Teaching and Learning Technologies: Focus on Impact

Harvard IT Summit 2015

June 4, 2015
The Program

Provide a continually evolving set of faculty-friendly, student-focused technologies that support teaching and learning across all Harvard schools, facilitate pedagogical innovation, and contribute to educational research.

<table>
<thead>
<tr>
<th>Strategic Objectives</th>
<th>Guiding Principles</th>
<th>Key Performance Indicators</th>
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<tbody>
<tr>
<td>• Provide core teaching and learning technologies to all Schools</td>
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<td>• Support pedagogical innovation and research on learning</td>
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<td>• Establish strong Harvard community based on actual partnerships with faculty and with academic support professionals</td>
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<td>• Cultivate open source community around component development that complements core technologies</td>
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<td>• Deliver high-quality program on time, on budget, in scope</td>
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<td>• Communicate and socialize program across the University</td>
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<td>• Balance need to move quickly with thoughtful planning</td>
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<tr>
<td>• Seek early and continuous faculty input from across the Schools</td>
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<td>• Transition program to ongoing services with sustained community and sustained vision</td>
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<tr>
<td>• Embrace fluidity</td>
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<tr>
<td>• Full-time staff focus is the rule; divided time is the exception</td>
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<td>• University migration from previous platform(s) to core technologies</td>
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<tr>
<td>• Usable data from teaching and learning activities available for research</td>
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<tr>
<td>• Meaningful engagement with faculty / teaching teams and with academic support professionals around needs</td>
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<tr>
<td>• Harvard-specific technology enhancements and applications generated by open source community</td>
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<tr>
<td>• Program delivered on time and on budget</td>
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Meet our Team!
The Vision

Provide a continually evolving set of faculty-friendly, student-focused technologies that support teaching and learning across all Harvard schools, facilitate pedagogical innovation, and contribute to educational research.
The Plan

Provide core teaching and learning technologies to all Schools

Support pedagogical innovation and research on learning

Establish strong Harvard community based on partnerships with faculty and academic support professionals

Cultivate open source community around component development that complements core technologies
The Plan

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Provide core teaching and learning technologies to all schools
Canvas Migration: iSites Schools

Harvard's Canvas Training Course

CANVAS 101
A self-paced course

After a successful year-long pilot during the 2013-2014 academic year, and following in the footsteps of more than 800 other colleges and universities (including many of our Ivy Plus peers), Harvard is migrating to the open source learning management system (LMS) known as Canvas. Learn More >>

Canvas 101 is a self-directed training designed to get you up to speed quickly on using Canvas and its robust features for teaching and learning.

You can:
- Access the Quick Start for a broad Canvas overview.
- Complete the training in its entirety to gain a solid Canvas foundation.
- View only the content you need as a just-in-time resource while developing your course site.
- Refer to the site for Canvas examples, ideas, and best practices for teaching and learning.

Getting Started
- Complete the Course Orientation.
- If you are a returning participant, click Modules to access the Modules list.

Looking for instructor-led training?
- Visit the Teaching and Learning Technologies (TLT) events calendar for upcoming sessions of Transitioning to Canvas: Re-imagining Your Course Site, an instructor-led introduction to Canvas.
Canvas Migration: iSites Schools

Spring 2015 Courses (Actual)
Canvas Migration: iSites Schools

Spring 2015 Courses (Actual)

Fall 2015 Courses (Projected)
Canvas Migration: iSites Schools

Spring 2015 Courses (Actual)

Fall 2015 Courses (Projected)

Fall 2016 Courses (Required)
Canvas Migration: Non iSites Schools
Top Canvas Features

1. Clean user interface
2. Gradebook and SpeedGrader
3. Integrations across Canvas tools
4. Modules for organizing learning content
5. Communication stream
6. Extensibility through open standards
7. Mobile app
“We LOVE Canvas. It really is such a HUGE step forward.”

-- Eric Mazur
Balkanski Professor of Physics and Applied Physics
Migration Evaluation

• What: Survey
• Who: Faculty and students
• When: Toward end of each term
• Why:
  – Hear from community about successes / challenges
  – Inform our work of supporting the migration
  – Educate community about Canvas functionality
  – Track trends across semesters
TLT / School Partnership

TLT + School = Success!
Harvard’s Platform Strategy

Offer a single platform for all teaching and learning needs

Provide multiple platforms – with unified user experience, access to data, extensibility and interoperability – to support Harvard’s residential and online teaching and learning needs
Types of Learning Experiences

- Degree Programs
- Executive Education
- Other Learning Experiences
- MOOCs
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Online Program Series

COURSE CATALOG  ABOUT OUR COURSES  FREQUENTLY ASKED QUESTIONS

Popular Diets: A Quest for Proof

This course examines popular diet trends and outlines data-driven evidence about their efficacy. It inspects claims made by fad diets, explores their characteristics, provides evidence-based assessments...

Self-paced  FREE

Diet and Chronic Diseases

Healthy nutritional choices are closely associated with reduced risk of chronic diseases. This course explores food choices and patterns, studies their nutritional implications, and provides...

Self-paced  FREE

Obesity

This course offers compelling research analysis on obesity causes to help reverse the global obesity epidemic in adults and children. It provides statistics and trends, guidelines for obesity prevention...

Started Mar 24, 2015  FREE
Support pedagogical innovation and research on learning
Development Roadmap

Types of Development
1. Integrations with Harvard systems
2. Course administration tools
3. Teaching and learning tools
4. Development related to enabling extraction of data for educational research

Areas for Consideration
✓ User benefit
✓ Technical complexity
✓ Viability of alternatives
✓ Governance-driven priorities
✓ “Project management triangle”
# Development Roadmap

<table>
<thead>
<tr>
<th>Launched</th>
<th>In Process</th>
<th>Up Next</th>
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<tbody>
<tr>
<td>✓ Manage people tool enhancements</td>
<td>✓ Bulk course site creation</td>
<td>✓ Display of class list email addresses to teaching staff</td>
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<tr>
<td>✓ A/B testing tool (pilot)</td>
<td>✓ Adjustments to the self-service course site creation wizard</td>
<td>✓ Clarification of Canvas help options</td>
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<tr>
<td>✓ “AskUp” tool (pilot)</td>
<td>✓ Mailing lists for courses</td>
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<tr>
<td>✓ Shopping period enhancements</td>
<td>✓ Shopping adjustments for Fall</td>
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<tr>
<td>✓ Harvard viewable courses permission setting</td>
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<tr>
<td>✓ ID photos</td>
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<tr>
<td>✓ Credit status based sections</td>
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<tr>
<td>✓ Managing sections</td>
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<tr>
<td>✓ Course site creation and templating</td>
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<tr>
<td>✓ Student locations</td>
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<tr>
<td>✓ Lecture video display</td>
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<tr>
<td>✓ Library reserves list display</td>
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Pilot: Bringing HarvardX Content into Canvas Course Sites

VIDEOS ON EDX

In this example, taken from The Ancient Greek Hero, a passage of The Odyssey is delivered verbally, as they were originally performed. Although much of modern scholarship around these works is based off of written transcripts, you can see, edX instructors are able to do some really engaging things when presenting course material using video instead of in-person lecture or written text.

VIDEO

VIDEOS ON EDX

In this example, taken from The Ancient Greek Hero, a passage of The Odyssey is delivered verbally, as they were originally performed. Although much of modern scholarship around these works is based off of written transcripts of the poem, this video shows how much a human face and voice contributes to the ancient work of art. As you can see, edX instructors are able to do some really engaging things when presenting course material using video instead of in-person lecture or written text.
Pilot: A / B Testing Tool
Student Developer Program

What is AskUp?
AskUp is an educational tool to help you make sense and remember material you learn in class, at home, or in the hospital. It uses evidence-based principles to improve your learning.

What to do?
After any educational event—a lecture, patient encounter, a video—generate your own questions and answers. Periodically test yourself on your answers to make sure you remember the material. AskUp allows classmates to create questions and ask them on their questions as well.
Dashboard Views of Course Activity

Activity
Each bar represents the number of page views on that day. An orange bar indicates that some user took some action within the course on that day.

Submissions
Each bar is an assignment. The green layer represents the percentage of students that turned in their submission on time. Submissions that are late are yellow, and missing submissions are red.

Grades
Each bar is one assignment. The thin vertical whisker extends from the lowest score for any student in the course to the highest score. The thicker bar extends from the 10th percentile to the 90th, with the median marked.

aggregate

individual student
Extract Raw Data to Support Education Research
Establish community with faculty and academic support professionals
Teaching and Learning Community

Why?
• More than just a technology migration
• Need to meet teaching, learning, research needs
• Engage with faculty ... and those who support faculty

How?
• TLT / Schools
• Canvas Governance Group
• Coffee & Canvas
• Participate in existing convenings (e.g., HILT’s TLC)
Cultivate open source community around component development
Developer Community

Why?
• History of silos – working hard, not smart
• Inefficiencies of process and product
• TLT can’t do it alone – now we don’t have to

How?
• Gather academic developers from Harvard schools and organizations
  – Open bi-weekly sprint demos
  – Monthly developer convenings
  – Quarterly demo days
  – Summer hackathons
• Work with schools outside Harvard based on problem to solve
Wrapping Up
Update: Standard iSite Migration
Post-Program Plans

AcTS 1.0
TLT
TBD

AcTS 2.0
Other IT Summit Sessions of Interest

12:30 Brown Bag Seminar

- “Driving with Purpose: Logic Modeling the Standard iSites Migration” (HUIT)

1:10 concurrent session 2

- “Enabling Job-Embedded Professional Development through Learning Communities with Technology” (HGSE)
- “Canvas and the Case Method: Canvas at HBS” (HBS)
- “Academic Technology Support at DCE” (DCE)

2:25 concurrent session 3

- “Making the Case for UX” (HUIT)
- “Introducing the New My.Harvard Student Information System” (HUIT)
- “Digital Video @ Harvard” (HUIT)
- “Creating Digital Learning Units for International Policymakers” (HKS)
- “HBX, an 18-Month Adventure into the Cloud” (HBX)
Follow Our Progress

Teaching and Learning Technologies
A Harvard IT Strategic Initiative

HOME Overview Canvas People News & Events About

Student Developer Program
For undergraduate students with an interest and skill in software development

What is Teaching and Learning Technologies?
It's an exciting time for teaching and learning in higher education. This is as true at Harvard as anywhere. And with so many opportunities for learning in and outside the classroom, technology plays an essential role. Enter the Teaching and Learning Technologies (TLT) program. A Harvard

LATEST NEWS
DCE Leverages Canvas for Online Distance Learning
April 24, 2015
Taking advantage of Canvas, Extension School instructor Teo Nicolai ups the ante for distance learning courses. Read more

UPCOMING EVENTS
Transitioning to Canvas: Reimagining Your Course Site Training
MAY 13
Registration is required
9:30am to 10:30am
Location: Web Conference

TLT.harvard.edu
Questions? Comments?
Thank you!

Kristin Sullivan, Program Director

kristin_sullivan@harvard.edu
Appendix
Clean Interface

1. Course Navigation
2. Global Navigation
3. Breadcrumb Navigation
4. Content Area
5. Sidebar
6. Help Corner
Gradebook and SpeedGrader
Integrations across Tools

- Assignments
- Gradebook
- Syllabus
- Calendar

Same data, different lenses
Modules
Communication Stream

**Recent Activity**

- **2 Announcements**
  - HIST-101

- **1 Conversation Message**
  - Emily Boono

- **64 Assignment Notifications**
  - BIO-101, HIST-101, and EDT 201

- **9 Discussions**
  - HIST-101 and BIO-101

**To Do**

1. Grade Writing Assignment
2. Grade Expectations
3. Grade Theory
4. Grade Auto Assign w/non-submission
5. Grade Research Assignment

**Coming Up**

- Peer Review with Rubric
  - Today
- Unit 1 Quiz
  - Today
- Peer Review Assignment Test Due Date
  - Friday
- Initial Ideas about Biosynthesis
  - Tuesday

7 more in the next week...
Extensibility

External Apps

Apps are an easy way to add new features to Canvas. They can be added to individual courses, or to all courses in an account. Once configured, you can link to them through course modules and create assignments for assessment tools.

Click here to see some LTI tools that work great with Canvas. You can also check out the Canvas Community topics about LTI tools here.
Mobile

Notifications

- September 26, 2014
  Problem Sets

- September 22, 2014
  Sections and Office Hours

- September 17, 2014
  Assignment Created - Roll...
  Academic Technology 101
  Assignment Created - Roll...
  Academic Technology 101

Profile

Kimberly Edelman
kimberly_edelman@harvard.edu

- My Files
- About
- Help
- Logout

Help

Courses

Favorite Courses
- Academic Technology 101
  acadtech101
- Conflict of Laws test
  nc-test-dib-col
- Edelman Canvas Course
  edelman_canvas
- Kimberly Edelman / October Demo
  Kimberly Edelman Demo
- Kimberly's Demo Course
  demo-Kimberly
- Spring 2014 Canvas Pilot Evaluat...
  spring-2014-program-assessment

Groups

Blue Group
Academic Technology 101