Module 1-b: History of Digital Libraries and Library Automation

Draft: 3/13/07

   a. Scope note: the origin of the DL research agenda, DLI, DLI-2, NSDL, the origin of other long-term DL projects still extant.

2. Learning objectives:
   a. Students will be able to name areas of research and development that fed into early digital library work.
   b. Students will be able to describe early digital library initiatives.
   c. Students will be able to describe ways in which areas of research and development that fed into early digital library work affect current digital library work and future areas of digital library research and development.

3. Level of effort required:
   a. Prior to class: 3 hours for readings
   b. In class: 1.5 hours

4. Prerequisite knowledge required:
   a. In LS programs: None
   b. In CS programs: None

5. Relationships with other modules:
   a. Necessary relationships:
      i. 10-a: Future of DLs
      ii. 10-b: Education for digital librarians
      iii. 1-a (10-c): Conceptual frameworks, theories
      iv. 10-d: DL research initiatives
   b. Weak relationships:
      i. 4-f: Object description and organization for a specific domain
      ii. 7-a: Search engines, IR
      iii. 9-h: Social issues

6. 5S characteristics of the module:
   a. Primary: Societies
   b. Secondary:
      i.
7. **Introductory remedial instruction:**
   a. In LS programs (optional): Course on the history of library automation
   b. In CS programs (optional): Course on the history of computing

8. **Body of knowledge:**
   a. Research streams that fed into early DL work
      i. Information Retrieval
      ii. Electronic Publishing & Scholarly Publishing
      iii. Databases
         1. Text-only
         2. Multimedia
      iv. Cyberinfrastructure
      v. Other
   b. Digital Library Initiative (DLI)
   c. Digital Libraries Initiative Phase 2 (DLI2)
   d. Funding agencies
      i. National Science Foundation (NSF)
      ii. Institute of Museum and Library Services (IMLS)
      iii. Andrew W. Mellon Foundation
      iv. W.K. Kellogg Foundation
   e. Major digital library projects
      i. Education
         1. National Science Digital Library (NSDL)
      ii. Humanities
         1. Documenting the American South
         2. Perseus Project
      iii. Geographic data
         1. Alexandria Digital Library (ADL)
      iv. Multimedia
         1. Informedia Project
         2. Open Video Project
      v. Management approaches to collections of collections
         1. ibiblio
         2. NSDL
   f. Evolution of services
      i. Architectural
      ii. Library-style
      iii. Educational
9. Resources

a. Required readings:

b. Research streams that fed into early DL work
   i. Information Retrieval
         1.0. Blacksburg, VA: Virginia Tech.
         1, 2, & 3)
   ii. Electronic Publishing & Scholarly Publishing
      1. Bush, V. (1945). As We May Think. The Atlantic Monthly,
         Journal Publishing. In M. E. Williams (Ed.), Annual Review of
         Medford, NJ: Information Today, Inc.
   iii. Databases
   iv. Cyberinfrastructure
         Volume I: The World of Knowbots, (DRAFT): An Open
         Architecture For a Digital Library System and a Plan For Its
         Development: Corporation for National Research Initiatives.
         http://hdl.handle.net/4263537/2091
      2. Atkins, D. E., Droegemeier, K. K., Feldman, S. I., Garcia-
         Revolutionizing Science and Engineering Through
         Cyberinfrastructure: Report of the National Science Foundation
         Blue-Ribbon Advisory Panel on Cyberinfrastructure.
         Arlington, VA: National Science Foundation.
   v. Other
         MA: MIT Press.

c. Digital Library Initiative (DLI)
   i. DLI website: http://www.dli2.nsf.gov/dlione/
   ii. 6 projects:
   iii. Range of media

d. Digital Libraries Initiative Phase 2 (DLI2)
   i. DLI-2 website: http://www.dli2.nsf.gov/

e. Funding agencies
   i. National Science Foundation (NSF)
   ii. Institute of Museum and Library Services (IMLS)
iii. Andrew W. Mellon Foundation

iv. W.K. Kellogg Foundation

f. Major digital library projects
   i. Alexandria
   ii. Perseus
      http://dx.doi.org/cnri.dlib/january98-crane

iii. ibiblio

iv. The National Science Digital Library (NSDL)
g. Evolution of services
   i. Architectural
   ii. Library-style
      1. Library Trends 49(2), Fall 2000: Special issue: Assessing Digital Library Services
   iii. Educational

10. Concept map

11. Exercises / Learning activities
   a. Homework to be completed prior to this lesson:
      i.
   b. Exercise in class:
      i. Minute paper?
   c. Discussion questions for the classroom:
      i.
   d. Lab in class:

12. Evaluation of learning outcomes
   a. Homework to be completed subsequent to this lesson:
      i.

13. Glossary
   a. DLI: Digital Libraries Initiative
   b. DLI-2: Digital Libraries Initiative Phase 2
   c. IMLS: The Institute of Museum and Library Services. imls.gov
   d. NSDL: National Science Digital Library, created by the National Science Foundation. nsdl.org
14. Useful links