Lessons Learned: That "Hindsight Thing"

#0226116

NSDL: November 2004; Chicago

First iteration of eERL. (2000-2002)

Lesson 1

Lessons Learned 1

- Define and clarify the primary audience and focus on serving that audience. You cannot be all things to all people.

Note: All participants need a clear understanding of the primary audience.

Lesson 2

Lessons Learned 2

•The NSDL funding period may not be long enough for the development needed to put the library in a position to sustain itself (for example, more time for testing and refining is necessary).

Note: Feedback from NSDL needs to be frequent and frank. This includes the proposal review process.

Lesson 3

Lessons Learned 3

•Choose collection/vetting team to match the needs of the audience.

•Identify people who will get things done and who will support the efforts of the team.

Lesson 4

Lessons Learned 4

Evaluation:

•Internal and external evaluative plans need to be refined and implemented constantly.

Note: Could NSDL provide more formative evaluation, well before summative evaluation? How can evaluation provide feedback on sustainability issues?

Note: Don't get tangled up in the theory of evaluation. Focus on answering the basic questions of the designers, contributors, and funding organizations.

Lesson 5

Lessons Learned 5

•Participants need to buy into the project and assume active roles as team members. There is a need to take a pulse periodically to evaluate participant enthusiasm and contribution. Provide a mechanism for gracious exits and new recruitments.

(Avoid "Donald Trump" moments.)

Lesson 6

Lessons Learned 6

•On-site meetings are essential to a project uniting participants from across the country: meeting model brought the players together constructively. (Advisory Board and Collection team met with Working team.)

•Use telecons, e-mails, etc., between on-site meetings as the glue to maintain the project's momentum.

Lesson 7

Lessons Learned 7

•To get the work done with limited staff time and resources is a stretch. It requires workarounds, creative solutions, and working smarter, not necessarily harder.

Lesson 8

Lessons Learned 8

- •Marketing is integral to the success of the digital library world.
- •Grassroots marketing seems to be especially successful to build the user base.
- •Use creative, focused marketing techniques directed towards funding organizations as well.

Lesson 9

Lessons Learned 9

•Create a sustainability plan with actions taken well in advance of the end of a funding period.

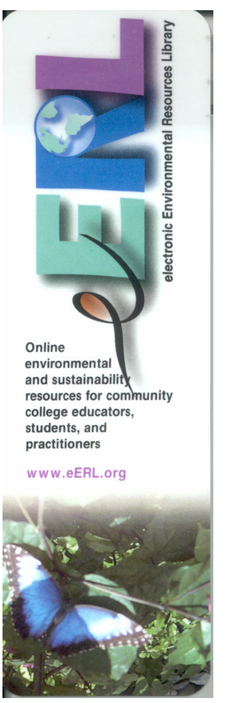
•Need to expand network of people who implement the library and who contribute to it.

Lesson 10

Lessons Learned 10

Take advantage of the resources and expertise found within the NSDL community.

Conceptual models are needed to help show how a library works and interacts with NSDL and the community it serves.



eERL Players:
PI
Project Manager, Instructional Designer
Librarians
CWIS
Technologist
Collection team + LFEE
Evaluator
Board
Classroom implementers
Teacher's Guide Designers
LFEE
Cornell's Metadata Services
PETE
Think Aloud Moderators

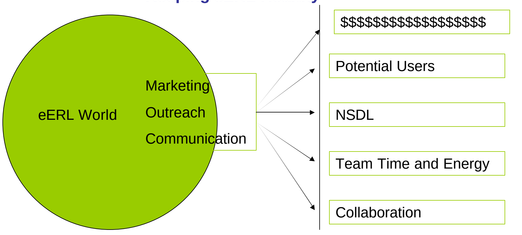
eERL WORLD

Processes
- Recommendations (Internal/External)
- Content Review (Vetting)
- Validation
- Virtual Reference
- Cataloging/Harvesting
- Testing/Retooling

Tools
- Quick ID and Response Matrix (solutions based on scenarios)
- Formative Evaluation and ThinkAloud Validation
- Trial Implementation and Outcomes Assessment
- Marketing
- Guides: Teachers, Users, etc.

Actors
- Users: Students, Teachers, Practitioners
- Implementers
- Collectors
- Librarians
- Managers
- Technologists
- Collaborators

The Greater Universe: Keeping eERL Healthy



3-05-04

NSDL Annual Meeting

November 14-17, 2004

eERL: electronic Environmental Resources Library (#**0226116)**

Thanks to the eERL Team, for their participation in the creation of this new digital library, one of the portals on NSDL:

Dr. Ellen Kabat Lensch, PI

Gary Olson, Instructional Technologist

Christine Walker, Project Manager

Chris Neuhaus, Evaluator

Dee Canfield, Librarian

Sue Ring, Librarian

Meg Sarff, Librarian

Jeff Bates, Collections

Dan Chiras, Collections

Sharon Flanagan, Collections

Mike Jund, Collections

Richard Knaub, Collections

John Marks, Collections

Kevin King, Collections

Debra Rowe, Collections

Cheryl Stith, Collections

Beth Conlin, Collections (MIT's LFEE)

Kathy Cardwell, Advisory Board (2003 only)

Tim Cole, Advisory Board

Betty Hagberg, Advisory Board

Kent Jensen, Advisory Board (2003 only)

Rajul Pandya, Advisory Board

Marie Zimmermann, Advisory Board

Martin Kurth, Consultant

Frank Settle, Mentor

Laura Bartolo, Mentor

Casey Jones, Mentor

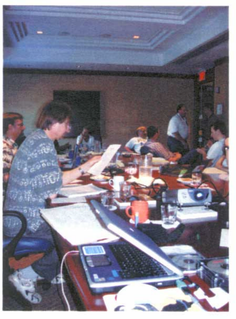
Think Aloud Moderators

Classroom Implementers

ATEEC's electronic library project, funded by NSDL

"Libraries without books and walls will change the face of education, and eastern Iowa will be home to one such library, thanks to a grant from the National Science Foundation."

–Quad City Times



Content experts working on eERL

www.eerl.org (http://www.eerl.org)

Overview: About eERL

www.eerl.org (http://www.eerl.org)

The electronic Environmental Resources Library (eERL), an ATEEC (Advanced Technology Environmental Education Center) project, is a multi-faceted clearing house of valuable electronic resources. eERL results from an NSDL, or National Science Digital Library, grant.
For this grant, ATEEC joined forces with the Davenport Public Library and also collaborated with the Partnership for Environmental Technology Education (PETE) and MIT's Laboratory for Energy and the Environment (LFEE). DPL's librarians bring the skills to catalogue the resources recommended by PETE and LFEE and reviewed / vetted by eERL's handpicked team of environmental educators and practitioners.

This electronic library collected 2500+ STEM (Science, Technology, Engineering, and Math) resources tied to environmental science and technology resource information-- from classroom-ready materials to regulatory information and global environmental issues. Some of the areas include: air quality, emergency preparedness and response, energy, natural resources management, safety and health, and sustainability. Vocational areas are covered also, from agriculture, automotive, and green building to manufacturing technology.

eERL's team of expert community college educators and practitioners evaluate and recommend valid, up-to-date content. eERL's carefully chosen resources are incorporated into NSDL's database regularly, offering another way to access eERL and many other NSDL libraries. See NSDL's site: http://nsdl.org.

Community College Role in Digital Libraries
eERL is a product of a community college based NSF center, ATEEC. As the only community college digital library portal in NSDL, eERL becomes a tool to extract vital information for students and educators. eERL serves to link research on STEM resources tied to environmental science and technology content and make it available to high school and middle school as well to its niche of community college education. eERL is working with the Gender Diversity and Technology Institute to make its resources available to middle school students with a focus on engaging girls in STEM education. eERL is also collaborating with ASDL (Analytical Sciences Digial Library).

Community colleges enroll 10.4 million students annually in college transfer and workforce preparation credit and noncredit programs. 44% of all undergraduates are attending community colleges with 58% of those students being women. 46% of African Americans, 55% of Hispanic, 46% of Asian, and 55% of Native American undergraduate students attend community colleges.

MIT's Laboratory for Energy and the Environment (LFEE)
MIT's Laboratory for Energy and the Environment (LFEE) contributes original research to eERL on energy and other environmental issues. LFEE brings together collaborating faculty and staff in 14 departments to integrate sustainability research and education needs.

eERL's Library Team
A team of librarians help guide the eERL project, forming collection policies and preparing data about the resources available through the eERL database. The tremendous value librarians add to the digital library process includes organization and cataloguing information that makes the resources easy to find and identify as what the user needs and wants.

The following three sections summarize what eERL provides for each of its three audiences—educators, students, and practitioners

eERL for Educators
--clearing house of environmental resource information--from classroom-ready materials to regulatory information and global environmental issues
--reliable resources for your class: They are reviewed/vetted by expert educators and practitioners
--bibliographic information searchable and expertly crafted and organized by librarians to help you find the right resources for your needs FAST
--an opportunity to submit the excellent resources you have identified
--a great place to share information
--use of Teacher's Guide to find ideas that you can customize for your class without starting from scratch

eERL for Students
--reliable resources reviewed and recommended by expert educators and practitioners in environmental technology
--quick location of resources as you research. Use keyword or advanced search or browse.
find regulatory information online, bookmark favorite sites, and cut down on the time you need for research
--source of career information--from locating internships and potential employers to how to's for job search
--contacts in your field; links to organizations and associations
--resources reviewed (vetted) to become part of eERL
--hot topics, like greenbuilding, sustainability, energy, etc.
--refined search process

eERL for Practitioners
--use of advanced search techniques to find resources quickly and easily
--links to associations and organizations that can help keep you in touch with hot topics
--opportunity to keep up with the job market and what is happening in your field
--regulations research

Lessons Learned (NSDL Grant period, 2002-2004)

1. **Define and clarify the primary audience and focus on serving that audience. You cannot be all things to all people.**
   ***Note: All participants need a clear understanding of the primary audience.**

2. **The NSDL funding period may not be long enough for the development needed to put the library in a position to sustain itself (for example, more time for testing and refining is necessary).**
   ***Note: Feedback from NSDL needs to be frequent and frank. This includes the proposal review process.**

3. **Choose collection/vetting team to match the needs of the audience.**
   ***Note: Identify people who will get things done and who will support the team.**

4. **Evaluation: Internal and external evaluative plans need to be refined and implemented constantly.**
   ***Note: Don't get tangled up in the theory of evaluation. Focus on answering the basic questions of the designers, contributors, and funding organizations.**
   ***Note: Could NSDL provide more formative evaluation, well before summative evaluation? How can evaluation provide feedback on sustainability issueswell ahead of the end of a project?**

5. **Participants need to buy into the project and assume active roles as team members. There is a need to take a pulse periodically to evaluate participant enthusiasm and contribution. Provide a mechanism for gracious exits and new recruitments.**

   ***Avoid "Donald Trump" moments.**

6. **On-site meetings are essential to a project uniting participants from across the country: meeting model brought the players together constructively. (Advisory Board and Collection team met with working team.)**

7. **To get the work done with limited staff time and resources is a stretch. It requires workarounds, creative solutions, and working smarter, not necessarily harder.**

8. **Marketing is integral to the success of the digital library world. Grassroots marketing seems to be especially successful to build the user base. Use creative, focused marketing techniques directed towards funding organizations as well.**

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