The Evolving Education Digital Library: Or Why the Plumbing Matters

R. David Lankes

Presentation

Apple Education Leadership Institute, Key West, FL.

An overview of current education digital libraries, digital library technologies, and anticipated impacts on K-12 education.

digital libraries, education, K-12
The Evolving Education Digital Library: Or Why the Plumbing Matters

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Agenda

• Overview of Digital Libraries for Education
  – Why It Matters to You
• Education Digital Library
  – What is Out There Now
• Where is this Headed
Terminology Overload

• Portal, Digital Library, Web Site, Information Resource, Gateway, Internet Information System...

• A Place for Education Professionals to get the Information They Need...In the Way They Need It.
The Education Digital Library

• “A managed environment of multimedia materials in digital form, designed for the benefit of its user population, structured to facilitate access to its contents, and equipped with aids to navigate the global network ... with users and holdings totally distributed, but managed as a coherent whole.” – Collier/NSF
Basic Digital Library Model

Internet

Collections/Resources

Digital Library
Current Examples

• AskERIC
  - http://www.askeric.org

• The Gateway to Educational Materials
  - http://www.thegateway.org

• National Science Digital Library
  - http://www.nsdl.org
A Consumer Approach
Common Interface = LCD
Some Underlying DL Concepts

• Interface, Architecture, Information are all Separable
  – Can build multiple interfaces to a collection of education materials
  – Sherlock and Watson

• Plumbing/Technologies to “Pay Attention To”
  – XML, OAI, SOAP, Dublin Core, IEEE LOM
# Levels of Information

<table>
<thead>
<tr>
<th>Level</th>
<th>Information Sources</th>
</tr>
</thead>
<tbody>
<tr>
<td>Local</td>
<td>SIS, Lessons, Policies</td>
</tr>
<tr>
<td>Regional</td>
<td>Local History, Teaching Center Data, BOCES Resources</td>
</tr>
<tr>
<td>State</td>
<td>Standards, Reporting, Policies, Law</td>
</tr>
<tr>
<td>Federal</td>
<td>Policies, Research, Synthesis</td>
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<tr>
<td>Local</td>
<td>PowerSchool, WinSchool</td>
</tr>
<tr>
<td>Regional</td>
<td>County Systems, BOCES</td>
</tr>
<tr>
<td>State</td>
<td>Mass. VES, Washington Digital Education Commons, NYS- VES</td>
</tr>
<tr>
<td>Federal</td>
<td>AskERIC, GEM, NSDL, ED.gov</td>
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Expanded Model of Education DL

EDLib

Science Experts (AskNSDL)
Library Services
Education Management System

STEM Resources (NSDL)
Selected Sites (EdNA)
Reviews Sites (MERLOT)

NEA.org
theGateway.org
Seattle City Schools

District Data
Why This WILL Matter

• As Schools Get More Connected They Will Get More Network Centric
• As Schools Get More Network Centric, They Will Need Better Tools to Access More Information
• As Schools Get More Information They Will Need Better Tools to Organize and Integrate That Information Into the Education Enterprise
What to Do

• Now: Get to More Information Sources
• Next: Acquire Better Integration Tools
  – Standards and Network Based
• Ultimately: Build a Multi-Tiered Education Digital Library System
  – Classroom, School, District, State, Nation
Don’t Panic!

• Knowing the Web is Enough to Access Current Excellent Resources
• Large Federal and State Investment in Education Information Infrastructure
  – State Education Portals, Digital Libraries, etc.
• Rapid Development of Tools and Standards for “Enterprise Integration”
  – I.e., by the time you’re ready to do it, it will be off the shelf