

Functionality Mash Up - Evolving to the Next Generation of Learning Management Systems

Dr. Charles Severance

University of Michigan School of Information

IMS Global Learning Consortium

www-dr-chuck.com

April 30, 2008 - JA-Sig Conference



IMS Global Learning Consortium

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Charles Severance

Developer Network Coordinator
Email: [Email](#)

Biography

Dr. Charles R. Severance

Charles is currently the IMS GLC Developers Network Coordinator and Clinical Assistant Professor in the School of Information at the University of Michigan. Previously he was the Executive Director of the Sakai Foundation and the Chief Architect of the Sakai Project.

Charles is the Author of the book High Performance Computing, Second Edition, published by O'Reilly and Associates. Charles has a background in standards including serving as the vice-chair for the IEEE Posix P1003 standards effort and edited the Standards Column in IEEE Computer Magazine from 1995-1999.

Charles has taught Computer Science courses at the University of Michigan and Michigan State University.

Charles has developed several tools to assist in the production of multimedia web-based lectures. The tools are called the Sync-O-Matic 3000 and ClipBoard-2000.

Charles is active in television and radio as a hobby, he has co-hosted several television shows including "Nothin but Net" produced by MediaOne and a nationally televised program called Internet:TCI. Charles appeared for over 10 years as an expert on Internet and Technology on a call-in radio program on the local Public Radio affiliate (www.wkar.org).

Chuck's hobbies include off-road motorcycle riding, karaoke and playing hockey.

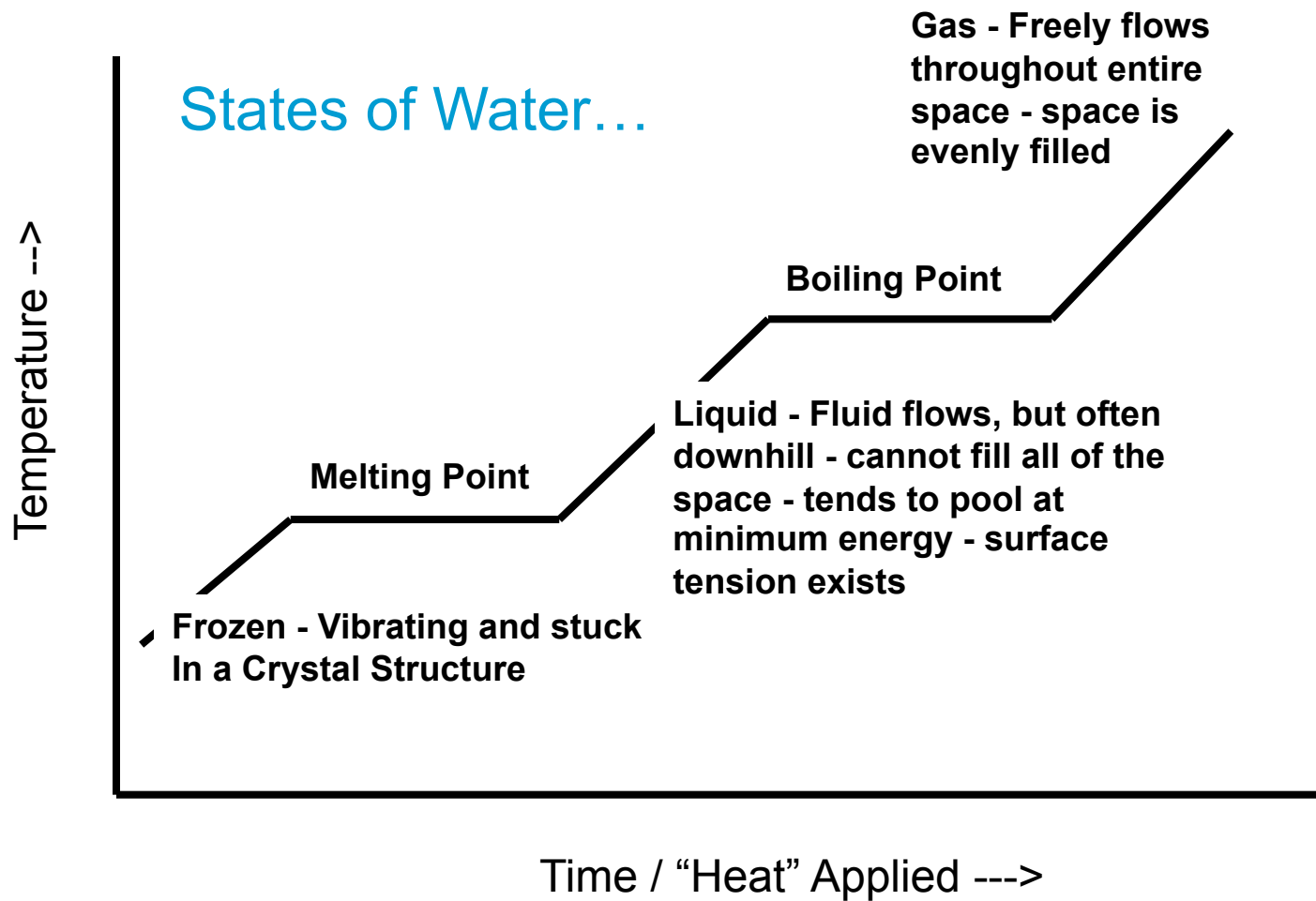
Charles has a B.S., M.S., and Phd. in Computer Science from Michigan State University.



Outline

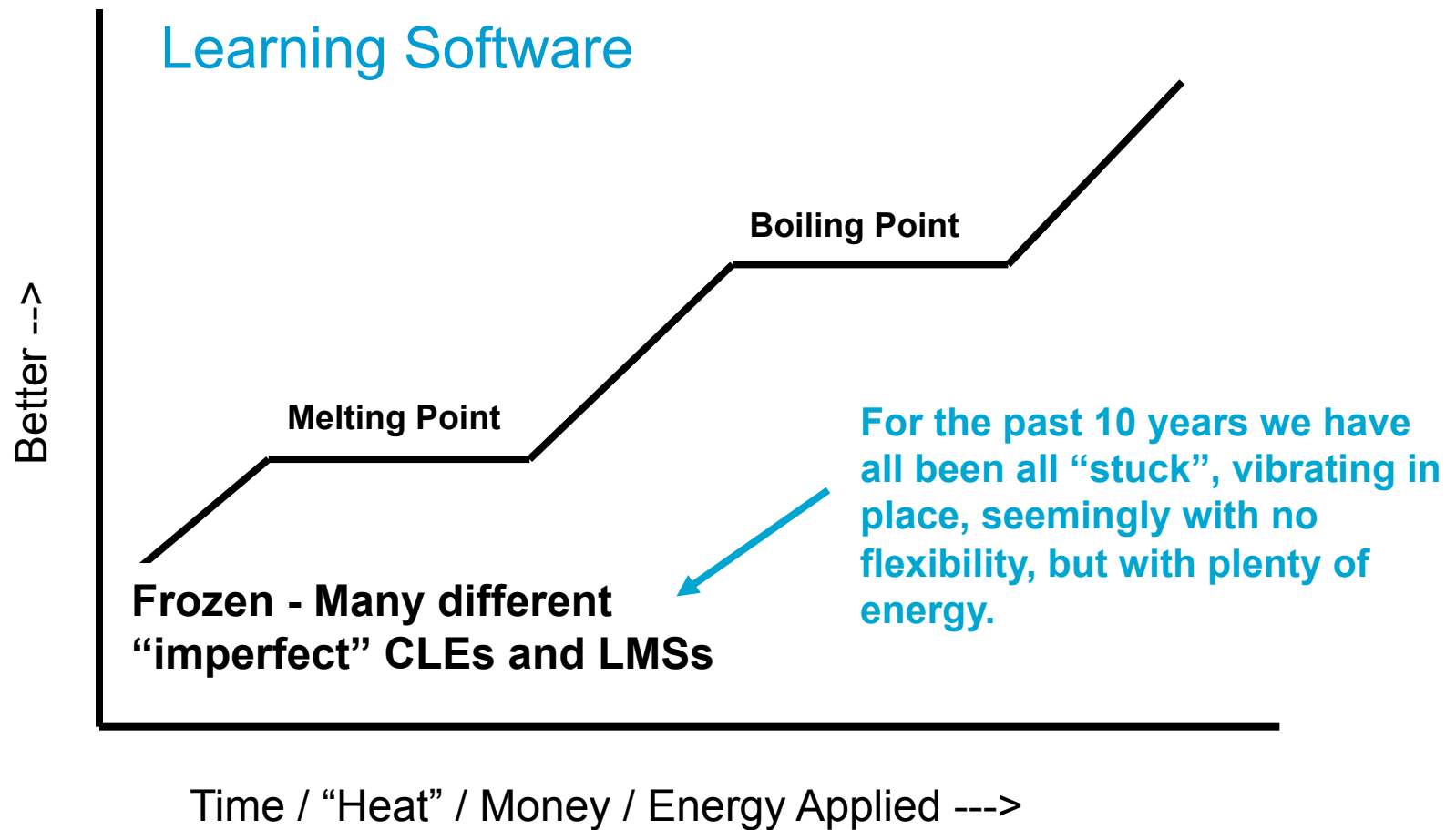
- Looking back at looking forward (2004)
- Student-Centered Learning
- What will the “next” LMS look like?
- IMS Learning Tool Interoperability 2.0
- Sakai/IMS Google Summer of Code
- Looking ahead in Sakai and Moodle

States of Water...



Dec-2004

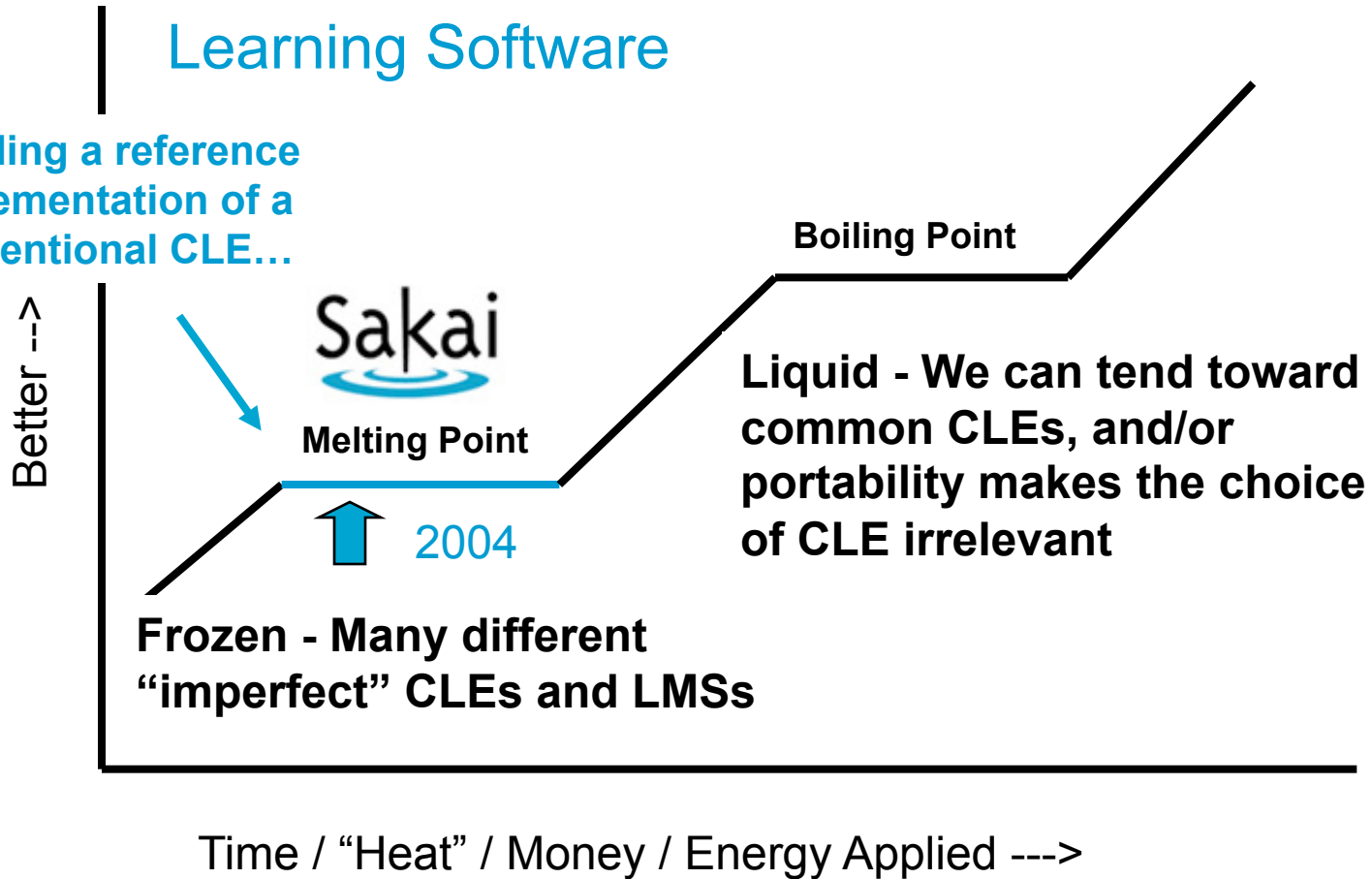
Latent Heat of Learning Software



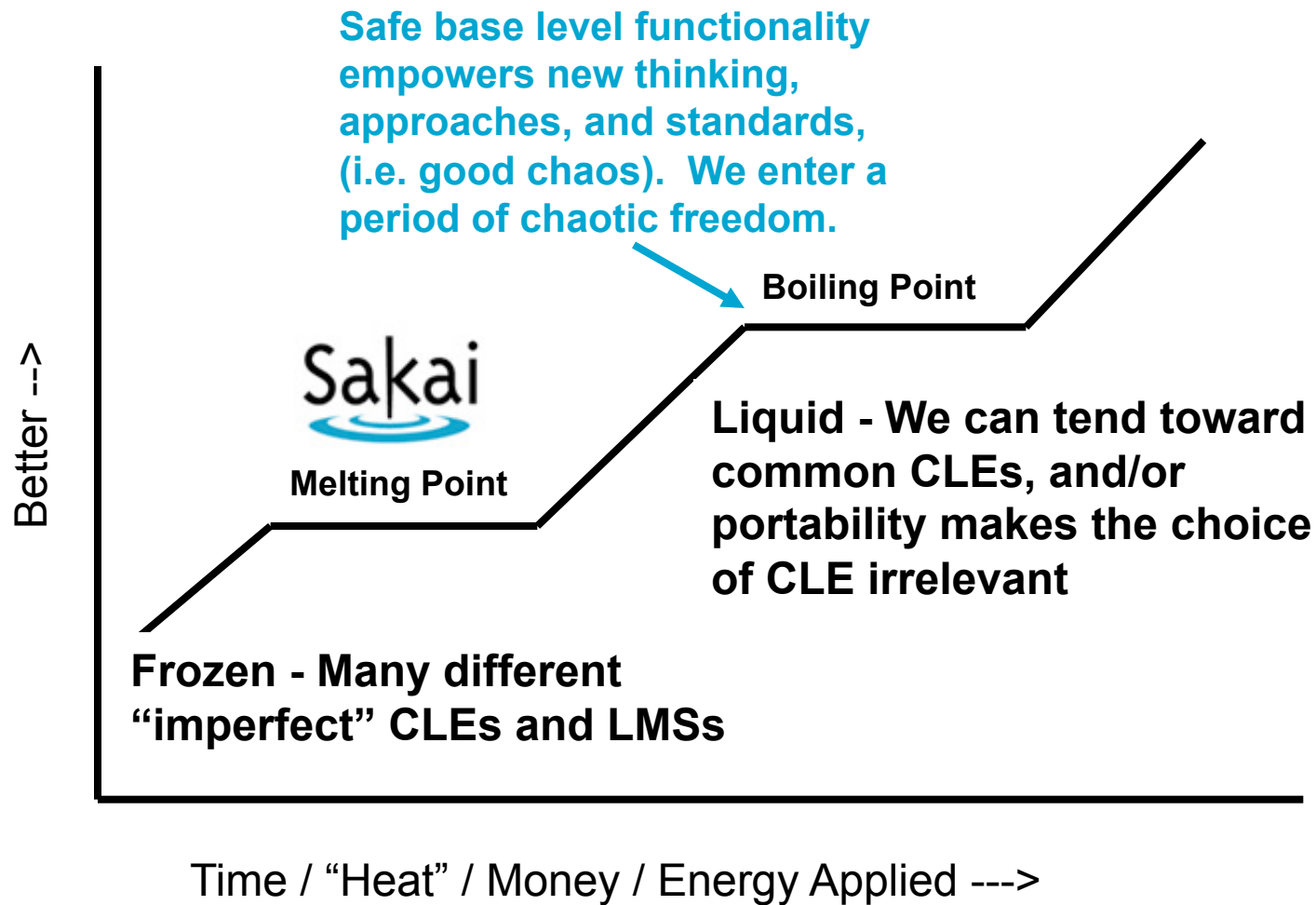
Dec-2004

Latent Heat of Learning Software

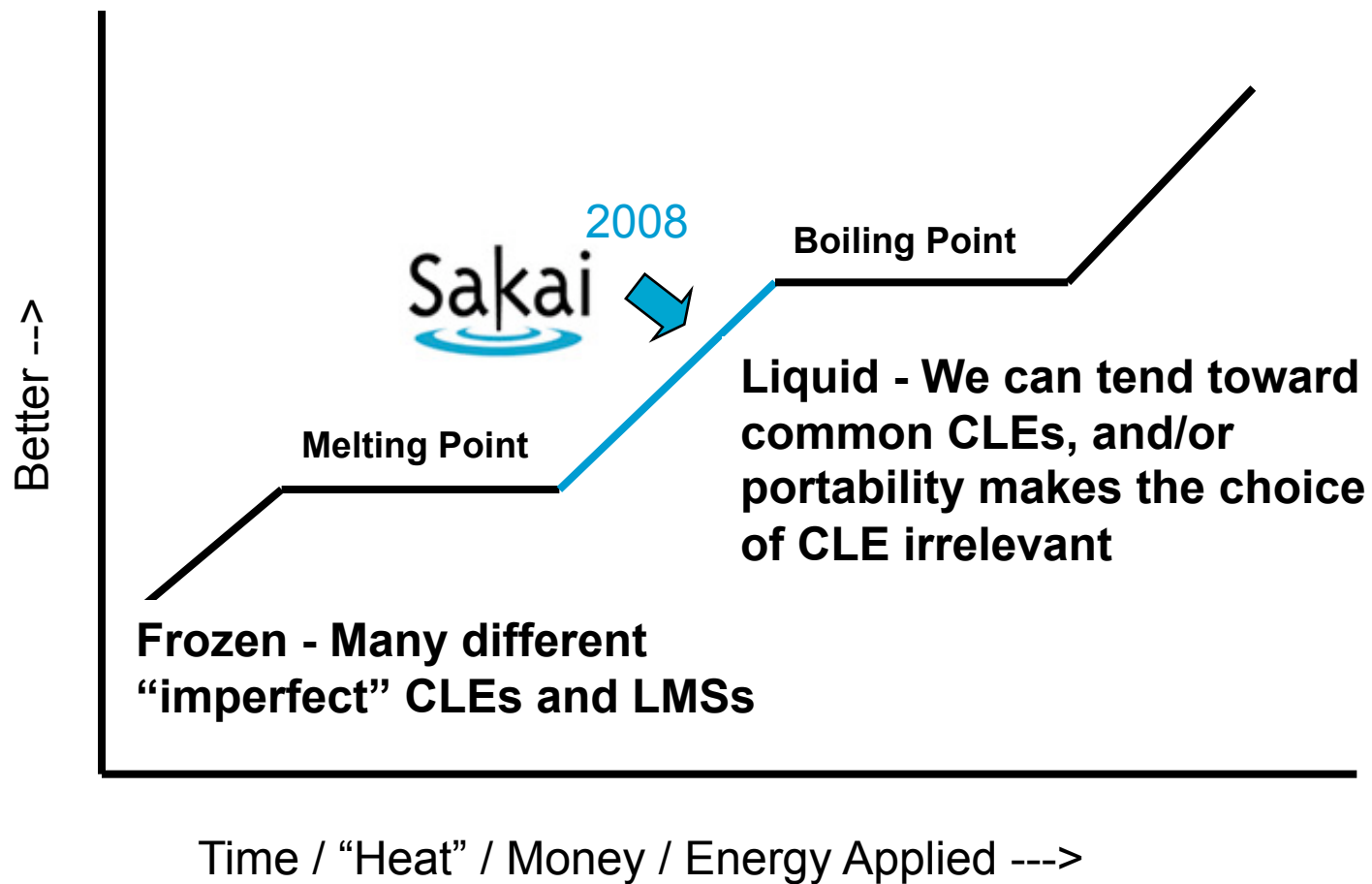
Building a reference implementation of a conventional CLE...



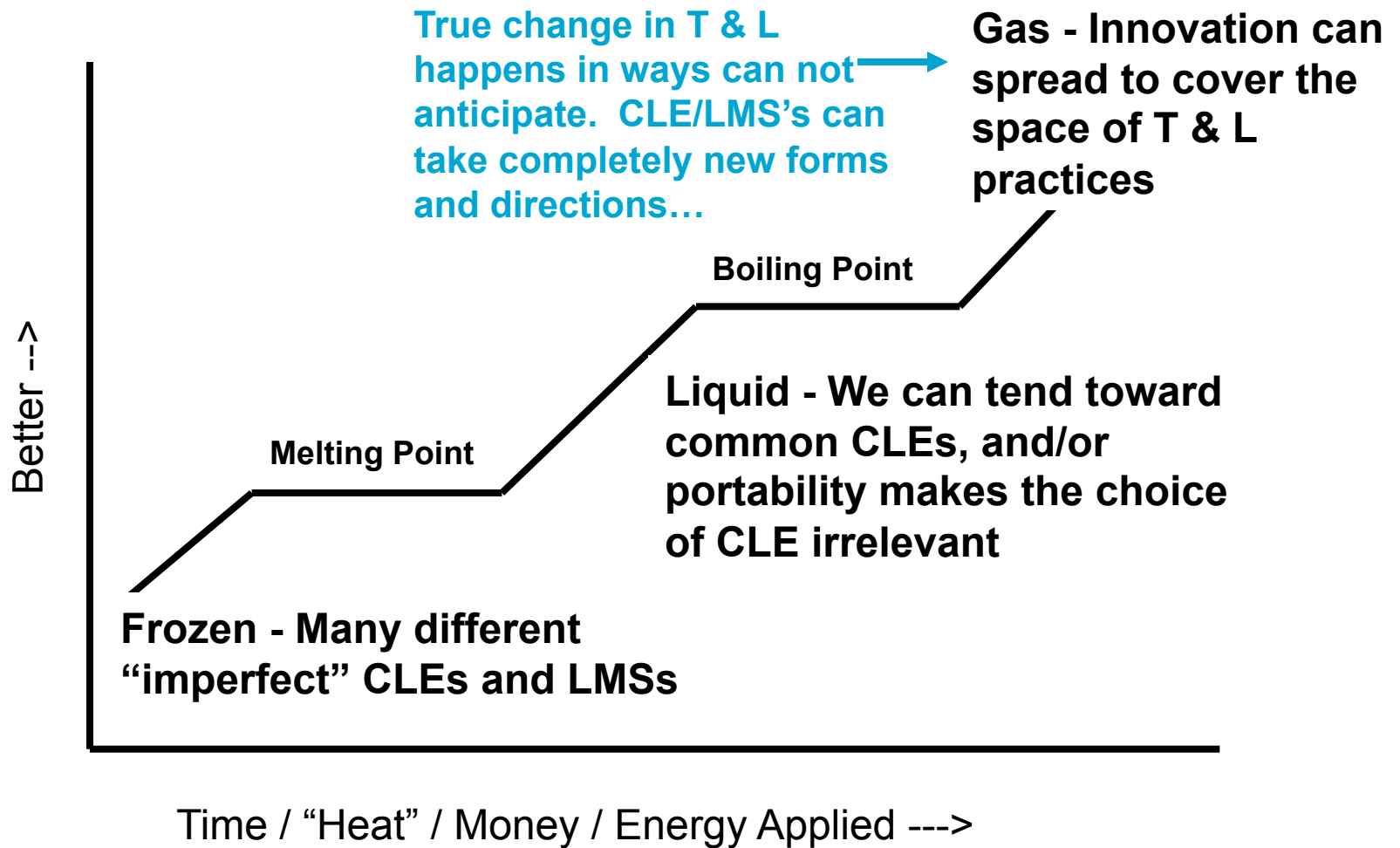
Dec-2004



Dec-2004



Dec-2004



Dec-2004

More Than Free Source Code

Open Source leads to Open Thinking
and Open Innovation

Open Everything

- Open Source
- Open Intellectual Property
- Open Thinking
- Open Ideas

- Open Innovation

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dScribe
Opportunities for
students & faculty

U-M community | Dentistry

collaborators | Creative Commons: ccl_earn

collaborators | OCW Consortium

collaborators | Hewlett Foundation



Open.Michigan is a
OCWC—find more
are opening resourc

U-M community | Medical School



M AND FLORA
LETT
ODATION

Flora Hewlett
generously supporting
with a substantial
work in OER.

David Stern, M.D., Ph.D. Talks About Global REACH



open.blog

This is a collaboration and discussion space for the Open.Michigan community. It's a space where we can stay informed about our various projects, share experiences, and ask for feedback. [More >](#)



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Moodle .versus. Sakai

- Many schools compare and choose
- Neither wins all the time
- Everyone realizes their weaknesses
- Everyone gets stronger

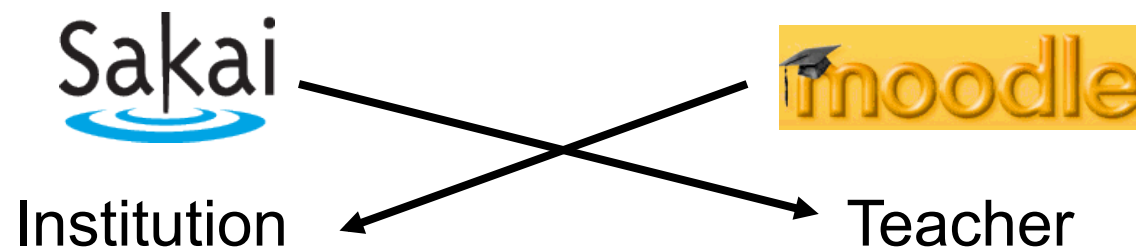


Ideas Flow...

- Moodle adds flexible role system (Sakai)
- Sakai is designing flexible course setup and layout (add Resource) (Moodle)
- Moodle is building Learning Activity Management System (LAMS) Sakai wants this too..
- Moodle is adding web service APIs (Sakai)...
- Communities and adopters are glad to see teaching and learning improving

Addressing Weaknesses

- Moodle is working on increasing its appeal to enterprise institutions
- Sakai is working on building interfaces that teachers will love



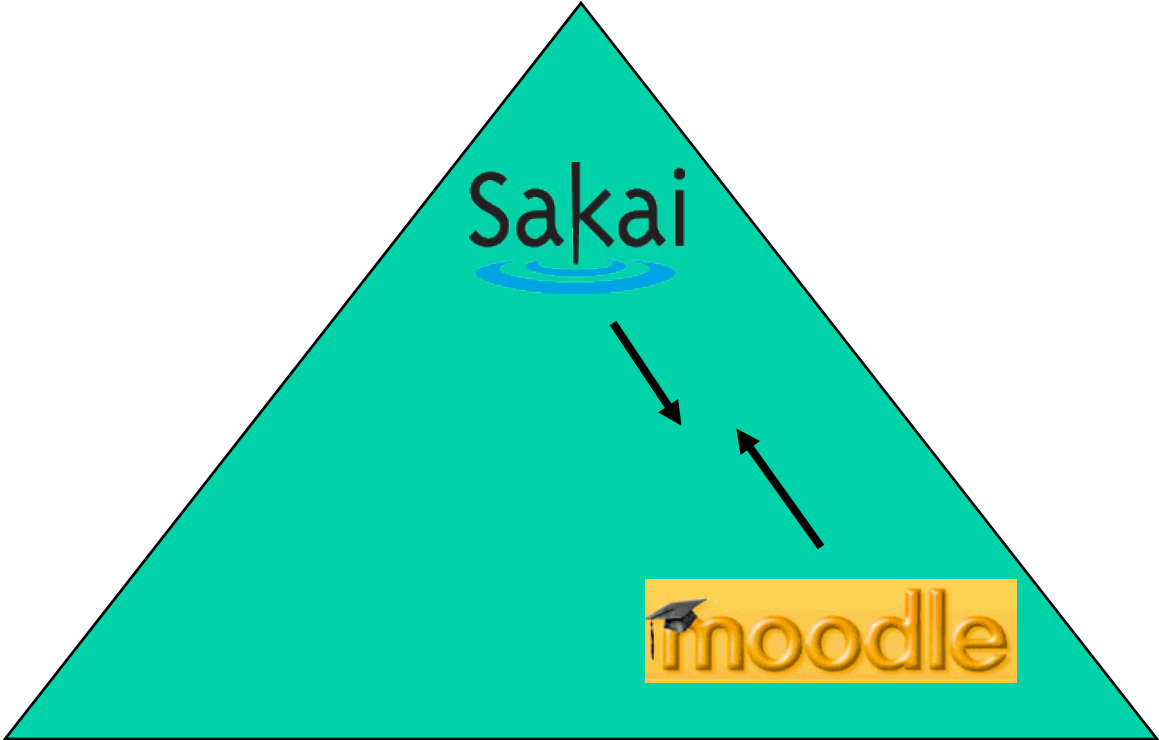
Institution

Sakai

Student

Teacher

moodle



Institution

Serving the needs
of the student...

Sakai

Student

facebook

moodle

Teacher

Institution

Facebook is part of a student's life. Students *choose* to use Facebook.

Sakai and Moodle are something students *must* use for a grade.

Sakai

Student



moodle

Teacher

Student Centered Learning

What can we learn from Facebook?

Can we make a teaching environment
students *want* to use?



University of Michigan Medical School

- What is beyond Sakai and Open Source Portfolio?
- In 2007, the put out a Request for Information (RFI) for a student centered learning system.
- They had a very clear vision of what they wanted
- Nothing in the marketplace even came close to their requirements



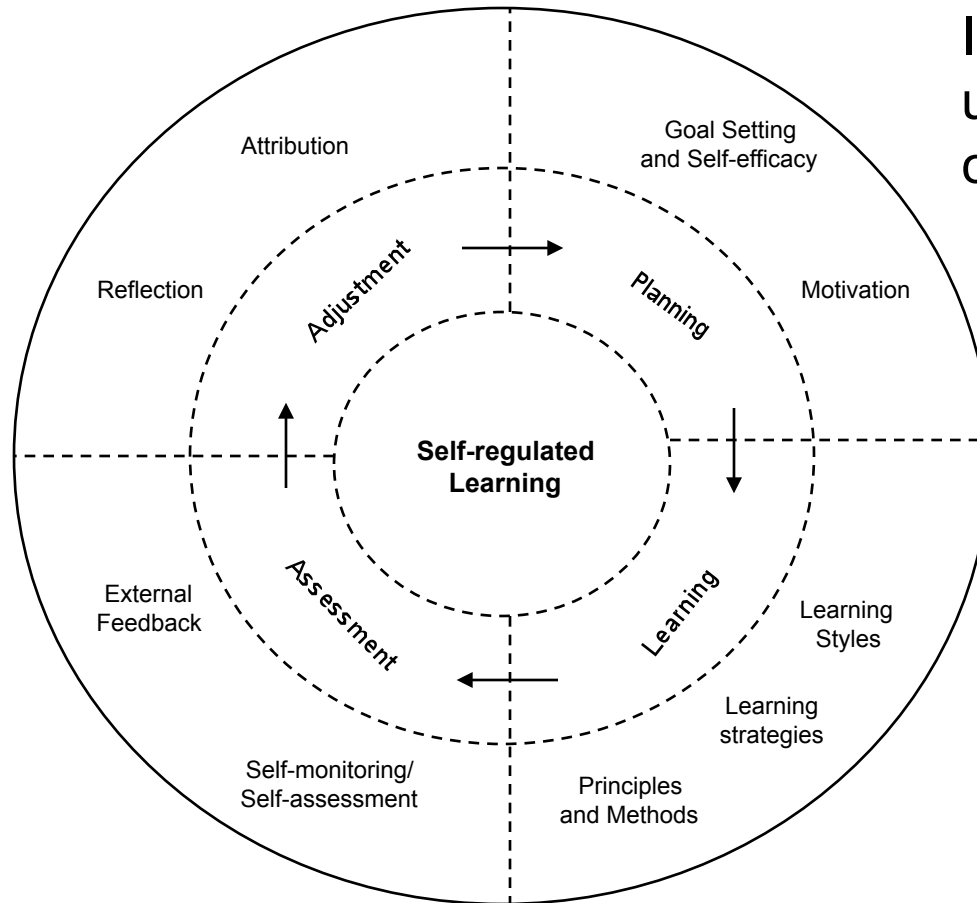
Learning Management System: Medical School Requirements

- Student-centered
- Self-regulated learning
- Competency-oriented - national and local competencies
- 3 distinct but interactive levels
 - Institutional
 - Personal
 - Portfolio

Casey B. White, Ph.D.
Joseph C. Fantone, M.D.
March 2007

A Model for Self-regulated Learning*

Inner ring is the users's learning cycle.



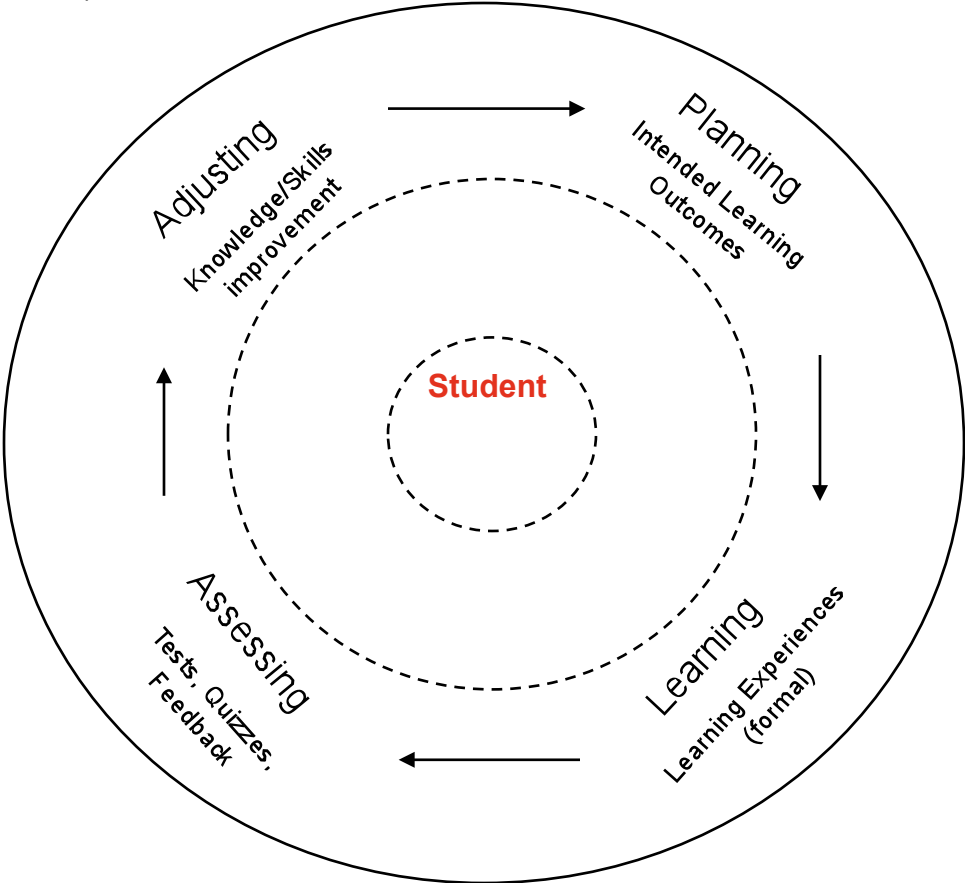
Outer ring is the institution's learning cycle.

• White CB, Gruppen LD. 2007. Self-regulated Learning in Medical Education. Association for the Study of Medical Education: Understanding Medical Education.

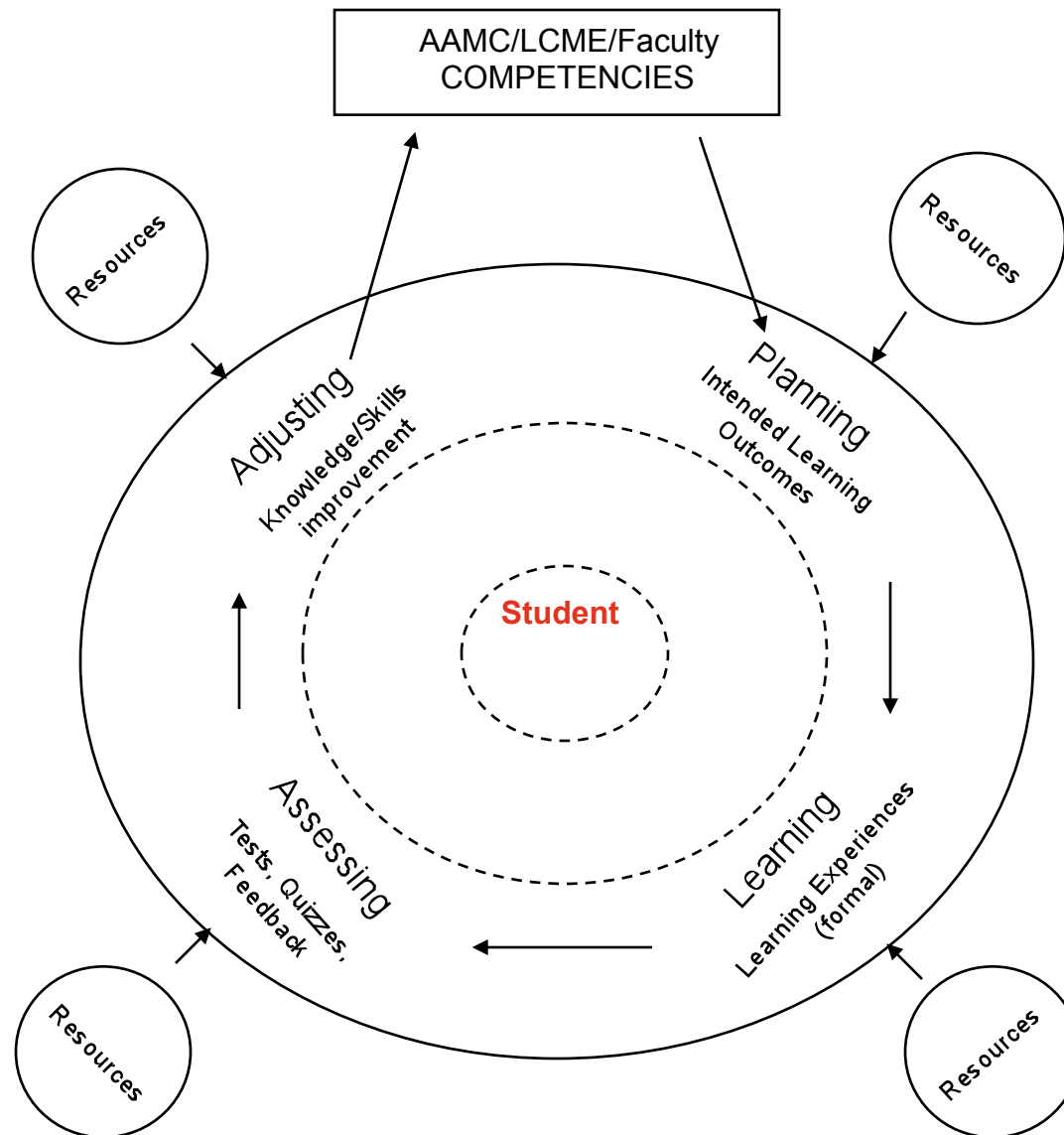


Self-regulated Learning

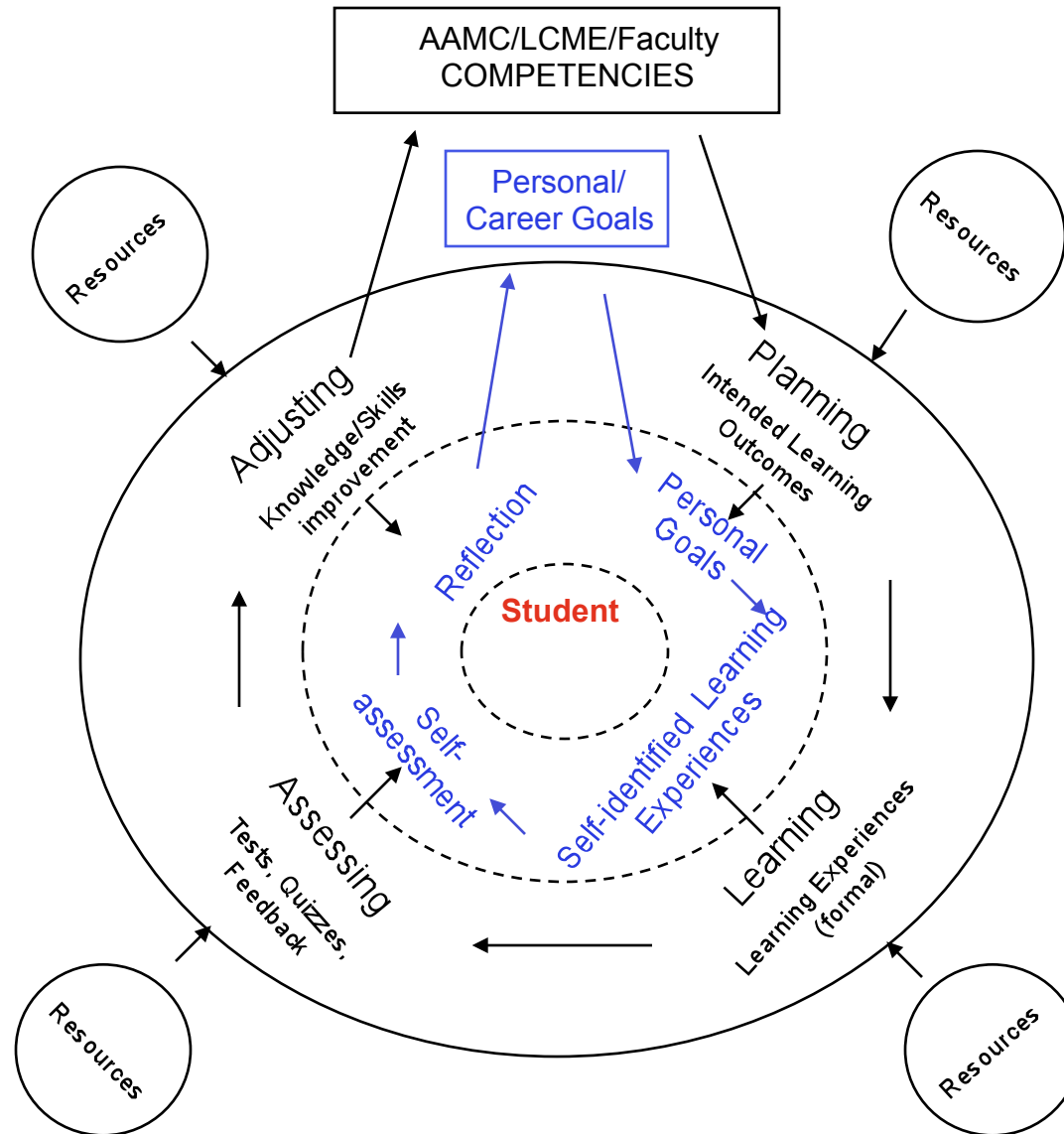
- 4-phase cycle
- Continuous (formative/summative)
- Feedback = key
- Student responsibility & Accountability
- Lifelong learning



Responding to the need for tracking of competencies defined by others.

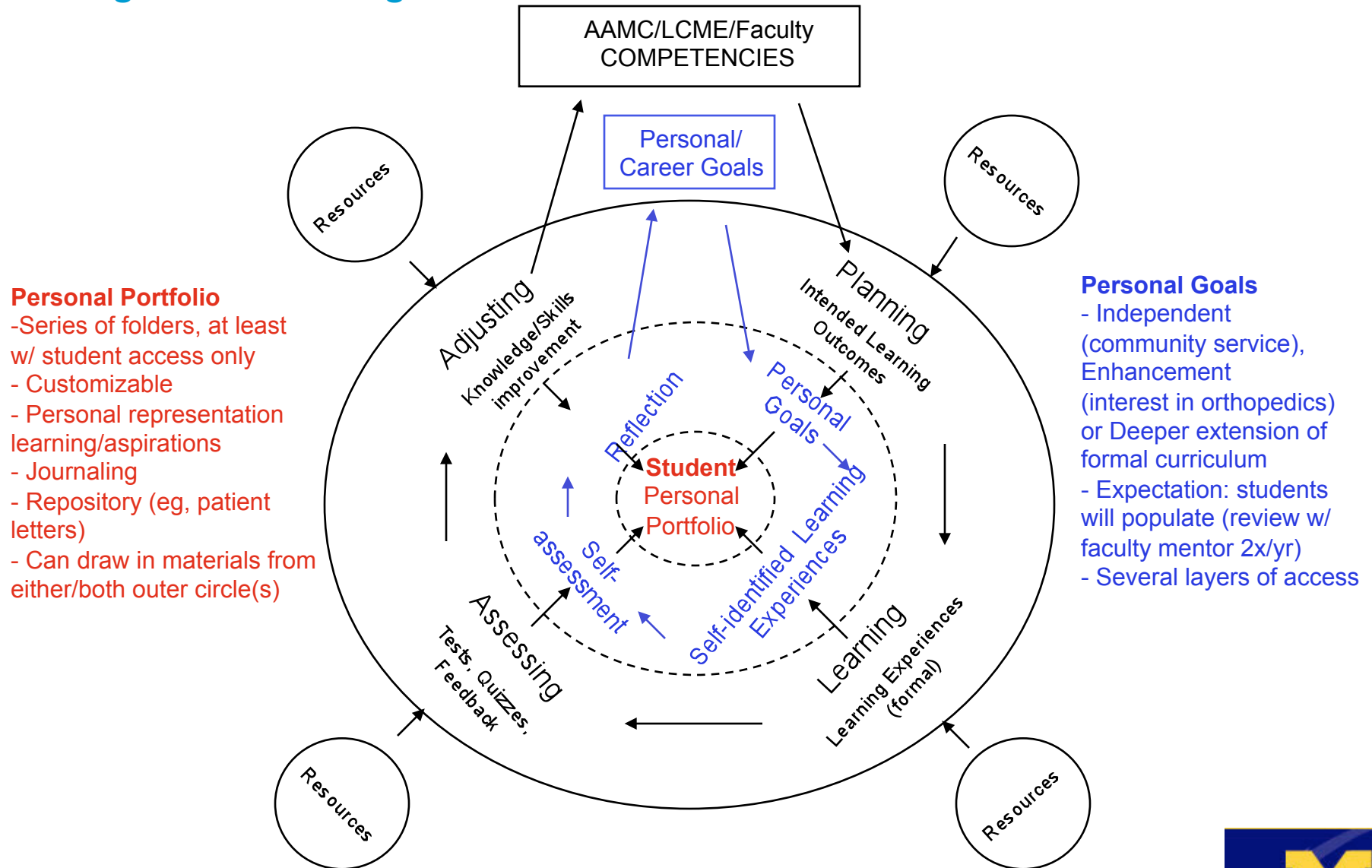


The student process operates within the institutional process under the student's control



- Personal Goals**
- Independent of (community service), enhancement to (interest in orthopedics) or deeper extension of formal curriculum
 - Expectation students will populate (review w/ faculty mentor 2x/yr)
 - Several layers of access

Learning Management System: Self-regulated Learning Model



Personal Portfolio

- Series of folders, at least w/ student access only
- Customizable
- Personal representation learning/aspirations
- Journaling
- Repository (eg, patient letters)
- Can draw in materials from either/both outer circle(s)

Personal Goals

- Independent (community service), Enhancement (interest in orthopedics) or Deeper extension of formal curriculum
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Learning Management System: Self-regulated Learning Model

Characteristics across levels

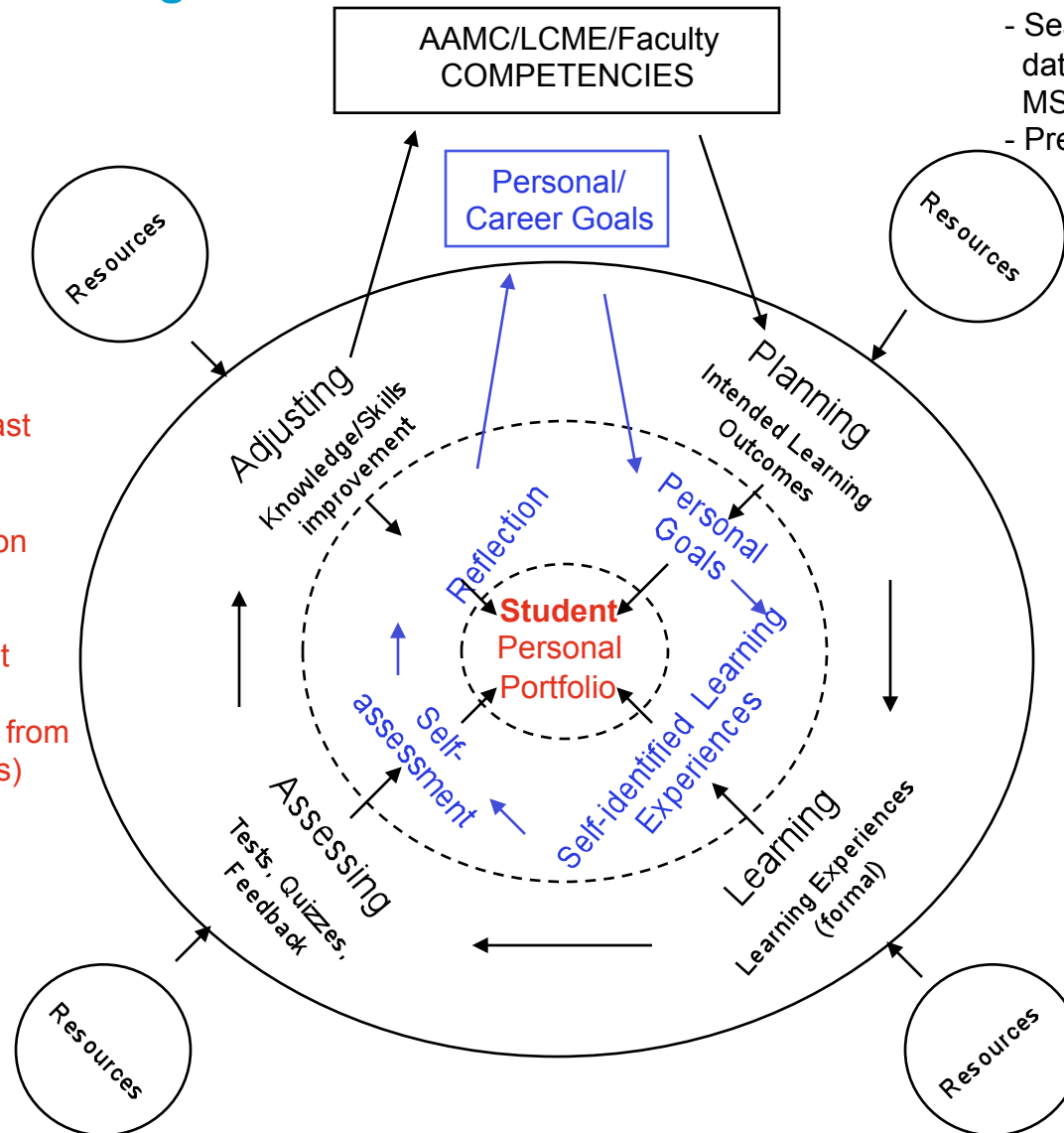
- Search engine
- Drag and drop
- Seamless access to web and databases (Sakai, Portal, MSIS/Oracle, PubMed, etc.)
- Presentation functionality

Personal Portfolio

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Personal Goals

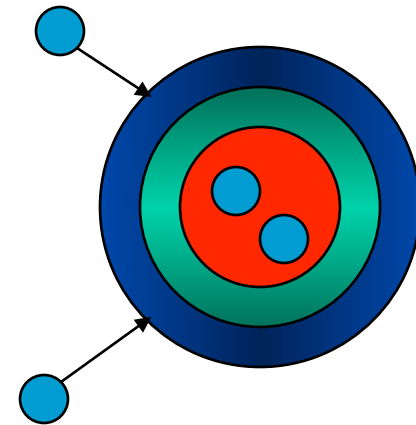
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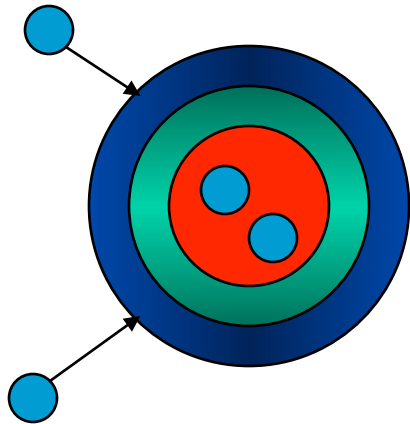




The Social Dimension

- These pictures focus on the view from the institution into the individual
- The processes and flows are around and toward the student at the center





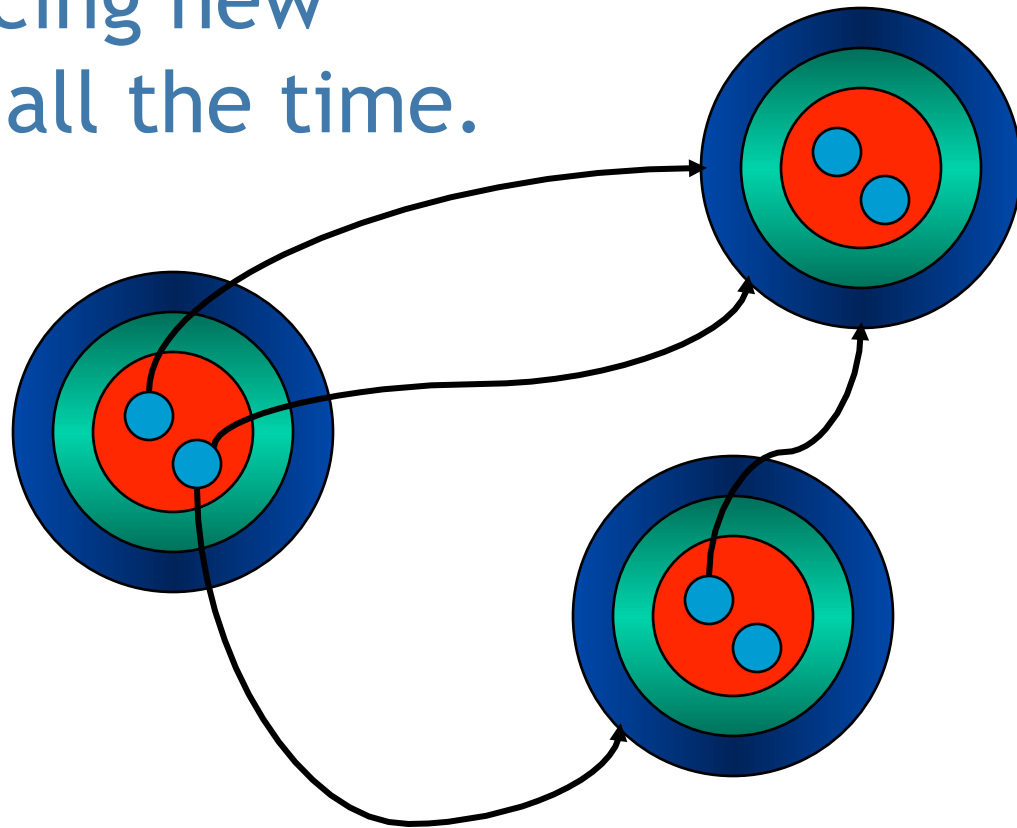
What are we doing with the resources?

What are we putting in our portfolio?

Do those things just sit there forever?



The “learning turbines”
are producing new
resources all the time.



These can be people or even
groups - constantly making,
consuming, and enhancing
resources.

What will the Student Centered Learning System look like?

A journey of 1000 miles begins with a single step...



Michigan Medical School

- The desired software cannot be purchased or downloaded. Period. Nothing comes close.
- Lets just write it. Lets build/adopt/extend a student centered learning environment.
- This is not a new feature in an LMS - this must be for the student. It must compete with Facebook.



Teaching and Learning @ Michigan

- Deeply involved in Sakai and OSP
 - 5 FTE working on Sakai
 - 4 FTE working on Open Source Portfolio
- Building Open Courseware / Open Educational Resources
- Michigan also runs BlackBoard on its Flint and Dearborn Campuses
- SharePoint is increasingly used in administrative settings



First: Survey The Market to Learn from others

- Not happy with classic LMS software like Sakai and Moodle
- Look for personal portfolio systems and content management systems and Facebook
- Start from the student perspective and work outwards...



Things to Look At...

- LAMS
- Moodle Portfolio
- Open Source Portfolio
- Mahara
- Chisimba
-
- Elgg
- Drupal
- Plone
- Joomla
- Facebook
-

Always think “personal” not institutional. The institution has an interest - but the user interface must be personal fit institutional needs into a user-centered interface.



portfolio.evaluation.ulcc.ac.uk

ulcc
University of London
Computer Centre

Portfolio Evaluation Moodle 1.9 Site

You are logged in as Charles Severance (Logout)

Main Menu

Mahara:

- Mahara Portfolio
- Mahara Evaluation Form
- Mahara Evaluation Quick Start
- Mahara User Guide

My Stuff:

- My Stuff Portfolio
- MyStuff Evaluation Form

Elgg:

- Elgg Portfolio
- Elgg Evaluation Form
- Elgg User Guide

MP: Portfolio on offer as

Welcome to ULCC's Portfolio Evaluation

As part of our E-learning service we have been evaluating tools to support the 'personalisation of learning' agenda. Please follow the links and information in the left menu to access the different platforms and feedback forms.

"Personalisation of Learning"

ULCC are exploring e-learning solutions to raise the quality of personalised learner experience and have initially identified three strands of development:

- Personalised Learning Plans (PLP):** Support for the process of learning through mapped routes from a starting point to the achievement of individual goals, for example completing frameworks, or gaining sustainable employment. ULCC have developed a [plug-in solution](#) for Moodle to manage PLPs.

ULCC Links

- ULCC Web Site
- ULCC Moodle
- ULCC ILP Demo

Thanks to Nate Angell's Blog Post


Note: The following evaluation and conclusions were only based on about 30 minutes of playing with each of these applications. It is brainstorming and **nothing more**. That means that this is not very scientific and should absolutely **not** be used to guide institutional major investments or strategic directions.

But *at the same time*, how long will students tolerate learning a user interface that theoretically was built for them.

Take all of this with a grain of salt - its intent is to make you think not give you conclusions. This section is for entertainment purposes only.



Moodle Portfolio

 **ulcc**
University of London
Computer Centre


Portfolio Evaluation
Moodle 1.9 Site

You are logged in as Charles Severance (Logout)

MyStuff

Overview Spaces Tags Items Sharing Pinboard

MyStuff / Overview

 **Charles Severance's stuff**
New items | New note |

Recent activity

04.04.2008 @ 06:08
No recorded activities


Storage

F


0mb of 500mb used



Moodle Portfolio

MyStuff 


Overview Spaces Tags Items Sharing Pinboard


MyStuff / Items / Manage + New  Browse

With selected... **Active** | [Archived](#) | [Deleted](#) | [A](#)


No items found.

<input type="checkbox"/>	Title & tags	Form	Modified
<input type="checkbox"/>			
<input type="checkbox"/>			
<input type="checkbox"/>			
<input type="checkbox"/>			


 **University of London Computer Centre**

Portfolio Evaluation Moodle 1.9 Site 

You are logged in as Charles Severance (Logout)

MyStuff 

Overview Spaces Tags Items Sharing Pinboard

MyStuff / Tags / Manage  Browse

<input type="checkbox"/>	Tag	Tagged	Modified
<input type="checkbox"/>	Copies	0	
<input type="checkbox"/>	Tagless	0	
<input type="checkbox"/>	documents	0	
<input type="checkbox"/>	hobbies	0	
<input type="checkbox"/>	life	0	
<input type="checkbox"/>	links	0	



Elgg- It is clearly about “you”


A screenshot of the Elgg user interface. At the top, there is a navigation bar with tabs for 'Your Blog', 'Your Files', 'Your Network', 'Your Resources', and 'Your Profile'. On the right side of this bar are links for 'Account settings' and 'Log off'. Below the navigation bar is a blue header area containing the 'ulcc' logo (University of London Computer Centre) and the text 'ULCC Elgg Evaluation Site'. To the right of the logo is a search box with a dropdown menu set to 'all' and a 'Go' button. Below the search box are links for 'Browse' and 'Tag cloud'. The main content area is titled 'Charles Severance :: Feeds' and includes links for 'Feeds', 'Publish to blog', 'View aggregator', and 'Popular Feeds'. The text explains that feeds are information streams from other sites and provides instructions on how to add a new feed. Below this text is a form with a text input field containing 'http://', a 'Subscribe' button, and a 'Recent Activity' section with a link to 'View your activity'. On the right side of the page, there is a user profile card for Charles Severance, showing his profile picture, name, and links for 'Tags' and 'Resources'.

Elgg is social software



Elgg - where you fit...

Your Blog | Your Files | Your Network | Your Resources | Your Profile [Account settings](#) [Log off](#)


 **ULCC Elgg Evaluation Site** -- all --
[Browse](#) | [Tag cloud](#)

Charles Severance :: Friends I have linked to

[Communities](#) | [Owned Communities](#) | [Community invitations](#) | [Friends](#) | [Friend of](#) | [Friendship requests](#) | [Access controls](#) | [Invite a friend](#)

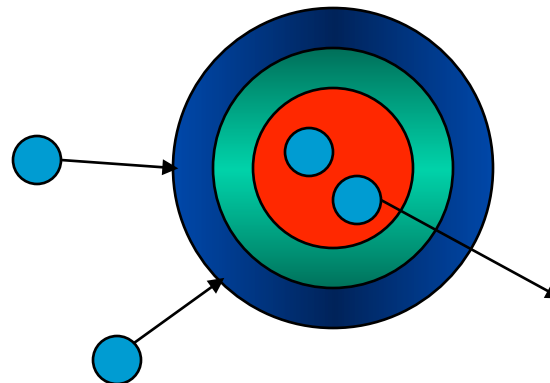
You don't have any friends listed! To add a user as a friend, click the 'friend' button underneath a user's icon.

You


Charles Severance
[Tags](#) | [Resources](#)

Recent Activity

[View your activity](#)





open source eportfolios
 [mah-hah-rah;verb]: to think, thinking, thought

Demo

Download Now

HOME FEATURES COMMUNITY ROADMAP SUPPORT AND TRAINING DOCUMENTATION

Puts ePortfolio Owners in Control

Established in 2006, Mahara is the result of a collaborative venture funded by New Zealand's Tertiary Education Commission's e-learning Collaborative Development Fund (eCDF), involving Massey University, Auckland University of Technology, The Open Polytechnic of New Zealand and Victoria University of Wellington.

Mahara is a fully featured open source electronic portfolio, weblog, resume builder and social networking system, connecting users and creating online communities. Mahara is designed to provide users with the tools to demonstrate their life-long learning, skills and development over time to selected audiences.

Meaning 'think' or 'thought' in Te Reo Māori, the name reflects the project's dedication to creating a user-centred life-long learning and development application as well as the belief that technology solutions cannot be developed outside the considerations of pedagogy and policy.

Mahara is provided freely as Open Source software (under the GNU General Public License). In brief, this means that you are allowed to copy, use and modify Mahara provided you agree to:

- ◆ provide the source code to others;
- ◆ not modify or remove the original license and copyrights, and
- ◆ apply this same license to any derivative



IN THE NEWS...

- ▶ **Mahara 1.0.0 Released**
 2 April 2008
 Mahara 1.0.0 has been released! This landmark release contains many great new features over the 0.9 series.
[more](#)
- ▶ **Mahara 1.0.0rc1 Released**
 28 March 2008
 Mahara 1.0.0rc1 has been released, containing many bug fixes and improvements, especially to browser support.
[more](#)
- ▶ **Mahara 1.0.0beta2 Released**
 7 March 2008
 Mahara 1.0.0beta2 has been released, which contains the new theme and many bug fixes and improvements.
[more](#)






Mahara - “My Portfolio”

The screenshot shows the Mahara 'My Portfolio' interface. At the top left is the ULCC logo (University of London Computer Centre) and the text 'ULCC Portfolio Evaluation Mahara 1.0.0'. To the right is a search bar. Below the logo is a navigation menu with 'Home', 'Profile', 'My Portfolio', 'Groups', 'Settings', and 'Logout'. Underneath is another menu with 'My Views', 'My Files', and 'My Blogs'. The main content area is titled 'My Views' and contains two view entries: 'A VIEW' and 'First View'. Each entry has 'Edit view details' and 'Edit view access' links, with the access level set to 'Nobody can see this view'. A 'Create View' button is in the top right of the 'My Views' section. On the right sidebar, there is a user profile for 'Charles Severance' with 'Logout' and 'Settings' buttons and a profile picture. Below the profile is another search bar labeled 'Search My Portfolio'. At the bottom center, it says '2 views'.



Mahara - A View

 **ULCC Portfolio Evaluation**
Mahara 1.0.0

University of London
Computer Centre



Search

[Home](#) [Profile](#) [My Portfolio](#) [Groups](#) [Settings](#) [Logout](#)

[My Views](#) [My Files](#) [My Blogs](#)

Edit View "A VIEW"

[Blogs \(3\)](#) [External feeds \(1\)](#) [Files, images and video \(5\)](#) [General \(1\)](#) [Profile \(2\)](#) [Resumé \(2\)](#)

 Blog Display an entire blog	 Blog Post Display one blog post	 Recent Blog Posts Display the 10 most recent blog posts
---	---	---

[Change my view layout](#) [Display my view >](#)



Mahara - Artifacts



ULCC Portfolio Evaluation Mahara 1.0.0

- Home
 - Profile
 - My Portfolio**
 - Groups
 - Settings
 - Logout
-
- My Views**
 - My Files
 - My Blogs


Edit View "A VIEW"

Blogs (3) External feeds (1) **Files, images and video (5)** General (1) Profile (2) Resumé (2)


External Video Embed Youtube/Google videos	File(s) to Download Select files for people to download	A folder A single folder from your Files area	An image A single image from your Files area
Embedded media			



Mahara - Artifacts

 **ULCC Portfolio Evaluation**
Mahara 1.0.0

University of London
Computer Centre


Search 


Home Profile **My Portfolio** Groups Settings Logout


My Views My Files My Blogs


Edit View "A VIEW"


Blogs (3) External feeds (1) **Files, images and video (5)** General (1) Profile (2) Resumé (2)

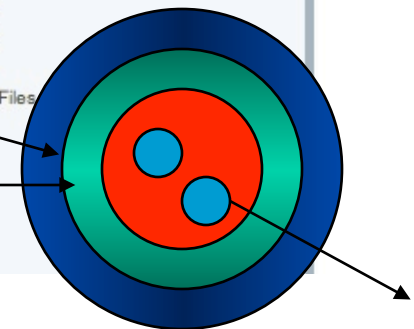
 **External Video**
Embed Youtube/Google videos

 **File(s) to Download**
Select files for people to download

 **A folder**
A single folder from your Files area


 **An image**
A single image from your Files

 **Embedded media**





Up Next-Functionality Mashup

 **ULCC Portfolio Evaluation Mahara 1.0.0** 

[Home](#) [Profile](#) [My Portfolio](#) [Groups](#) [Settings](#) [Logout](#)

[My Views](#) [My Files](#) [My Blogs](#)

Edit View "A VIEW"

[Blogs \(3\)](#) [External feeds \(1\)](#) [Files, images and video \(5\)](#) [General \(1\)](#) [Profile \(2\)](#) [Resumé \(2\)](#)

 External Video Embed Youtube/Google videos	 File(s) to Download Select files for people to download	 A folder A single folder from your Files area	 An image A single image from your Files area
 Embedded media			

Functionality/Resource Mashup

Distributed Provisioning for Teaching
and Learning Software

Functionality Mash up

- Functionality Mash up is the ability to pull a program into another program under end-user control
- Functionality Mash up is not just read-only - the mashed up application will need sufficient access to services in the aggregating system to be able to provide rich and dynamic features.
- Functionality mash up includes identity, context, roles, and data interchange

Search ▾

Applications edit

- Photos
- Groups
- Events
- Marketplace
- Twitter

▾ more



Which Star Trek Personality Are You?

◀ Browse More Applications



Are you a fearless leader like Captain Kirk? Or are you a crazy, hard drinking Scotsman like Chief Engineer Scotty?

This application can be added to your Facebook account.

+] Add Application

Become a Fan

Share with Friends

No Updates

Block Application

About this Application

Users:
36 daily active users
0% of total, 1 friend

Categories
Gaming, Just for Fun

This application was not developed by Facebook.

About fVentures

We make social media fun.

Search ▾

Applications edit

- Photos
- Groups
- Events
- Marketplace
- Twitter

▾ more

Add Which Star Trek Personality Are You? to your Facebook account?



Allow this application to...

- Know who I am and access my information
- Put a box in my profile
- Place a link in my left-hand navigation
- Publish stories in my News Feed and Mini-Feed
- Place a link below the profile picture on any profile
- Send me notifications via email

Which Star Trek Personality Are You? was **not created by Facebook**. By clicking 'add,' you agree to the [Platform Application Terms of Use](#).

➔ Add Which Star Trek Personality Are You?

or cancel

The Developer's Description

“ Which Star Trek personality are you most like? Take this 30 second quiz and find out if you are Captain Kirk or a mere cadet.

[More Information about Which Star Trek Personality Are You?](#)

[Afraid of abuse by this application? Block Which Star Trek Personality Are You?](#)



Bodington / Leeds

- Bodington (www.bodington.org) is an LMS developed by Leeds, Manchester, Oxford, and University of the Highlands and Islands.
- Bodington uses a variant of Shibboleth called GuanXI to mash up functionality.
- Leeds has done extensive experimentation with functionality mash up.

"I certainly don't see the VLE or LMS continuing in the form that they currently are, where you have a monolithic application with lots and lots of different tools presented to teachers and students. You very quickly come to the limits of any tool that you use. The answer is to abandon the tool you have been using and to swap in another tool. Now I can see a situation where you extend this from a single tool to all of the tools of an LMS. I can see a situation where the VLE or LMS actually shrinks to a container into which you plug these learning tools". (Dr. Aggie Booth, Leeds University, 2007)



<http://www.dr-chuck.com/media.php?id=80>



Functionality Mash Up Future – Learning





IMS Learning Tools Interoperability 2.0

Building the Standards for Learning
Functionality Mashup





IMS Tool Interoperability

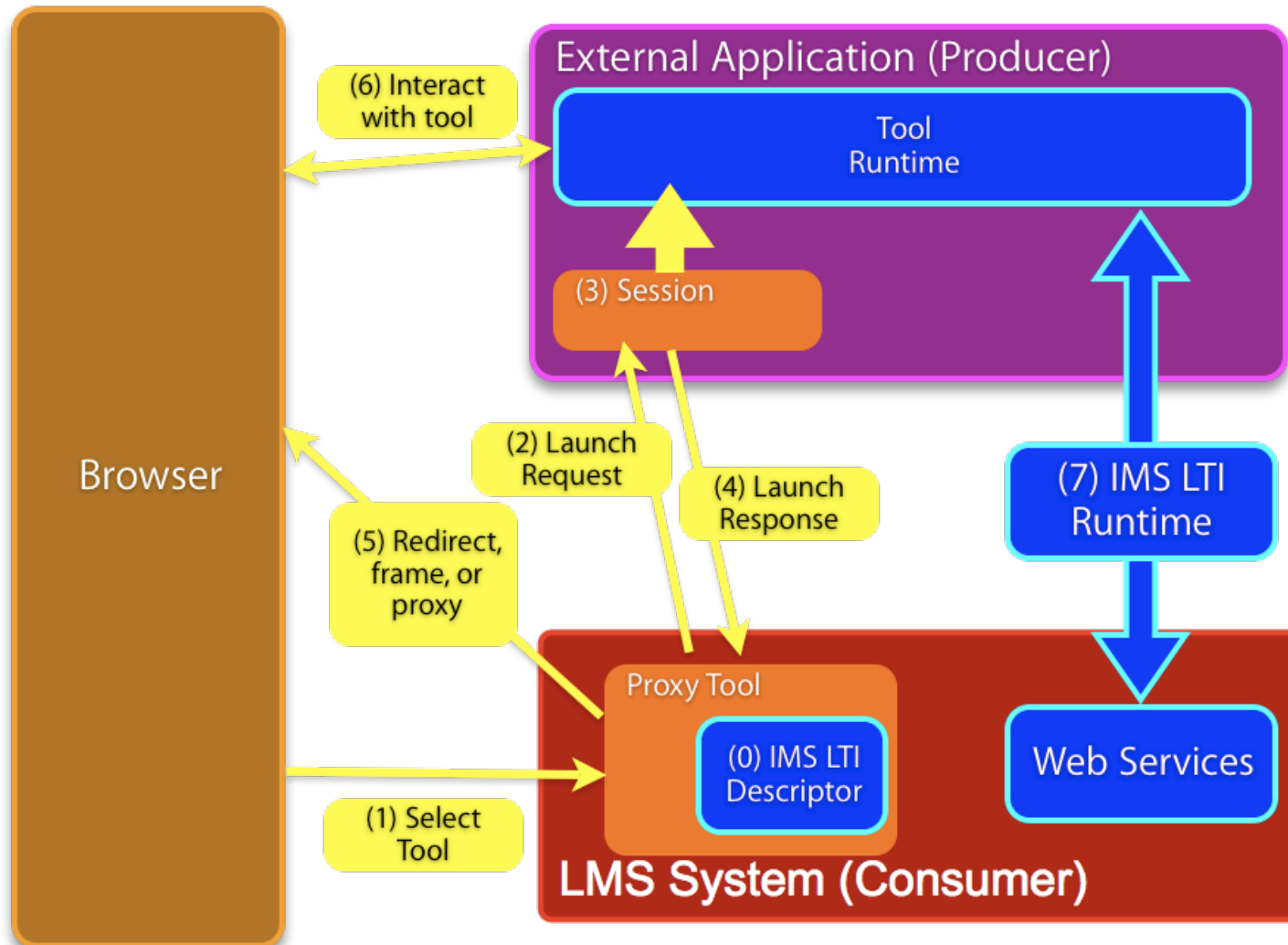
- A standard which is currently under development by IMS (www.imsglobal.org) for functionality mash up
- Effectively provides Facebook-like capabilities for learning management systems
- Read-write access from a tool to the LMS



IMSTools Interoperability 1.0

- Demonstrated at IMS Alt-I-Lab 2005 in Sheffield England
- Blackboard, Sakai, WebCT, Moodle, Samigo, ConceptTutor







IMS Learning Tool Interoperability 2.0

- Currently in Development
- Specification Leads
 - Bruno van Haetsdaele - Wimba
 - Chris Moffatt - Microsoft
- Learning Functionality Mash Up
- Integrated into “Add Resource” in learning systems



Caveat: This section discusses a specification still under development - anything can change as the specification progresses.



Scenarios

- IMS LTI 2.0 tool installed by the administrator - end-users don't even realize the tool is hosted externally
- IMS LTI 2.0 generic tool available to instructors - to be placed and configured Mash-Up style (like a general-purpose RSS reader or web-content tool)
- An IMS LTI 2.0 tool is placed when a publisher cartridge is loaded - often these are partially provisioned



Virtual Tool - Admin Install

- Administrator installs a proxy tool and makes it available as a regular tool
- Administrator configures services “sandbox” for the remote tool - exchange of key material
 - Tool may have permission to connect asynchronously
 - Tool may have permission to places “resources” - instances of itself

Instructor MashUp - YouTube

- Instructor creates some learning object in an external service (freelearningsoftware.com)
- The service presents a URL + password
- The instructor pastes this information into an LTI Consumer Tool in the LMS



From: [csev](#)
Joined: 1 year ago
Videos: 33 [Subscribe](#)

Added: **April 18, 2008** ([More info](#))
Dr. Chuck had his first experience singing with...

Embed: [Customize](#)

```
<object width="425" height="355"> <param name="movie" value="h
```



Instructor MashUp - SandBox

- For instructor mash up - the Instructor configures the "sandbox" at the time of mash up
- The admin can set an inherited "sandbox" for all instructor-placed tools.

Allow this application to...

- Know who I am and access my information
- Put a box in my profile
- Place a link in my left-hand navigation
- Publish stories in my News Feed and Mini-Feed
- Place a link below the profile picture on any profile
- Send me notifications via email

Which Star Trek Personality Are You? was **not created by Facebook**.
By clicking 'add,' you agree to the [Platform Application Terms of Use](#).



Common Cartridge

- Scenario 1: Content points to a pre-trusted host such as content.pearson.com - administrator has a sandbox pre-configured for tools that point to the pre-trusted host
- Scenario 2: When there is no pre-arranged trust/sandbox - a placement from a cartridge behaves as an instructor-placed IMS LTI proxy tool.



Case Study: UM.SiteMaker www.gvcsitemaker.com

- SiteMaker is a simple, end-user tool to build web sites
- Database capability called “data tables”
- Combination of power and simplicity
- Written in Apple’s Web Objects by Michigan
- Now has its own open source community and commercial vendor
- Should we rewrite SiteMaker in Sakai? No.



Sakai / Sitemaker Integration

- Launching via IMS LTI 2.0 (an early draft)
- Experiment in the ease of workflow of mashing a tool up
- Model: YouTube - “paste this HTML”
- Production: Fall 2008



GVC.SiteMaker [Return to Main Page](#) [Logout](#)

You are logged in as user: **maybaum@umich.edu**.
This site is owned by: **maybaum@umich.edu**, and associated with unit: **GVC.SiteMaker Development**.
Configuring site with SiteID: **LTI.demo**, site URL is: <http://192.168.0.6/lti.demo>.

Configure Access Groups

[Add Group](#)

Group Name:
(required)

Group Location:
(required)

Groups in use

Group Name	Action	Delete
Remote Participants <i>RemotePart Group</i>	View/Configure	In Use
Site Owner/Co-owners <i>Local Group</i>	View/Configure	In Use

The users listed in the **Site Owner/Co-owners** group above have permission to configure this website. You may add additional users who will be considered site co-owners. You may also remove any co-owners from this list. The site owner can only be changed by an administrator.



GVC.SiteMaker Return to Main Page Logout

You are logged in as user: **maybaum@umich.edu**.
This site is owned by: **maybaum@umich.edu**, and associated with unit: **GVC.SiteMaker Development**.
Configuring site with SiteID: **LTI.demo**, site URL is: <http://192.168.0.6/lti.demo>

Revise Access Group

Cancel Update Update & Done

Group Name:
(required)

Remote Participation Password:
(leave blank to deny access)

Select Style:

Remote Participants

Use this URL in remote system:
<http://192.168.0.6/apps/WebObjects/GVCSiteMaker.woa/wa/tiLaunch?site=lti.demo>



[Logout](#)

My Workspace Administration Workspace Citations Admin **LTI 2.0** Portfolio Admin mercury site

- [Home](#)
- [Site Info](#)
- SiteMaker
- [Help](#)
- Users present:
Sakai Administrator

[IMS Learning Tool Interoperability \(JSR-168\)](#)

[Tool View](#) | [Clear Session Settings](#) | [Clear Stored Preferences](#)

Remote Participation Information

SiteMaker Url:

SiteMaker Password:



Sakai

[Logout](#)

My Workspace

LTI 2.0

SiteMaker

[View YouTube Videos](#)

[Manage YouTube Videos](#)

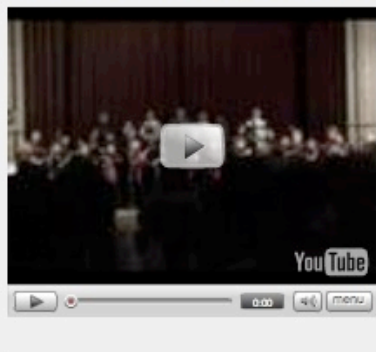
Navigate Database Table: "YouTube Videos"

Current record is #1 out of 1 in found set (1 total records in table)

[List View](#) [Search](#) [Find All](#)

<<First <Prev Next> Last>>

Kol Halev in Argentina - Part 1



This video was taken during our concert in Rosario, Argentina, during the summer of 2007. The trip was a very rewarding experience, both for Kol Halev and for each of the communities that we visited.

Comments [Add Comment](#)

I found the music to be spirited, and very heartfelt. Very commendable for the group...



IMS Learning Tools Interoperability Demonstration

- IMS Learning Impact
- May 12-16, 2008, Austin, TX, USA
- <http://www.imsglobal.org/>

Sakai

My Workspace Administration Workspace Citations Admin LTI 2.0 Test Portfolio Admin mercury site

Home Site Info IMS TI Help

IMS Tool Interoperability (JSR-168)

List of Rooms and Archives

Create Room

Users present: Sakai Administrator

Title	Type	Enter	Open/Close	Remove
looksgreat	room	launch	open	delete
testroom1	room	launch	close	delete
testroom2	room	launch	close	delete

Team Site

Welcome UNIVERS1.ZBOQB\administrator

Home My New Space This Site Site Actions

Team Site > Shared Documents > IMS LTI

IMS LTI

Launch Tool

Wimba Instructor

Classrooms List Live Classroom

Select	Type	Title	Status	Description
<input type="checkbox"/>	Room	Test	Open	test room
<input type="checkbox"/>	Room	Test2	Open	test room bis
<input type="checkbox"/>	Room	Test3	Open	test room ter

Your Institution UNIVERSITY

Home Help Logout Developer Copy

My Institution Courses Community Services System Admin

Announcements Course Information Staff Information Course Documents Assignments Communication Discussion Board External Links Tools

List of Rooms and Archives

Create Room

Title	Type	Enter	Open/Close	Remove
looksgreat	room	launch	open	delete
testroom1	room	launch	close	delete
testroom2	room	launch	close	delete

Test LTI Course

Moodle > TL101 > Icoodeon Customer Support > Editing Icoodeon SCORM Player

You are logged in as Admin Icoodeon (Logout)

Adding a new Icoodeon SCORM Player

Icoodeon SCORM Player for .NET

SCORM Detective

Playback Mode: SCORM Free Form

SCORM API Commands

LMSGetValue Called, Successful LMSGetLastError LMSGetErrorString

LMSGetValue LMSGetDiagnostic

LMSFinish **Not Called Yet** LMSCommit

Last Command: LMSGetValue

LMS Response: user_full_name

SCORM CMI Data Model

Gettable: true Settable: false LMS Mandatory: true

NB. Using iframe!

Moodle Docs for this page

You are logged in as Admin Icoodeon (Logout)



IMS Developer Network

- My task is to develop the IMS Developer Network
- Improve “in-the-field” availability of standards-compliant implementations
- Develop reusable bits / sample code / test code
- Work with and go-between developers implementing IMS Specs in their products

Sakai / IMS Google Summer of Code



Functionality Mashup Using IMS Learning Tools Interoperability Google 2008 Summer of Code



Update: Sakai and IMS are very pleased to have been selected for [Google Summer of code 2008](#). We are now in the phase of the process where students and mentors interact and get to know each other better. Students applications are accepted by Google from [March 24 - March 31](#). Students interested in working Sakai should read this entire page paying particular attention to the [Ideas section](#) below. If you have any questions, you should feel free to contact [Dr. Chuck](#) directly.

This Summer of Code 2008 ideas page centers around the notion of building open source reference implementations in a number of Learning Management Systems and environments for the IMS Learning Tool Interoperability specification which is under development.

IMS LTI has the potential to dramatically transform the use of technology in education. With IMS LTI, teachers and students will be able to use a wide variety of tools in their teaching and learning - not just the tools installed in their centrally installed learning management system. In addition, IMS LTI has the potential to put learners in charge of their own learning over their lifetime. The hope is to make the mash-up of teaching and learning tools as simple as placing the Google and YouTube videos on this page.

Presentation: [Breaking Down Barriers Between Learning Systems](#)
December 17, 2007, Open University, Milton Keynes UK



General Idea

- Build many different implementations of IMS Tool Interoperability
- Variations on a theme - think beyond just learning management systems
- Try to create an initial body of work to make it worthwhile to build tools using IMS Tool Interoperability



Proposed Project Ideas

- Sakai
 - Consumer
 - Producer
- Moodle
 - Consumer
 - Producer
- Atutor
- Elgg
- Chisimba
- Drupal
- Google Android
- Rails IMS TI Test Kit
 - Consumer
 - Producer
- Proxied access

Consumer = LMS Producer = Tool

Moodle Happens

Moodle development and other great issues

Home About

Apr
08

Applying for a Google SoC at few hours to deadline

DFWikiLABS, Moodle

No Comments »

Today have been a strange day.


This morning I entered to my boss office like every Monday: we usually make the working planning for all week and also we meet some of his grad students that need help, orientation or (even) more work.

Today was a little different, we had a [Campus project](#) meeting at 9h. So we talk about weekend, music and finally about work (not too much). We also attended [Gonzalo](#), he wanted to explain us last improvements that he have made to the [WikiBook](#).

I don't know what time was when we left [FIB](#) (at [UPC](#) north campus) to take the bus to the [UOC](#) buildings but I'm sure about one thing, we were late.

When we arrived to the meeting [Pablo Casado](#) was speaking about problems they faced during the implementation of [GFI](#) but we discussed about the chosen solution. At 9h...

Ohloh

 **pigui**
445 commits, 2 kudos

Categories

- Bookmarks
- BPM
- DFWikiLABS
- How-to
- Moodle
- NWiki
- PXC
- Review

Tags

backups **BPM** certificate
database datalib.php DFWikiLABS
DFWikiTeam dmllib.php Drupal
Eclipse Hibernate

Jordi Piguillem Poch / Marc Alier





Sakai / IMS

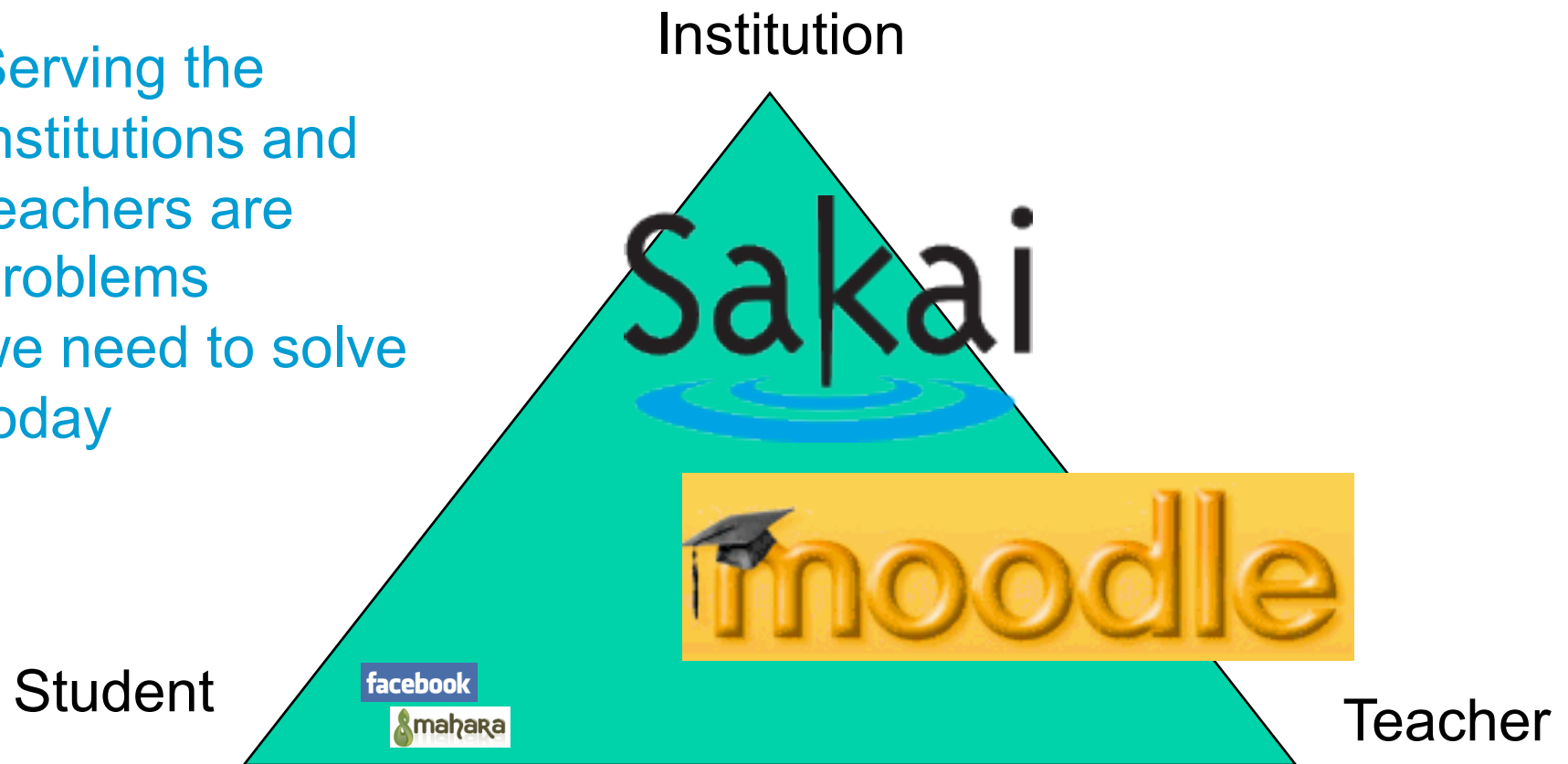
Google Summer of Code

- Funded Applications
 - An IMS LTI Producer for Sakai - Katherine Edwards, McGill University
 - An IMS LTI Producer for Moodle - Jordi Piguillem Poch - Universitat Politècnica de Catalunya
 - Improving Sakai's Presense Capability - Eli Foley - Georgia Tech

Coming back to earth...

We can never get too excited about the ultimate future and lose track of the immediate future.

Serving the institutions and teachers are problems we need to solve today



MyCamTools - Cambridge University

Adding a Personalized View to Sakai



Sakai User Centered Sakai

- Cambridge University is experimenting with a new interface to Sakai which is focused on giving the users more control over their interaction with Sakai.
- Users also have more flexibility with widgets which provide dashboard information outside of Sakai in the interface of their choosing

Sakai CamTools Widgets


- Wherever the user wants to learn - meet them there.



CamTools Everywhere


- In your Mac dashboard
- In your Google desktop
- In your iGoogle homepage
- In your Facebook
- Via RSS
- In your Vista Sidebar

My Startpage (Add stuff ...)

My File Finder 

Start typing the name of your file

This will also search within file content

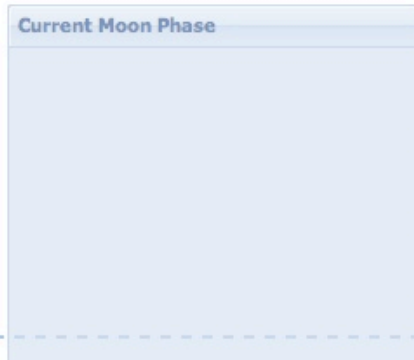
My Courses and Projects 


Start typing the name of a course/project

- ★ Personal Tools
- ★ CARET


You can join courses/projects in your [Courses & Projects](#)

Current Moon Phase










Message Of The Day 

Dutch for the masses, now on CamTools.

Recent Activity 


< 1 >

-  CARET: New file - **blue-border.gif** (14 Feb 08 15:37)
-  CARET: New file - **Step1.png** (14 Feb 08 15:37)
-  CARET: New file - **ext-all-debug.js** (14 Feb 08 15:38)
-  CARET: New file - **ext-core-debug.js** (14 Feb 08 15:38)
-  CARET: New file - **ext-core.js** (14 Feb 08 15:38)
-  CARET: New file - **ext-1.js** (12 Feb 08 16:33)


Quick Announcement 

Title:

Body:

--- Select course or project --- 

Please use the Announcements tool for more opt

My RSS Feed 

< 1 2 3 >

- [Unlocking the potential of mature women students](#)
(Cambridge University News - 04-04-2008 07:56:00)
- [Cambridge academic appointed Chief Scientific Adviser for Ministry of Defence](#)
(Cambridge University News - 03-04-2008 13:49:59)
- [New evidence for star formation from recently discovered galaxies](#)
(Cambridge University News - 03-04-2008 09:11:00)
- [Archaeological finds on observatory site](#)
(Cambridge University News - 03-04-2008 07:56:00)
- [Mark Prisk MP visits Judge Business School](#)
(Cambridge University News - 02-04-2008 07:56:00)

[Manage my feeds](#)



Moodle 2.0 Roadmap

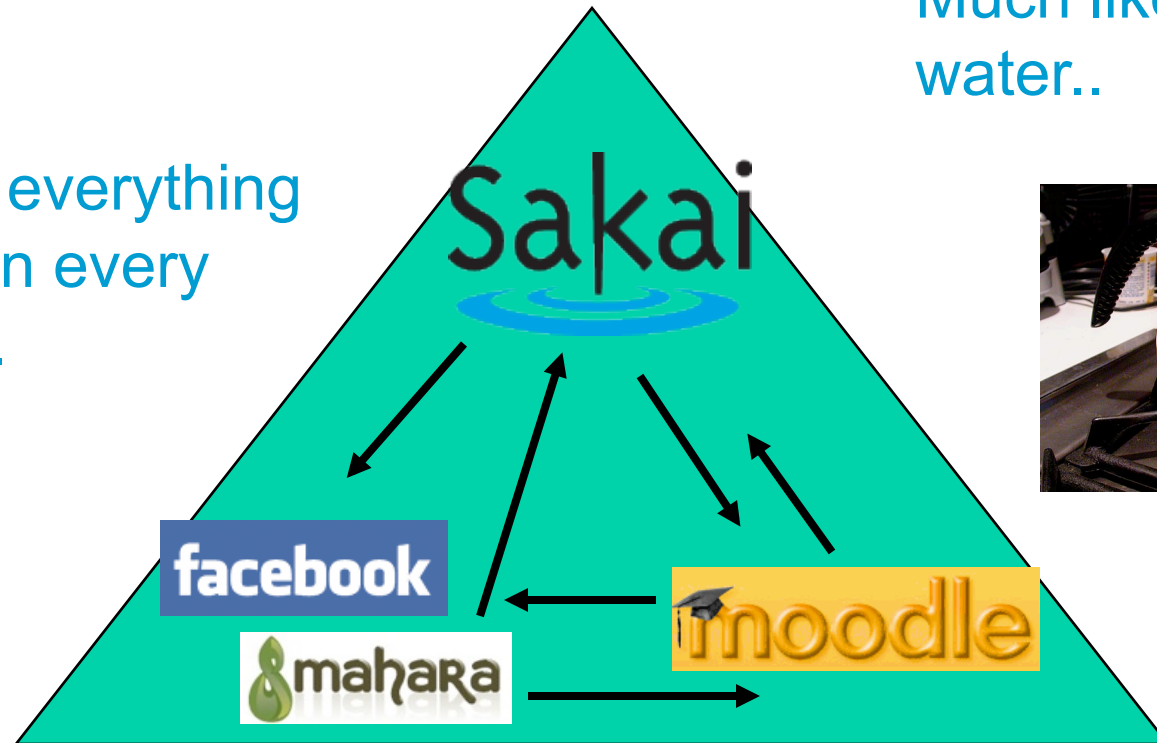
- File API - internal repository of files and access controls
- Repository API - allows users to browse external repositories
- Portfolio API - allows Moodle content to be pushed to repositories.
- Learner plans and competencies
- Builds on 1.9 support for outcomes so that individuals can have learning plans which are updated when courses are completed
- Standard Web Services Layer

Institution

Much like boiling water..

In reality everything is going in every direction.

Student



Teacher

A lot of topics

- Looking back at looking forward (2004)
- Student-Centered Learning
- What will the “next” LMS look like?
- IMS Learning Tool Interoperability 2.0
- Sakai/IMS Google Summer of Code
- Looking ahead in Sakai and Moodle

Summary

- Open Source Learning Management Systems such as Moodle and Sakai are just the appetizer
- True innovation will happen with the exchange of ideas and new ways of thinking about teaching
- We are approaching the “boiling point” in teaching and learning