



The Gender & Science Digital Library

Education Development Center, Inc.

Presented by

Sarita Nair, Project Director

2002 SWE National Conference



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Agenda

- Education Development Center, Inc.
- What is a Digital Library?
- The National STEM Digital Library from the National Science Foundation (NSDL) : NSF's vision & direction
- The **GSDL**: A new & unique vision (December 2002)
- Building the GSDL - Process, content, & relevance
- Questions & Comments - Your feedback!



Education Development Center

- History of EDC, Inc. (1958)
 - Newton, MA, 600 employees, 300+ projects, 20 countries
 - International research and development organization
 - Projects spanning preschool to professional education

“...to improve quality, effectiveness, and equity of education; and in turn improve quality of life globally for people of all ages.”



Gender & Diversities Institute

- Objectives
 - Developing gender-healthy education and schools
 - Leveraging technology in the pursuit of equitable education
 - Improving economic self-sufficiency of both women and men
- <http://www.edc.org/GDI>

“Improving the well-being of individuals and communities, especially women and girls, through innovative, gender-healthy approaches to life-long learning.”



Digital Library vs. Traditional Library

- Instant access to digital information
- Automated organization, searching, reference desk services
- Metadata - high level of information granularity
- Fragility of electronic items
- Access control, security, copyright issues



Digital Library vs. Search Engine

- Highly refined and focused collection of items
- Increased accuracy of ‘hits’
- Cataloging/management of items
- Time-saving and effective searching



-A Broad Vision

- National Science, Technology, Engineering, Mathematics Education Digital Library (NSDL)
- A STEM education portal (December 2002)
- K-12, undergraduate, graduate, life-long learning
- Formal and informal learning environments





- Integrated Resources & Services

- FY 2002 - \$25 million
- 40 individual, interoperable collections
- 100+ other funded, research projects
- Seamless access to high quality, interactive materials supporting the best models of STEM learning and teaching
- Building a global community of learners



Why Gender & Science?

- Gender issues often ignored or marginalized
- Gender issues seen as “women-only”
- Girls and women still avoid the sciences
- Boys and men often do not see women as active collaborators in STEM
- K-12 teachers do not know how to address the issues
- Undergraduate and graduate courses lack resources



The GSDL

- Role of gender and diversity in teaching/learning
- K-12 & Higher Education
- Teacher preparation programs
- Womens studies programs
- Formal and informal learning environments
- Researchers, families, communities
- No fee for use



Content

- Examples of what the GSDL will contain:
 - Curriculum, lesson plans and classroom activities
 - Research & course materials for undergraduate/graduate courses
 - Teacher guides for equitable science instruction
 - Professional development and pre-service resources
 - Global research on gender issues in science
 - Evaluation and assessment tools
 - Software applets, video and audio segments



Moving to a New Vision

- ... Building a new kind of collection for the NSDL!
- GSDL is multi-disciplinary
 - GSDL is a global collection
 - GSDL links gender, race, ethnicity, disability concerns
 - GSDL adds value as a lens to other collections
 - GSDL integrates STEM education with careers
 - GSDL supports gender-healthy education and work
 - GSDL is a community building system

GSDL

GENDER & SCIENCE
DIGITAL LIBRARY

at Education
Development Center, Inc.

MY GSDL

ABOUT GSDL

NEWS AND EVENTS

CONTRIBUTE

JOIN OUR MAIL LIST

LINKS

FAQ

HELP

WHAT'S NEW

Gender and Science STEM resources for

K-12, higher education, women's studies, teacher
preparation programs, and informal learning environments

SEARCH 

Search for:

GO

[Searching Assistance](#)

[Advanced Search](#)

Mission - The GSDL will provide high-quality digital resources to 1) help educators promote interest and engagement with science education by all learners of all ages, particularly females, 2) encourage learners to pursue science education and future careers in science, 3) provide an inter-disciplinary examination of the role of gender in the creation, teaching and learning of science, and 4) build community among all interested users for the purposes of inquiry, information exchange, best practices development and mentoring. For more information on the vision and scope of this collection, please click [here](#).

Feature of the Week!

Title: Mathematics Projects that Foster a Critical Look at our World

URL: http://quine.enc.org/gsd/external/search/gsd/ search_redirect?url=http://www.enc.org/topics/realworld/online/document.shtm?input=FOC-001733-index

GSDL #: 1030

Autor: Fanny Sosenke

Synopsis: Using real-life investigations, this seventh grade teacher motivates her students to critically examine the world around them, helping them become quantitatively literate or "numerate." As a middle school math teacher, she believes her job goes beyond teaching the mathematics skills and concepts that will prepare my students for the next math class. She aims to make sure that the curriculum.....



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SEARCH

Search for:

GO

[Searching Assistance](#)

[Advanced Search](#)

Results

4 items found.

1. Inquiry and the National Science Education Standards

http://books.nap.edu/html/inquiry_addendum/index.html

GSDL #: 1973

Author: National Research Council (NRC). Center for Science, Mathematics, and Engineering Education (CSME)

Synopsis: This World Wide Web (WWW) site contains an electronic version of a guide, the first of the planned 2 to the NATIONAL SCIENCE EDUCATION STANDARDS (NSES), that was written to discuss the meaning and roles of inquiry in the classroom, summarize.....

[View Full GSDL Record](#)

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2. CIBL, Center for Inquiry-Based Learning

<http://www.zoology.duke.edu/cibl/>

GSDL #: 2154

Author: Norman Budnitz

Synopsis: This World Wide Web (WWW) site, maintained by the Center for Inquiry-Based Learning (CIBL) at Duke University, contains inquiry based science and mathematics activities. CIBL is a group of scientists and science educators who develop exercises and train.....

[View Full GSDL Record](#)

3. Meaningful science

<http://serve.org/Eisenhower/images/meansci.pdf>

GSDL #: 2641

Author: Jacqua L Ballas

Synopsis: This electronic document presents the experiences of seven K to 8 teachers who participated in a do cohort group in science education during which each of the teachers engaged in a different real world scientific research project. The idea was.....

[View Full GSDL Record](#)

4. Beloit Teaches Young Girls Secret of Science

<http://www.beloit.edu/~belmag/sum99/girlsandwomen.html>

GSDL #: 5074

Author: Argonne National Laboratory (ANL). Division of Educational Programs

Synopsis: This article, featured in Beloit College Magazine, describes the Beloit College Girls and Women in Science program (GWS), a weekend workshop held annually for 6th grade girls, one of their parents, and their science te



You are leaving the GSDL web site!

Thank you for visiting!

You will now access: <http://www.beloit.edu/~belmag/sum99/girlsandwomen.html>

If you are not taken there within a few seconds, please click on the above link.

We have provided a link to this site because it has information that may be of interest to you. The GSDL does not necessarily endorse views expressed or the data and facts presented on this site.

To return to the GSDL website please use the browser's Back button.



[Beloit College
Magazine](#)

[Index to Summer 1999](#)

Features

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- [Capping One Hot Year](#)
- [Boomerang Effect](#)
- [Scientific Secret](#)
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[Beloit College Home Page](#)



Beloit Teaches Young Girls Secret of Science:

It's Fun!

by Nate Llewellyn '94

A simple scientific concept—the ripple effect—is the idea behind the Beloit College Girls and Women in Science program (GWS), generating a lifetime of interest and opportunity in the sciences.

Because the unique “minds-on, hands-on” program actively involves parents and teachers of the sixth-grade participants, the wave of excitement ripples through the girls’ homes and classrooms.

Sarah James '99 (Darlington, Wis.), who just completed her third year as GWS assistant director, has experienced firsthand the positive influence of the program’s comprehensive approach. Both of her younger sisters have



How can the GSDL help you?

- Engineering professional
 - Professional development resources, networks, societies
- K-12 educator
 - Equitable models of classroom instruction
 - Innovative lesson plans to engage students, especially girls
- Faculty member
 - Same instructional issues as in K-12 environment
 - Strategies for recruitment or retention of women in engineering



How can the GSDL help you?

- **Researcher/scientist**
 - STEM and gender equity research from the around the globe
 - **Parent, family or community member**
 - Homework help - interactive, science education sites for children,
 - Ideas for science projects, camps and special programs
 - STEM career options, degrees, scholarship information
 - Mentoring opportunities
- ... and much more!



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<http://www.edc.org/GDI/GSDL>

Or **<http://www.gsdl.org>**