LON-CAPA 3.0
Sneak Preview
Gerd Kortemeyer
April 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
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
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
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
3.0 Hierarchical Menu

- Action-oriented top-level
- Standard course management actions
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
A car (mass 860 kg) is bug need in order to sl [Image 45x32 to 748x580] 

![Tries 0/10](image)

![Click](image)

**Contextualization**

- … of course depends on the privileges of the user

<table>
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<th>Any User</th>
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<td>in Course</td>
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<td>general</td>
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<td>Maximum Number of Tries [Part: 0] (maxtries)</td>
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Contextualization

- What’s New screen
  - Essays and drop boxes

Click and grade
Grading

- Category-based grading mode added
Content Editor

- Less scrolling and clearer categories on Content Editor
## Navigation

- **New automatically generated index**

|        | Planets ... | Potential ... | Pendulum ... | Problem 1 ... | Problem 7 ... | Problem 1 ... | Problem 7 ... | Approximat ... | Approximat ... | Problem 7 ... | Problem 7 ... | Cosmic Muo ...
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... and yes, homework ...

- We could not have a new release without some enhancements to homework
- Dynamic graphing
Homework

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 $3 \text{ m/s}^2$.

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 I T E N 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.

Course grades with number of students for past three semesters of BIOL 13500, First-Year Biology Lab

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<thead>
<tr>
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<th>Fall ‘09</th>
<th>Spring ‘10</th>
<th>Fall ‘10</th>
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<td>0</td>
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<tr>
<td>A</td>
<td>6</td>
<td>16</td>
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<tr>
<td>A-</td>
<td>10</td>
<td>4</td>
<td>6</td>
</tr>
<tr>
<td>B+</td>
<td>11</td>
<td>9</td>
<td>21</td>
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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 [show]</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>
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</table>

Frequently Asked Questions

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

- Content “Assets”
  - FAQ
  - Recommended resources
New Import Tools

- Automated ANGEL import
More on this

2011 LON-CAPA Conference and Workshop

May 19-21, 2011
Richmond, Virginia

Welcome to the 13th LON-CAPA Conference and Workshop!

The LON-CAPA Conference is hosted by Virginia Commonwealth University, Richmond, VA.

Sponsored by

i-clicker

Dell
The Decision is Simple
Thank you!

Questions and maybe answers?

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