

# Collection

According to the eERL Advisory Board Report from its annual meeting held in July 2004, some of the great strengths of eERL are the careful selection and description of over 3000 resources by experts. Our handpicked team of community college environmental science and technology educators selected the very best resources, according to the collection policy. The policy

(<http://www.eerl.org/SPT--eerl01--collpolicy.php>),

created by eERL's team of librarians, "was well thought out and well executed." This vetted (reviewed and evaluated) content uniquely serves the needs of two-year college environmental science and technology education, including ATE centers. Since eERL is the only project involving two-year colleges, it can serve as their advocate.

"This project is the only NSDL project involving two-year colleges. As such, it can serve as an advocate for the needs of two-year colleges within NSDL. Equally importantly, you have the opportunity to serve as an important resource for two-year colleges and ATE centers seeking additional avenues by which to disseminate their materials. Overall, we think the collection policy is a well thought out and well executed." —from the eERL Project Advisory Board Report, July 2004

## Project Scope

The complete list of project goals and objectives can be found at <http://www.ateec.org/eerl/goals.pdf>. Goals two and three directly relate to the collection part of this report.

**Goal 2: Develop a digital collection that serves the environmental technology education needs of community college students, instructors, and technicians across a broad range of technical fields.**

Objectives include:

- Form Collections Advisory Committee.** Ten members from across the country were chosen on the basis of their educational and professional experience. These ten members met on site to determine the process to use and the organization needed for the content. The content was divided into environmental areas plus vocational technical areas of automotive, allied health and nursing, agriculture, IT, manufacturing, and construction. (See <http://www.eerl.org/SPT--About.php>)
- Participate in a network of libraries.** Inherent NSDL membership is the opportunity to work with and link to other STEM libraries. The whole is definitely greater than the sum of its parts. Following standards for preparing metadata enabled each of the projects to become OAI data providers. Projects with complementary content were able to share data and provide more resources for users.

**Goal 3: Establish a system to collect emerging environmental research from MIT's LfEE (Laboratory for Energy and the Environment) and other sources.**

The objective was to **develop the research section of the library**. The development of a research section of the library helped link MIT researchers with the workforce that community colleges help educate.

**Evaluation (link): Formative and summative evaluation plans were developed and coordinated by eERL's external evaluator.** The evaluator, along with the Project Manager, served on the Educational Impact and Evaluation Standing Committee for NSDL. One of the privileges of being part of the NSDL community was the opportunity to participate and help shape the course of the development of digital libraries.

The following three sections (shown in **blue**) are excerpts from eERL Board Report, 2004

## Concerns about the Classification System

- The Classification list is big compared to the library size. We recommend not growing the list further without a significant addition of resources.
- Sometimes the classification system is mixed in a way that could be confusing. For example, for an educational resource on automotive topics, where should someone look — in educational resource or in automotive?
- The classification has a granularity issue; some topics have hundreds of resources, some fewer than ten. The problem is not so much the number of resources in each topic, rather it is the sometimes lack of parallelism in the magnitude of the topics' scope. For example energy vs. instrumentation. Consideration might be given to reviewing those classifications with small numbers to see if there is a broader classification that could accommodate them.
- There are other environmental sites with classification schemes—how does your classification scheme relate to some of these others?

## Concerns about the Browse Structure

The current browse structure conflates four or five different kinds of classification. This is our recommendation, subject to the constraints of the software: We'd like to see the browse structure focus on content/aboutness. Examples of content/aboutness include "air quality" and "waste management." Then limits can be placed according to other classification structure. These classifications might include educational level (k-12, 13/14, Adult/Continuing Education), publication type/purpose (laws and regulations, dictionaries, thesauri, lesson plan, lecture notes). Another possible distinction within the classification system, though more subtle, would be to differentiate domains (oceans, agriculture, energy) from aboutness.

## Collection Policy

Overall, we think the collection policy is well thought out and well executed. We have some concerns about granularity, particularly as the library grows. For example, you have both the EPA home page as well as various pages from within the website. There are two problems potentially: a user could get various search returns that are all pages on the same site. The other is that a user search could result in a link to the home page, leaving the user to navigate the site to actually find the useful information related to their query. We suggest that this issue needs to be explored as part of the collection policy, but may also be addressed in the way searches are returned.

# Implementation of Metadata Harvesting Service

When we began building eERL, we started with a small existing database of vetted content. This content was cataloged using our own schema. We hired Martin Kurth and his group from Cornell as consultants to look at our database and suggested changes needed to be Dublin Core compliant. Suggestions and questions from them helped us to clarify the preparation of data and decide which of the Dublin Core elements we would use. We needed to clean up the data (spelling, capitalization, etc.) and re-catalog it into Dublin Core. We chose to stay with Library of Congress Subject Headings for one subject element and use keywords provided by the selectors (experts in the field). We also increased the length of our abstracts, as the new program allowed for more information in that field. All three of these fields (elements) would be searchable. We used categories based on divisions in ATEEC for our browse structure. As we moved through the process, we made adjustments as necessary but stayed with the concept of using simple Dublin Core for cataloging and a browse structure for our directory.

The following browse structure shows the classification and taxonomy which was developed by the team of librarians, instructional technologist, and project manager. This organization is accessible in two ways—browse or search.

## Classification and Taxonomy

### Browse structure (classifications and the structure of the taxonomy):

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<a href="#">Agriculture</a> (108)	<a href="#">Funding and Finance</a> (33)
<a href="#">Air Quality</a> (114)	<a href="#">Information Management Systems</a> (32)
<a href="#">Associations and Organizations</a> (298)	<a href="#">Jobs and Careers</a> (100)
<a href="#">Automotive</a> (84)	<a href="#">Laboratory Services</a> (101)
<a href="#">Building Construction, HVAC, and Landscape Design</a> (120)	<a href="#">Laws and Regulations</a> (135)
<a href="#">Climate and Meteorology</a> (24)	<a href="#">Manufacturing Technology</a> (12)
<a href="#">Compliance</a> (25)	<a href="#">Medical Health</a> (16)
<a href="#">Comprehensive Websites</a> (22)	<a href="#">MIT/ LFEE Research</a> (79)
<a href="#">Current Issues and Publications</a> (27)	<a href="#">Natural Resources Management</a> (473)
<a href="#">Dictionaries, Glossaries, and Terminology</a> (60)	<a href="#">Pollution Prevention</a> (36)
<a href="#">Education and Training Resources</a> (314)	<a href="#">Safety and Health</a> (194)
<a href="#">Emergency Preparedness and Response</a> (17)	<a href="#">Site Management</a> (74)
<a href="#">Energy</a> (294)	<a href="#">Sustainability</a> (259)
<a href="#">Environmental Decisionmaking</a> (25)	<a href="#">Transportation</a> (72)
<a href="#">Environmental Management Systems</a> (18)	<a href="#">Waste Management</a> (104)
	<a href="#">Water and Wastewater</a> (345)

### Searchable Fields

The search structure of the eERL database allows the user access via the following modes\*:

Contributor	Publisher
Coverage	Relation
Creator	Rights
Description	Source
Email Address	Title
	URL

\* These classifications need to include educational level (k-12, 13/14, Adult/Continuing Education) and publication type/purpose (laws and regulations, dictionaries, thesauri, lesson plan, lecture notes).