



eduSourceCanada

CANADIAN NETWORK
OF LEARNING OBJECT REPOSITORIES

Divergence and Collaboration in eduSource

March 29, 2004

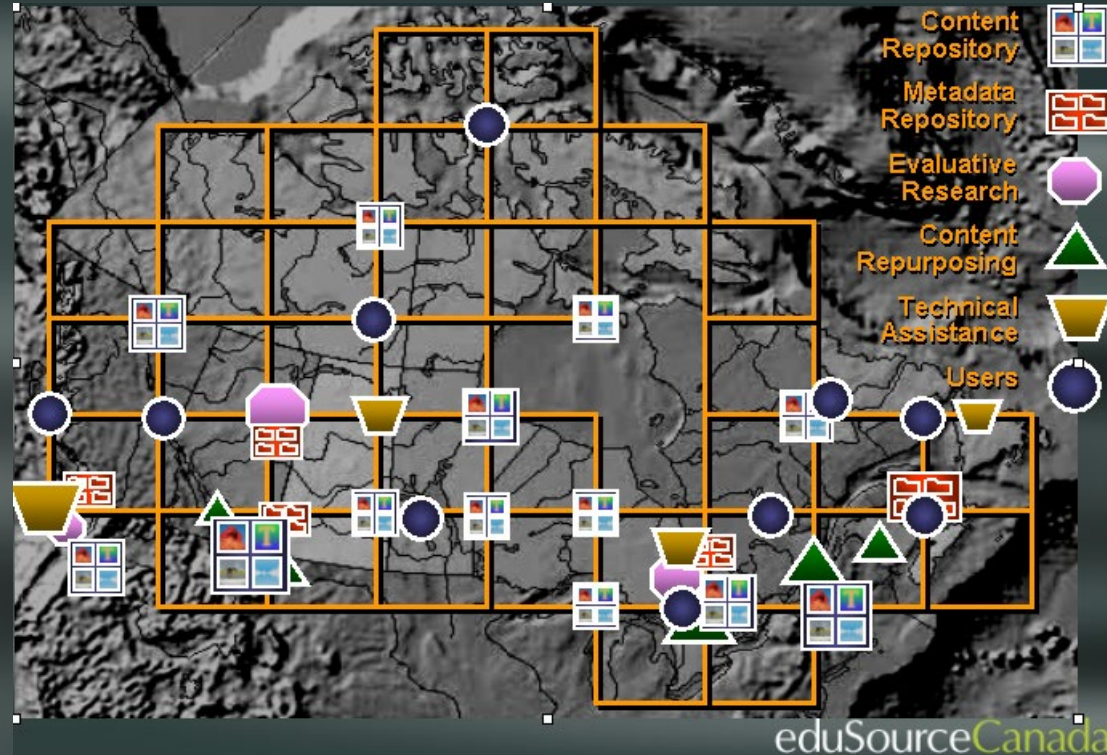
The Grand Collaboration

PRIMARY PARTNERS:

Athabasca University
Netera Alliance
New Media Innovation Centre
TéléEducation NB
Technologies Cogitarph
University of Waterloo

SECONDARY PARTNERS:

British Columbia Institute of Technology (BCIT)
Brock University
Canal Savoir
College of North Atlantic
École de technologie de l'information et CIRTA
e-Learning Research Group of NRC Institute for Information Technology
eNB.ca
Future Learning Inc.
Holland College
IDON East
Knowledge Pool Canada
L'Université de Moncton
Laval University
New Brunswick Community College
New Brunswick Department of Education (K-12 sector)
New Brunswick Department of Training and Employment Development
Northern Alberta Institute of Technology (NAIT)
Nova Scotia Community College
Ontario Co-operative Learning Object Exchange
Seneca College
Sheridan College
Simon Fraser University Surrey (SFU Surrey)
TelesTraining Inc.
Télé-université
The Centre for Curriculum, Transfer and Technology (C2T2)
University of Alberta
University of British Columbia
University of Calgary - Learning Commons
University of Lethbridge
University of New Brunswick
Waterloo Maple Inc.



Organizational Structure

- **Six primary partners** — Netera, Athabasca, NewMIC, Waterloo, Technologies Cogigraph, NBDEN
- **A gazillion secondary partners**
- **Nine Work Packages** — content development, DRM, testing and evaluation, metadata development, software development, hardware integration, business models, community, project management
- **100 People** — developers, designers, academics...

Governance

- **Steering Committee**
 - Primary partners each have a vote
- **Development Committee**
 - Chaired by Cogigraph, ad hoc membership
- **Others**
 - Vision Committee, Business Development Committee, Advisory Council

Administration

- Netera provided overall project management – esp. liaison with CANARIE
- Partners managed individual packages – package managers
- Committees became the major mechanism for collaboration

Did It Work?

- Obviously, it did, to a certain degree, since all participants are still talking
- But it shouldn't have, really
- Need to analyze difficulties and to understand why it worked in spite of those difficulties

Models and Strategies

- **Link to Strategic Goals and Aims**
- **Sound Business Planning**
- **Demonstrate Benefits to All Members**
- **Address Key Interoperability Issues**
- **Share Resources, Create Bridges**
- **Resolve Copyright, Ownership Issues**

Anderson and Downes, 2000

http://mlg-gam.ic.gc.ca/sites/acol-ccael/en/resources/R01_Anderson_Downes/index.asp

1. Strategic Goals & Aims

- Idea: project objectives must align with institutional objectives
- But with so many institutions, this created a wide variety of objectives
- Thus, the partners began with different views of the project objectives

Differing Objectives

- Institutional vs public focus
- Learning vs Education
- Proprietary vs Open Source
- Research vs Development
- The whole vs The Parts
- Commercial content vs sharing

Aligning Objectives

- This as a key role of the Vision Committee
- Essentially, needed to create structure which supported multiple objectives
- “Enable, Don’t Require”

2. Sound Business Planning

- The idea: we need a story about revenue generation (eg., tuition, service provision)
- Financial planning, however, centered completely around meeting CANARIE requirements and getting around 50 cent dollars
- Most partners – universities, government agencies - constrained

Infrastructure and Sevices

- Difficulty in finding business model for a network, since models are based on ownership
- Infrastructure Layer / Service Layer

The Business Model?

- Sale of services, not product:
 - Configuration and installation
 - Consulting and Support
- The 'silent' business model...?
 - Benefit for institutions – sharing
 - Commercial sales?

3. Benefits to Members

- What would a 'benefit' be?
- Who are the clients?
 - Institutions?
 - Teachers?
 - Students?
 - Business (eg., Corbis)?

What Did Members Want?

- Better access to markets for courses
- Marketing and promotion of existing software or products
- Enhancement of applications
- Market for content or services
- Access to resources

What Had to be Given Up

- **Ownership** – the network wasn't going to be 'owned' in the traditional sense
- **Control** – access, use would have to be open
- **Some third party constraints** – could not meet strict access control requirements

4. Interoperability

- Three Major Systems:
 - Peer to Peer
 - Harvesting
 - Federated Search
- Multiple Standards, including IEEE-LOM, CanCore, OAI, RSS...

What is a Learning Object?

- The 'tissue' debate
- Discussion even today about learning as 'objects'
- Are we even distributing the same thing? Teaching aids? Multimedia? Self Learning?

Interoperation?

- eduSource – ECL – a programmer's dream, but...
- Multiple formats supported (but this creates a new need for filtering)
- Is interoperability about sharing, networking, collaboration...?

5. Share Resources...

- With a 'silo structure', did we share resources?
- Our 'communities' operated in isolation:
 - CLOE
 - CogniSource
- No understanding of dependencies... still waiting on ECL, taggers, repositories...

The Sharing Model...

- Still doesn't really exist
- Because there still isn't a clear idea of what is to be shared
- But requires the network first in any case
- Which is still somewhat in disparate pieces...

What is Shared?

- Learning Objects? Not yet...
- Software and services? Hopefully...
- Expertise? Yes, quite a bit of evidence (but still some key personalities)

6. Copyright and Ownership

- We agreed (after a fashion) on an open source model, but...
- Still very different ideas on digital rights management...
- How do you make the entire network satisfy the security needs of one member? Who is that member? Corbis? Me?

Who Owns the Network?

- In an important sense, ‘nobody’, but...
- ‘Nobody’ isn’t a workable solution either
- DRM – each repository responsible for management of access, authentication
- But: how are essential network decisions made? ‘Jean-francois says’ isn’t a very satisfactory answer..

Locus of Control

- Has been a problem with the project from the start
- Admirable desire to remain decentralized, but resulted in disorganization
- The same problem will persist post-eduSource