Software to Fit T&L Practices

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Sakai Project Summary

• Building Open Source Collaboration and Learning Environment (CLE)
• Indiana, MIT, U. Michigan, Stanford, Berkeley, Foothill
• Funded from Mellon Foundation through 2005
• Releases 1.0 10/04, 1.5 1Q05, 2.0 2Q05
• Goal: Version 2.0 will be comparable to commercial offerings
Sakai’s Goals (per Chuck)

• Stop institutions from writing “yet another” local CLE
• Provide Open Source reference implementation of a CLE
• Encourage portability between commercial and non-commercial CLE’s
• Ultimately: Act as base for true innovation in T & L
Review: States of Water...

- Frozen: Vibrating and stuck in a crystal structure.
- Melting Point: Transition from frozen to liquid.
- Liquid: Fluid flows, often downhill, cannot fill all space, tends to pool at minimum energy, surface tension exists.
- Boiling Point: Transition from liquid to gas.
- Gas: Freely flows throughout entire space, space is evenly filled.

Time / “Heat” Applied --->
For the past 10 years we have all been all “stuck”, vibrating in place, seemingly with no flexibility, but with plenty of energy.
Latent Heat of CLE Innovation

- Frozen - Many different "imperfect" CLEs and LMSs
- Melting Point
- Liquid - We can tend toward common CLEs, and/or portability makes the choice of CLE irrelevant

Building a reference implementation of a conventional CLE...

Time / "Heat" / Money / Energy Applied ---→
Safe base level functionality empowers new thinking, approaches, and standards, (i.e. good chaos). We enter a period of chaotic freedom.

Time / “Heat” / Money / Energy Applied --->

Latent Heat of CLE Innovation

Better -->

Boiling Point

Melting Point

Frozen - Many different “imperfect” CLEs and LMSs

Liquid - We can tend toward common CLEs, and/or portability makes the choice of CLE irrelevant

Sakai
True change in T & L happens in ways can not anticipate. CLE/LMS’s can take completely new forms and directions...

Sakai

Better -->

Frozen - Many different "imperfect" CLEs and LMSs

Boiling Point

Liquid - We can tend toward common CLEs, and/or portability makes the choice of CLE irrelevant

Gas - Innovation can spread to cover the space of T & L practices

Time / “Heat” / Money / Energy Applied --->
T&L Innovation: Point Solutions

- There is a wide diversity of opinion when it comes to Teaching and Learning Practice and how technology is best used
- Those at the innovation front for T&L almost always evolve their own “point solutions”
- There is an impedance mismatch between these “point solutions” and conventional LMS Systems
- Until point solutions mature and become “conventional”, LMS flexibility and standards for building/integrating many different tools is necessary
Anatomy of a Point Solution for T & L

- Point solutions are by nature deep explorations down a possibly fruitful path by a passionate person or small group.
- Hard to get traction because it is not a “complete” solution
- Often projects end up starving to death for lack of attention
- Often it is a situation where a poet is ahead of their time
One Point Solution:
ProjectPad Audio Annotation
ProjectPad Details

- Jonathan Smith, Northwestern University (jas@northwestern.edu)
- www.at.northwestern.edu/spoken/
A Story of a Point Solution

Web Lecture
Archive
Project
www.wlap.org
syncomat.com

Tools And Technologies

Lecture Object

Tools And Technologies
Sad Story

• 1996 - Invented Sync-O-Matic (Real Media)
• 1997 - 1999 Gave continuous talks / demos at conferences
• 1998 - Tried to commercialize product through my job (It was the 90’s after all)
• 1999 - Switched jobs (partially due to bitter experience with intellectual property folks)
• 1999-2001 Re-Invented the idea in ClipBoard-2000 (Quicktime/Apple)
More Sad Story…

• 2001 - Switched jobs to the private sector to commercialize technology and deploy into the M.L.T.
• 2001 - Microsoft dropped M.L.T.
• 2003 - Switched jobs again to work on open source CLE (CHEF)
• 2004 - Became part of Sakai (broader open source CLE)
The Future of my Sad Story (?)

• 2005 - Sakai completes and is installed at 20 universities :)
• 2006 - I take a few months, reinvent ClipBoard and integrate it into Sakai so people can *finally* truly use it
• 2007 - Hundreds of people try my idea and it turns out it was a bad idea - so I invent something else…

• Moral: I have been waiting 10 years, and changed three jobs to find a framework to deploy my idea so people could use it. Turns out the only way it was going to happen was to help build it myself.
We must learn to walk before we fly. And we must start at the bottom and work upwards…
Sakai: Empowering Point Solutions

• By providing a stable base of (possibly boring) capabilities, Sakai will empower and support the activities of innovative point solutions.

• Though the Sakai Educational Partners Program (SEPP) point solutions can begin to cluster together and form new stable bases for new innovation to launch from

• With sufficient standards, the choice of a LMS/CLE will not be so crucial
IMS Tool Portability Project

- Started as a SIG for Sakai to interact with commercial LMS companies
- Approved 11/2004
- Blackboard, CETIS, MIT, Sun, Indiana, WebCT, University of Michigan …
- Goal: By Alt-I-lab in July 2005 to have demonstrated a single application working in Blackboard, WebCT, and Sakai.
By July 2005 - Demonstrate
How it Works

CLE Environment

Launch Control

Web Services

External Web Application

Application Code

Session And Services Bootstrap

1

5

6

2

4

7
Summary

• Sakai is “unfreezing” the LMS market in a number of important ways
• By gathering open source efforts together, we collectively “show up on radar”.
• By solving the basics of the CLE space, Sakai provides a launch platform for true innovation in approaches to T & L
• By investing in standards efforts, Sakai insures the forward progress will be across-the-board and not just for the adopters of Sakai.
Observations

• Hype does not last - Sakai must deliver solid software before the Sakai hype starts to fade

• The management and leadership within Sakai are very driven - we have a structure where the board is made up of very active customers
Thank you for your time..

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