

Sakai, Openness, and the New Reality in Education

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Covering

- **Background** - where is Sakai from, what we are
- **Context** - Challenges facing Higher Education
- How is the Sakai Community **responding** to those challenges?
 - Sakai **Open Academic Environment**
 - Increasing our collective resources - **merger with Jasig**



A Little History ...

Sakai Project Objectives (2003)

- Replace in-house LMS at 6 institutions with collaboratively produced, sustainable software
- More than an LMS - research, general collaboration
- Make “pluggable” - ease addition of tools, services
- uPortal integration - Personalize and Customize
- Enterprise software - run at scale

How Did We Do? - Sakai CLE

- ☑ Sustainability: 330+ Adopters, 80 HE Foundation members. 40+ Contributors, 19 Commercial Affiliates
- ☑ Go beyond the LMS: Significant adoption for research collaboration - UK, Australia
- ☐ “Pluggable”: partially accomplished, still needs work
- Personalize, Customize? - uPortal: Finally ...
- ☑ Enterprise level software: Scale of deployment and use - UNISA, 200k, Indiana, 100k. Intensive use

Sakai Foundation

- **Collegiate** in nature - not an open source 'pyramid'
- **Coordinator** of community - **not** a software house
- Multi-'product' -
 - Sakai **Collaboration** and **Learning Environment (CLE)**
 - Sakai **Open Academic Environment (OAE)**
- Members in **Japan** - Hosei, Kansai, Osaka, Nagoya Universities, Kanematsu Electronics, NS Solutions

A Little (Global) Context ...

What's changed since we set out on this path?

Changes in Policy and Practice

- Higher Education - a key governmental **policy lever**
 - Changes in direction, and responsiveness of HE
- **Learning and Teaching**
 - **Inclusion, diversity,** and pace of **pedagogical** change
- **Research**
 - Concentration/de-concentration, viability, collaboration
 - Stimulating **interdisciplinary research** a key theme
- Globalization - and role of HE as service exporter

Global Landscape

- Public institutions - **variable changes in funding**
 - **Structural** changes - Fees, Bologna
 - Impact of **globalization** at institutional level
 - Multi-campus, distance education
- Private institutions - **endowment revenue decline**
- **Footnote:** Spend on Admin IT systems - rarely mirrored in support of IT related to mission delivery

Scale ...

**... no longer means
“Enterprise”, but Web Scale**

Interoperability...

...from complex to realistic

Learner Expectations...

...learners expect the future

...Summing up change



‘An unprecedented capacity to share’

David Wiley

Responding to the Challenge

Some tendencies in higher education

'A central pillar of the academic community is its commitment to the free flow of information and ideas'

Jonathan R. Cole, The Great American University, 2009

The Open Agenda ...

Open Education

Open Access Publication



Open Data Open Doors

Issue 1 - March 2011

JISC and RLUK
Resource Discovery
Taskforce Newsletter

JISC

RLUK Research Libraries UK

What is Open Data? Why should I care?

This is the first newsletter of the JISC & RLUK Resource Discovery Taskforce, which was set up in 2010 as a collaboration of national stakeholders from the UK libraries, archives and museums communities. The newsletter is intended to profile both RDTF activities and developments that are relevant to the RDTF work.

The aim of the RDTF is to help to make resources more discoverable by both people and machines - discoverable resources that can then be reused through integration and aggregation for purposes beyond, but including, formal institutional commitments to exposure and access.

JISC and its partners are committed to a programme of activities designed to build a community of practice and critical mass through open data, exemplars of use and communication. This programme involves:

- **Engaging key stakeholders** from directors to developers across libraries, archives and museums, who have the power, the ideas and the will to make things happen
- **Building critical mass** of freely available quality data that will inspire others to participate in opening up their own data and developing purposeful aggregations and compelling applications

Open Data

Open Source Software



Open Source Drivers

- ■ ‘Courant Report’ surveyed US HE IT leaders (2006)
 - ■ **Cost** - the multi-million ERP/Finance system
 - ■ **Performance** - suitability for purpose
 - ■ **Control** - market size, & vulnerability to monopolization?
- ■ **Innovation** and academic **mission delivery**
 - ■ LMS as the “freezing point” of eLearning
 - ■ Community Source - collaborating to close innovation loop

Innovation Themes - 1



Innovation shifting from *manufacturer* to *user*
Democratizing Innovation / Eric von Hippel

Innovation Themes - 2



‘An important aspect of design is the degree to which the object involves you in its own completion.’

Brian Eno quoted in Stewart Brand, ‘How Buildings Learn’

Role of **networks** of people and **openness** in
stimulating innovation

**Where Good Ideas Come From: The Natural History of
Innovation** / Steven Johnson

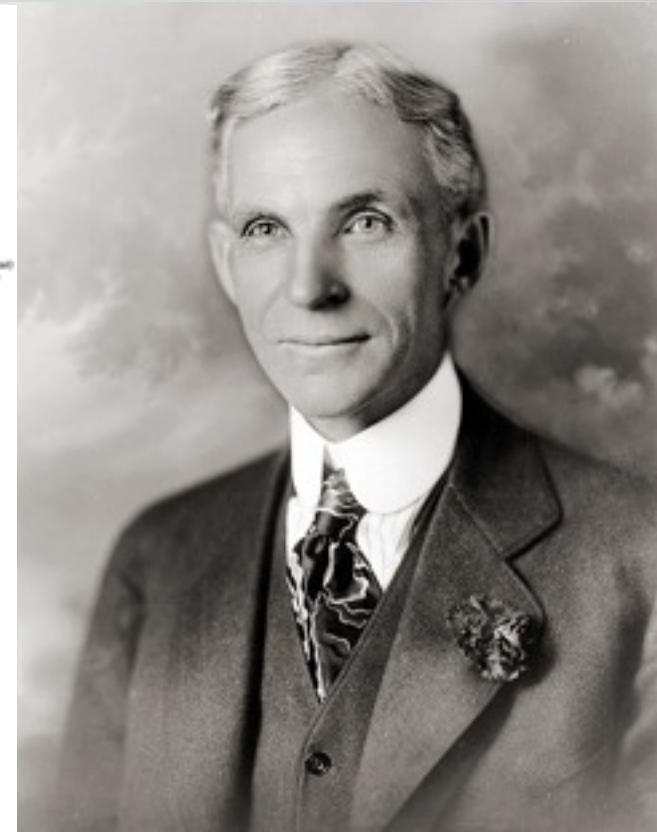
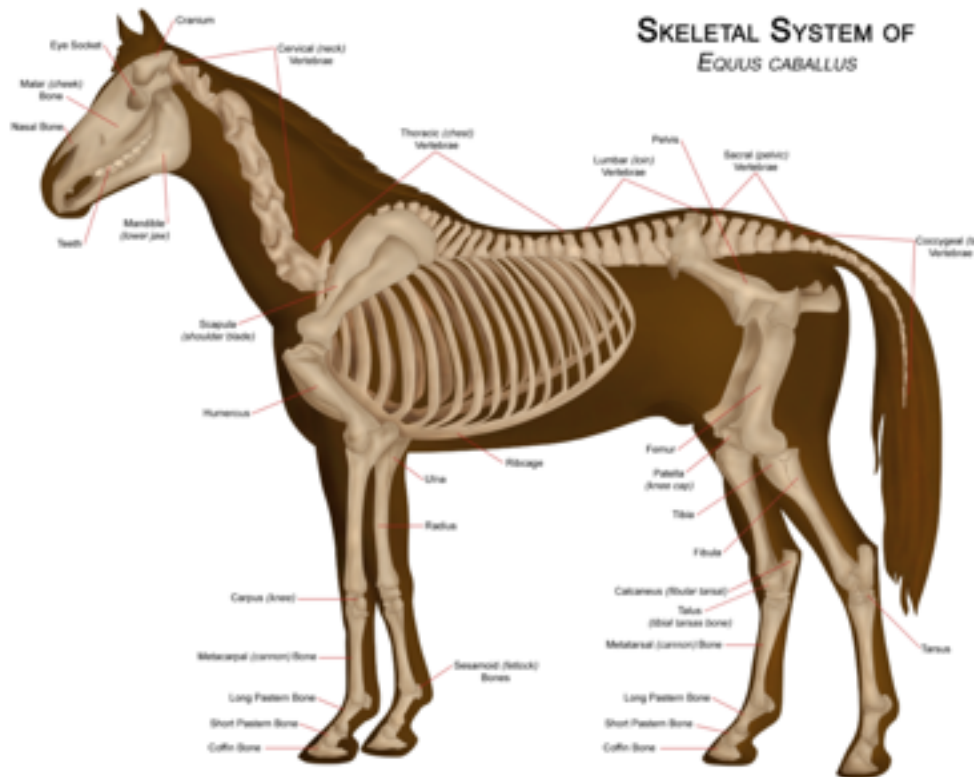
"It's not that the network itself is smart; it's that the individuals get smarter because they're connected to the network."

Open Networks

- **Open Education**
- **Open Content**
- **Open Access**
- **Open Data**
- **Open Source**

Open Networks

We need to realize the full potential of open networks by moving towards inter-networking between them



Sakai Open Academic Environment

“Not *<just>* a faster horse...”

Sakai **O**pen **A**cademic **E**nvironment

- Rooted in **community experience** of Sakai CLE
 - Work of Sakai **Teaching and Learning** Community
- Early work at Cambridge (UK) “Sakai 3”
- **Managed project** from July 2010
- Cambridge, Indiana U, Georgia Tech, Charles Sturt, NYU, UC Berkeley, U Michigan
- Ready for 1.3 release



Sakai OAE **Design** Goals

- **Openness** and **permeability**: navigable public access, access, use external content (& vice versa)
- **Networking** people and groups
- **Composable workspaces**. Tools and resources exposed on pages via placement of tool widgets.
- **Sharing** one to one/many without being members of common workspace.
- **Modern user experience**



Sakai OAE **Technical** Goals

- Open, standard interfaces
- Widget development - small, composable components
- **Re-use** technology from OSS communities outwith HE
- Designing -

Affordances for innovation



Simplified Continuum

Learning Management System

Open Academic Environment



Highly Structured

Tool Centered

Worksite/Space/Course Centered

Loosely Structured

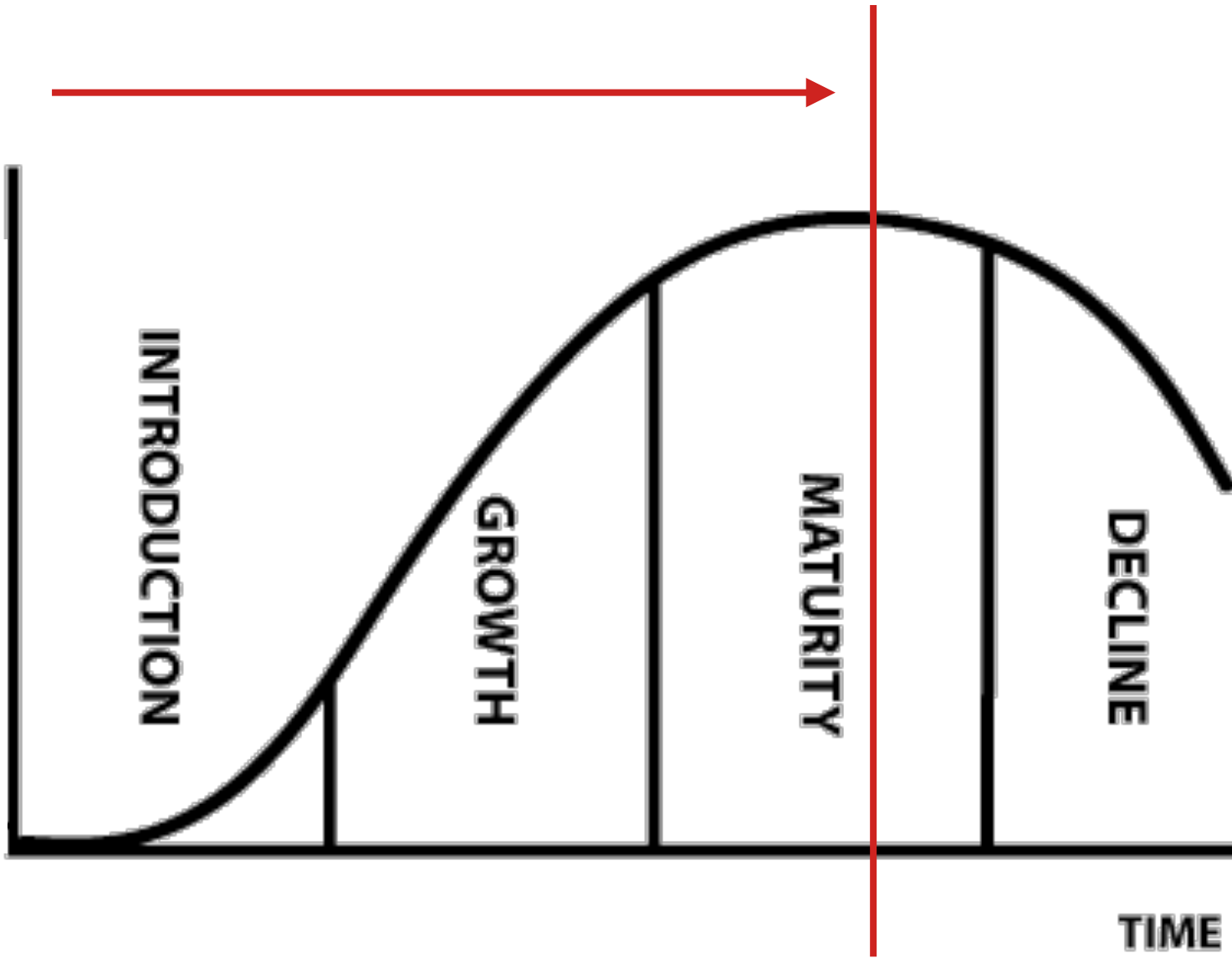
Person Centered

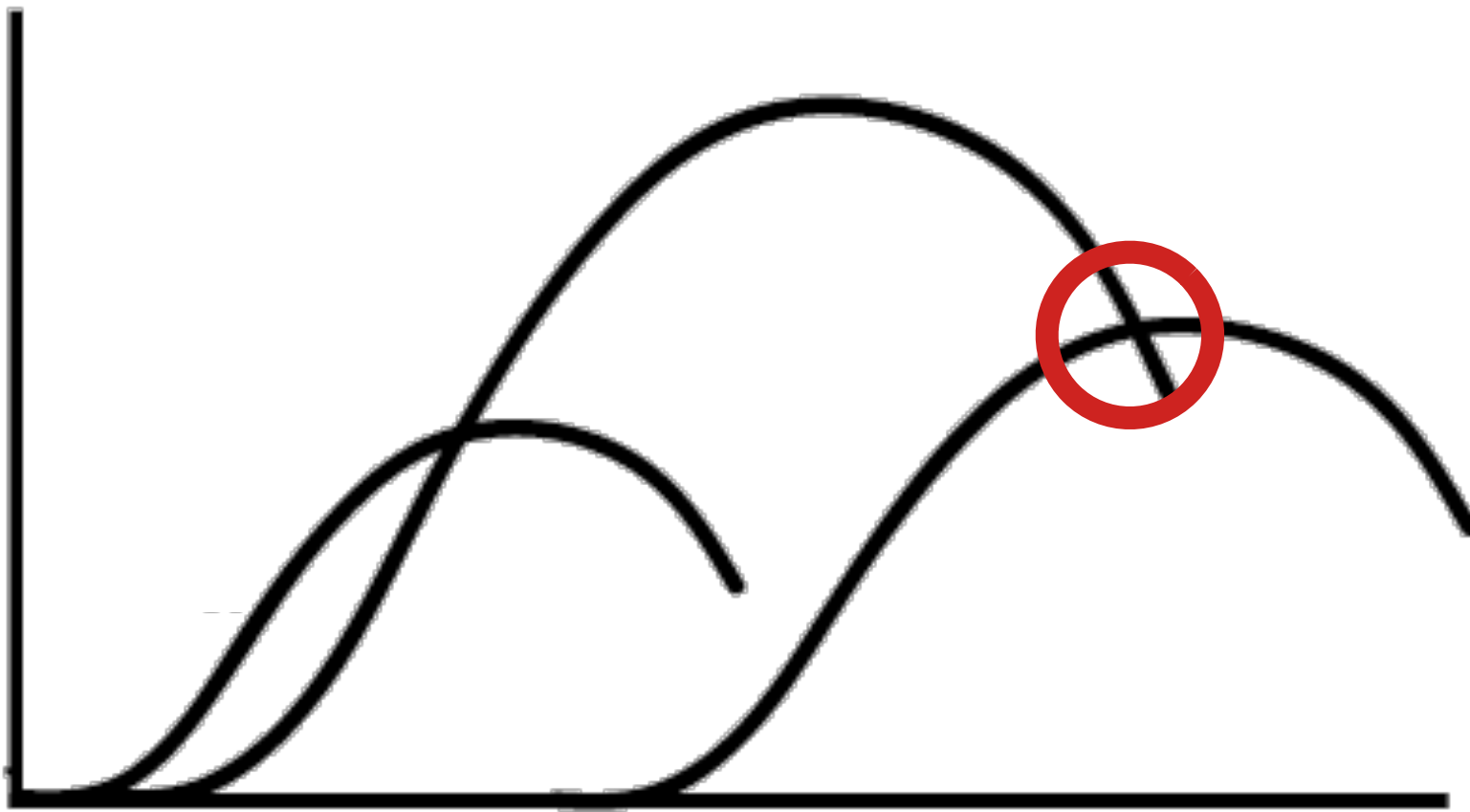
Content and Networking Centered

**Continuum also reflects skill set, person capability with technology
It may also reflect institutional capacity to support diversity ...**

A Small Sustainability Detour ...

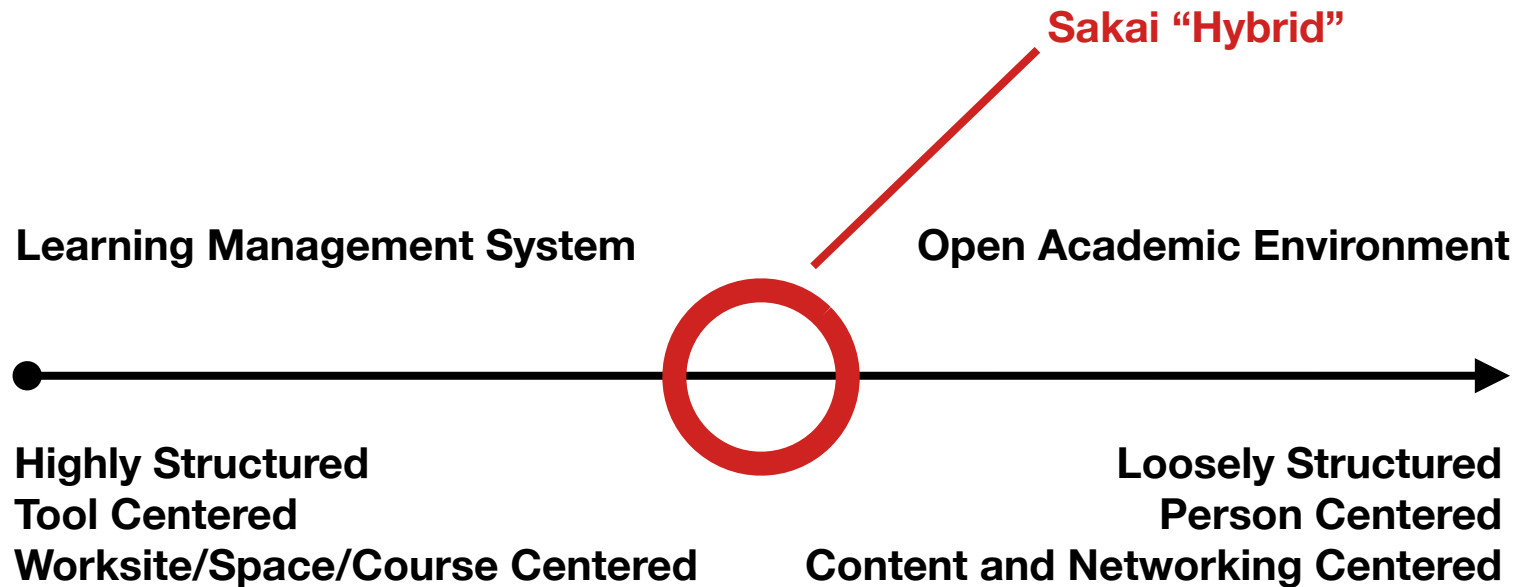
- The “adoption” of open source software
 - Adopting **software**
 - Adopting **approach**
- Adoption **and** Contribution is implicit in “approach”
- **Sustainability**: not just a long march to the plateau
 - Managing **lifecycle** and **transition**





Transition periods of unspecified duration...

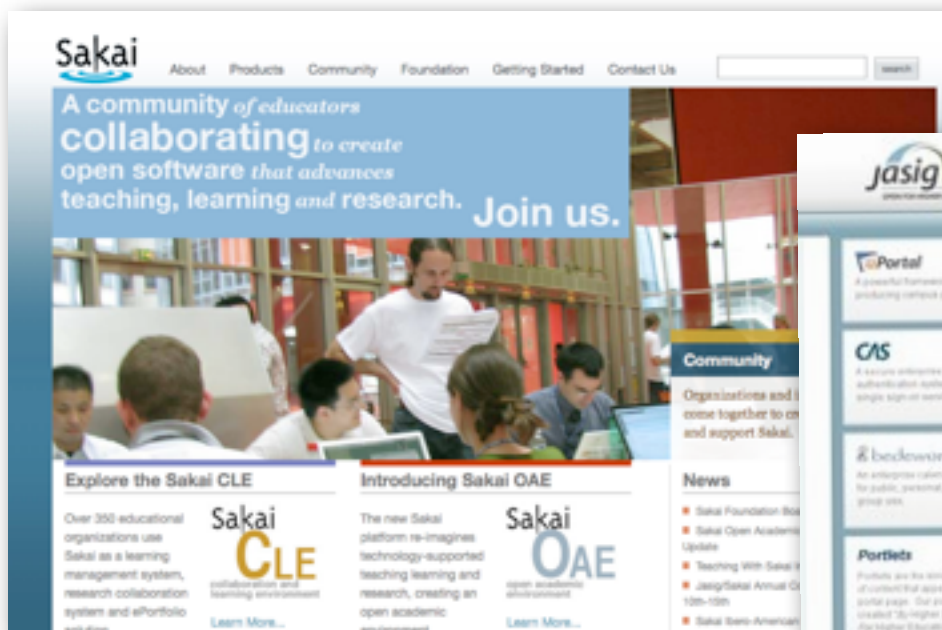
Simplified Continuum



**Transition point or an extension of capacity?
Different answers per strategic needs of institution**

Two Sakai Environments - Working Together ...

- **Hybrid** - CLE and OAE connected via IMS Basic LTI
 - Other approaches to integration likely ...
- Enabling control of the **pace of change**
- How long will you need both ends of the continuum?
- ... think in terms of **supporting capabilities** ...
- Takes resource. Need to **change the landscape**



Accumulating Resource

Merging Sakai Foundation with Jasig

Jasig

- Multiple products; uPortal, CAS, Bedework, Portlets, UMobile, 2/3/98
 - Could be mainly categorized mainly as **infrastructure**
- Similar **consortial** model - some overlap of members
- Experience of **incubating** software / communities
- We need to **de-duplicate** - not make a **new Foundation** for each project

Why Merge?

- ■ **Low hanging fruit -**

- ■ Conference organisation, Administration, Infrastructure
- ■ Licensing, IPR
- ■ Quality Assurance

- ■ **Strategic -**

- ■ Influence in direction of external infrastructure components
- ■ Opportunity to grow re-use of Jasig software components

What will it look like?

- Organized around overlapping -
 - **Software Communities**
 - Which have products, like uPortal 3 and 4, Sakai CLE 2.7, 2.8
 - No uniform governance model - draw on many experiences
 - **Communities of Interest**
 - Sakai Teaching and Learning Community
 - Jasig 2/3/98 - Openness and s/w procurement
- **Product branding** - “Sakai” won’t go away!

Extending Themes ...

- **Networking** is not just embedded in our software it's what we **are**. Jasig merger enhances our network
- Openness is not only a **product** of collaboration, but a **precondition** for collaboration - a key value
- Aggregation of resource alliances, and partnerships - **shifting patterns** over next decade
- Networking **innovation** in support of academic mission