

Syndicated Learning

Stephen Downes

National Research Council

August 14, 2002

Overview

1. Origins – How I Got Here From there
2. The Very Idea of Syndicated Learning
3. Tools – RSS, Javascript and a Shot of Web Services
4. Design Spruik
5. Principles of Syndicated Learning Design
6. Some Applications

Origins – How I Got Here From There

- The Start
 - Online Learning and Online Courses
 - Courses, Lessons, Modules
 - The Need for Reusability
 - The Need for Course Resources

- NewsTrolls - 1998
 - Originated in Online Community
 - Based in Discussion List with Sharing of Resources
 - NewsTrolls Etrolls
 - Revisions, Revisions

- The Brandon Pages – 1998
 - Civic Information Site
 - Added Resource (Links) Base
 - Generated Pages Dynamically

- Stephen's Web - 1998
 - Started as a Personal Resource Base
 - Added Discussion from Online Courses
 - Added Dynamic Pages from the Brandon Pages
 - Deployed RSS and JavaScript Feeds

- MuniMall – 1999
 - Intended as Portal for Municipal Sector
 - Built Around a Resource Base
 - Was Required to Work with Web CT Courses
 - Developed MuniVille Simulation
 - Developed MuniMall Newsletter

- Evolution of The Model – 2000
 - *Knowledge* – A Common Resource Base
Drawing Materials From the Net
 - *Learning* – Structured Learning Opportunities
into Which Resources are Fed
 - *Community* – Community Environment;
discussion, sharing (today, the blogosphere)

- OLDaily – 2001
 - Email Newsletter for Stephen’s Web
 - Formally Articulated Design Principles
 - Multiple formats – HTML, text, Javascript, RSS
 - Integrated tools – Refer, Research, Reflect (and one day, Read and Remember)

The Very Idea of Syndicated Learning

- Originates in News Media
 - Think, for example, of wire services such as Reuters, AP
 - Online Syndication (using RSS and NML)
 - Examples: Moreover, news.google.com, Yahoo!, News Is Free, Carmen's Headline Viewer

- Syndication Has Two Major Elements
 1. *Upstream* – The Collection of Resources You Draw Into Your Online Resource
 2. *Downstream* – The Collection of Resources You Send Your Resource IntoThe Two Parts are Equally Important
[A drawing here would be neat-o)

- Syndication is Like Learning Objects, but:
 - Without the “Learning” and
 - Without the “Objects”

In Other Words, Syndication Employs the
Concept of Learning Objects, but Without the
Baggage

- Without the “Learning”...
 - The Resources are not *Learning Resources* in any Specific Sense
 - May be Newspaper Articles, Journal Articles, Photos, Data, Whatever....
 - These Resources *Support* Learning but
 - (Typically) They Do Not *Substitute* for Learning

- Without the “Object”
 - The Resources do Not Use Learning Object Metadata or Wrappers
 - Indeed, their Producers (Newspapers, Magazines, Governments, etc) Will Probably Never Tag them Properly
 - It is Up To the Syndicated Learning System to Adapt to the Protocols that Exist

- Downstream...
 - You Are Not (Necessarily) Producing Learning Objects
 - Expect to Provide *Multiple Output Formats* (for example, HTML, Text, Email, RSS, Javascript, etc.)

- Learning With Syndicated Learning
 - Learning is *Open Ended* – The Syndicated Resource Does Not Worry About a Starting and an Ending Point
 - Learning is *Multi-Threaded* – It covers all topics (and various levels of difficulty) at Once, Not an Ordered Sequence
 - Learning is *User Driven* – There is No Curriculum, Only Options

- The Essential Concept - Dynamism
 - Syndicated Learning is *Dynamic* – Your Set of Resources is Always Changing (Because the World Changes)
 - The Idea is to Connect (Dynamic) Real World Data and Information With Static Learning Content
 - A Course About Ecuador, for example, Should use Today's News and This Year's Statistics

- Exercise:
 - Think of a Domain (Geography, Social Studies, Math, etc...)
 - List the Resources you Could Use in Such a Course From Day to Day...
 - Newspaper articles, government statistics, live data feeds, online articles....?

Tools – RSS, Javascript and a Shot of Web Services

Design Spruik

Principles of Syndicated Learning Design

- Find Your Niche
 - Syndicated Learning Works Best When It's Focused
 - Otherwise You and Your Readers are Swamped
 - Also, Focus Allows You To Develop Expertise
 - not just in content, but in people, resources

- Go Alternative
 - Remember, Everybody Can Access Mainstream Sources
 - Troll the Discussion Lists, Blogs, Specialty pages
 - Internationalize

- Be Yourself
 - Don't Try to Be Reuters
 - Add Context, Interpretation, Evaluation
 - Be an Idoru (Spot Patterns in the Phenomena)
 - *Use Your Own Knowledge Base* (even before Google)
 - Let the Selection Reflect Your Biases and Interests

- Add Value
 - Include Your own Articles, Essays, etc., into the Mix (They Will be Picked Up Downstream (And Will Bring Readers to Your Feed))
 - Connect online Commentary to the Resources Listed (and Syndicate the Commentary)
 - Contribute both Upstream and Downstream

- Design For Text
 - Keep Graphics to a Minimum – Most Output Formats are Text Only
 - Never use Graphics for Navigation (Think About the Poor Slug Using WAP)

- Integrate
 - Support Your Resources with direct Links to Comments, Similar Content, Etc.
 - In Your Own Work, Include Links back to the Knowledge Base
 - Or Even Better, Syndicate Resources into Your Own Online Publications (and Courses)

- Update Regularly
 - The Value of Your Resource is that it is Dynamic (I.e., Contains the Latest Stuff)
 - Generating an Email Newsletter Creates Discipline
 - If You Don't Have Time, Share

- **Avoid Noise**
 - Strive for Quality Content, Not day-to-day Chatter
 - Questions to Ask: Is it a new Point of View or Innovation, Does it Add Information
 - Things to Avoid (Unless You Specialize in Them): Awards, Stock Prices, Mergers, Press Releases, Minimal Product Updates, Non-News

- Foster Community
 - Contribute to Your Own Discussions
 - Recognize Contributions
 - Make it Easy to Add Comments (Both Publicly and Privately)
 - Help People Share Your Resources

Some Applications

- Sample Applications:
 - MuniVille
 - Budget Simulator
 - Nations of the World