements beyond geeky homework
- Bring basic course management up front
Idea 1 - Design

- Infrastructure
- Course Management
- Assessment
- Infrastructure
- Course Management
- Assessment
**Idea 2 - Background**

- More features than most systems … but faculty don’t know about them
  - Enormous number of parameters, settings, configurations … sometimes hard to keep track – “Discoverability”

- Very powerful system:
  - “We make the scissors, you do the running.”
    - Move to the foreground what is important at the time when it’s needed
Idea 2 - Background

DC 10
Idea 2 - Design

Airbus
Idea 2 - Design

- “Flight Management”
- What you need when you need it
Who is or will be working on that?

- **MSU:**
  - “Flight management”
  - Grading
  - Overall coordination
- **Ostfalia/Wolfenbüttel:**
  - Design
  - Look and feel
  - Discoverability
- **MIT:**
  - Social networking
  - Student support and signaling
- **Purdue:**
  - Flight management
  - Signaling
- **UIUC**
  - Hiring additional programmer
... with input by

LON-CAPA Author Users
Usability Evaluation Report

LON-CAPA Faculty Users
Usability Evaluation Report

Blackboard Course Coordinator Interface

Accessibility Compliance Evaluation Report
Things already (almost) working

- In the developer version of LON-CAPA, several of these concepts have already been implemented.
- Still need
  - finishing touches
  - testing
- ... but they will be in 3.0 for sure.
Menus

- The “old” LON-CAPA
- Remote Control
- RIP
Menus

- Clear contexts
- Consistent positions
### 2.10 Main Menu

#### My Roles
- Switch to another user role
- Course/Community requests

#### Communication
- Course announcements and my calendar
- Send and display messages
- Enter the chat room for the course

#### My Space
- Edit any group in the course
- Enter my portfolio space
- Edit blogs, RSS feeds, and podcasts
- Set my user preferences
- Use or edit my bookmark collection

#### Content Library
- Search the database of published resources and accessible portfolio files
- Browse published resources

#### User Management
- Manage course users

#### Course Management
- Edit any group in the course
- Manage slots
- Modify course configuration
- Modify parameter settings (due dates, etc.) for resources and the course
- What's New?

#### Grading and Statistics
- View calculated grades (Spreadsheet)
- View the course assessment progress chart
- View course assessment statistics

#### Course Content
- Edit course contents
- Table of course contents

#### Other
- Logout
- Display catalog of courses and communities
3.0 Hierarchical Menu

- Action-oriented top-level
- Standard course management actions
Menus

3.0 Hierarchical Menu

- Next level tabs
  - Should be intuitive for “old” users
  - Less learning curve for new users
  - Less clicks
Contextualization

- “Flight Management”
- Items and messages clickable

Direct jump to modification interface
... of course depends on the privileges of the user
Contextualization

- **What’s New screen**
  - Essays and drop boxes

- To view or grade a submission or a group of submissions, click on the **Check All** or **Uncheck All** button.

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Click and grade
Grading

- Category-based grading mode added
**Content Editor**

- Less scrolling and clearer categories on Content Editor
# Navigation

- New automatically generated index

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... and yes, homework ...

- We could not have a new release without *some* enhancements to homework
- Dynamic graphing
At $t=0$ s, a car cruises at a constant positive velocity. Suddenly, a light switches to red. At $t=10$ s, the driver is maximum on the brake. The car then stops in front of the red light for over 2 seconds. Eventually, it drives off, and then again cruises at a constant velocity. The car cannot accelerate with more than 3 m/s$^2$. Provide a graph of its acceleration as a function of time.
i>Clicker2

- Fully compatible with numerical and alphanumerical input of i>Clicker2
And always:
Bugs and enhancements
Actually catching up!
Things to be done

- Things that are still left to do
- Currently in concept stage
- Warning: going from actual screen shots to mockups
New Home Screen

- Home screen shows what is going on across courses, communities, ...
- Replaces Roles screen
New What’s New

- “Flight management”
- Will be available for all users in all roles
New Contextualization

- “Flight management”
- Display pertinent information when needed

High degree of difficulty

Extend due date
Increase maximum number of tries

Generally: Open Change
Not open for section 003 Change
Generally: Due May 17, 2010 Change

4 Messages regarding this problem Read
New Helpers

- More helpers to accomplish tasks
- “I want to turn this folder into an exam”
  - hiding
  - dates
  - exam mode
  - etc
• Recommender system based on dynamic metadata
• Shopping cart metaphor for importing resources
New Alerts

- Integrate Purdue’s alert system for students-at-risk into LON-CAPA

**LON-CAPA Laurie**
LON-CAPA Assessment Tools and All Things Edu-Tech

More LON-CAPA problems + Signal Alerts contributed to best student performance ever!
by LAURIE ITEN on JANUARY 5, 2011

Ever since I submitted course grades for my BIOL 135, First-Year Biology Lab last semester, I’ve been doing a “happy dance” because our overall class performance was the best ever! Just check out the table below of student course grades for the past three semesters.

<table>
<thead>
<tr>
<th>Course grades with number of students for past three semesters of BIOL 13500, First-Year Biology Lab</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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<tr>
<td>A+</td>
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<td>A</td>
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<tr>
<td>A-</td>
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<tr>
<td>B+</td>
</tr>
</tbody>
</table>
# New Learner Resources

## Learning Resources

<table>
<thead>
<tr>
<th>Type of Resource</th>
<th>Difficulty Level</th>
<th>Content</th>
</tr>
</thead>
<tbody>
<tr>
<td>Video Lecture</td>
<td>65%: Advanced Highschool and Introductory College</td>
<td>Lewin's Lecture on Friction [show]</td>
</tr>
<tr>
<td>Text</td>
<td>75%: Calculus Based College</td>
<td>Dave's: Going from Static to Kinetic*</td>
</tr>
<tr>
<td>Text</td>
<td>60%: Advanced Highschool and Introductory College</td>
<td>Coefficients of Static and Kinetic Friction*[show]</td>
</tr>
<tr>
<td>Text</td>
<td>80%: Advanced Calculus Based Physics</td>
<td>Static Friction as Constraint*[show]</td>
</tr>
<tr>
<td>Interactive Exercise</td>
<td>60%: Advanced Highschool and Introductory College</td>
<td>Andes Tutorial Problems*[show]</td>
</tr>
</tbody>
</table>

## Frequently Asked Questions

<table>
<thead>
<tr>
<th>Number of Ranking</th>
<th>Content</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>No ratings yet</td>
</tr>
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<td></td>
<td>How do we define kinetic friction on an incline*[show]</td>
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<tr>
<td>2</td>
<td>Somewhat Helpful</td>
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<td>In what ways are Normal and Frictional Forces components of a contact force*[show]</td>
</tr>
</tbody>
</table>
New Import Tools

• Automated ANGEL import
Thank you!

Questions and maybe answers?

Gerd Kortemeyer
kortemey@msu.edu
http://www.lon-capa.org/