

Using DLESE to facilitate high quality Earth Science Education

By Steve M. Carlson, Atmospheric Education Resource Agent, Local Implementation Leader-DataStream & Water and the Earth Systems Project, CREST Educational Services
White Salmon, WA 541 571 5993, nativelement@charter.net.

What is The Digital Library for Earth Systems Education (DLESE)?

DELESE is a place to find quality teaching and learning resources about the Earth system. It is to support and service educators and students in the schools across America. The database is the geosciences member library of the National Science Digital Library (NSDL). It includes tips for using resources, workshops on teaching with data and how to use digital resources in the classroom. This is a community-led effort, funded by the National Science Foundation (NSF) and includes participants from across the USA.

What does DLESE offer?

The DLESE system offers Web-based learning resources about the Earth Sciences. It provides services to help users effectively create and use materials. Users may Search by educational standards, find and contribute teaching tips and reviews, assess Community connections on Earth Science resources, register to attend workshops, summer institutes, and events and learn about funding sources. Participate are

also encouraged to partake in discussion groups on a wide range of topics and sign up to receive DLESE the monthly electronic newsletter that keeps them current on topics, resources and events. The database also interfaces and provides tools to allow exploration of Earth data sets. The main purpose is to provide efficient discovery of quality materials and provide a safe environment and put "boundaries" on the Internet so users don't waste time or chance logging on to a dangerous our unisexual web site. It also Mitigates the changeability of websites and forwards interested parties to the proper web resource. DELESE acknowledges the current reliance on Internet resources and gives the user power to maximize use of their time. In a recent survey, "About 75 percent of students said they used the Internet first, then went to a professor or librarian for assistance, and consulted print sources last."

While there are many types of digital libraries out there, DLESE is the first choice for your Earth science needs. Talk a look, www.dlese.org!

**Using the resources in the DLESE library Website: <http://dlese.org/dds/index.jsp>
Prepare a lesson meteorology/oceanography or hydrology for your grade level.**

PROJECT CRITERIA				
Ranking	CONTENT KNOWLEDGE	COMMUNICATION: The Lesson:	LESSON DESIGN	http://library.usm.maine.edu/research/researchguides/web_evaluating.html
3	<ul style="list-style-type: none"> •Exhibits exceptional understanding of lesson topic •Transfers understanding to concrete examples •demonstrates earth science relationships 	<ul style="list-style-type: none"> • draws active participation •Visuals and handouts essential to lesson • conceptualizes understandings regarding subject 	<ul style="list-style-type: none"> •Clearly maps a plan for the lesson •Utilizes the websites to maximize learning styles domains •Adapts the material to the appropriate grade level. 	<ul style="list-style-type: none"> •Evidence of using the above criteria website to submit a review of 10 DLESE websites.
2	<ul style="list-style-type: none"> •exhibits clear understanding of chosen topic •references relationships to concrete examples •shows understanding of earth science relationships 	<ul style="list-style-type: none"> • uses appropriate vocabulary • uses visuals and handouts as part of unit • responds scientifically to questions 	<ul style="list-style-type: none"> •Somewhat maps a plan for the lesson •Somewhat utilizes the website to maximize learning styles domains •Some attempt to adapts the material to the appropriate grade level. 	<ul style="list-style-type: none"> •Evidence of using the above criteria website to submit a review of 7 DLESE websites.

1	<ul style="list-style-type: none"> • understands chosen topic area • references concrete examples • references earth science relationships 	<ul style="list-style-type: none"> • uses appropriate vocabulary • uses visuals and handouts part of presentation • responds appropriately to science questions 	Random accumulation of information for the lesson <ul style="list-style-type: none"> • Under utilizes the website to maximize learning styles domains • No Attempt to adapt the material to the appropriate grade level. 	<ul style="list-style-type: none"> • Evidence of using the above criteria website to submit a review of 5 DLESE websites.
---	---	--	--	--

The following is how to **SUBMIT A REVIEW** @ <http://crs.dlese.org/> all earth science educators are encouraged to help in this community project.

DLESE REVIEW CRITERIA @ <http://library.usm.maine.edu/research/researchguides/webevaluating.html>

Authority:

- Is the information reliable?
- Check the author's credentials and affiliation. Is the author an expert in the field?
- Does the resource have a reputable organization or expert behind it?
- Are the sources of information stated? Can you verify the information?
- Can the author be contacted for clarification?
- Check for organizational or author biases.

Scope:

- Is the material at this site useful, unique, accurate or is it derivative, repetitious, or doubtful?
- Is the information available in other formats?
- Is the purpose of the resource clearly stated? Does it fulfill its purpose?
- What items are included in the resource? What subject area, time period, formats or types of material are covered?
- Is the information factual or opinion?
- Does the site contain original information or simply links?
- How frequently is the resource updated?
- Does the site have clear and obvious pointers to new content?

Format and Presentation:

- Is the information easy to get to? How many links does it take to get to something useful?

- What is the quality of the graphical images? Do these images enhance the resource or distract from the content?
- Is the target audience or intended users clearly indicated?
- Is the arrangement of links uncluttered?
- Does the site have its own search engine?
- Is the site easily browseable or searchable?

Cost and Accessibility:

- Is the site available on a consistent basis?
- Is response time fast?
- Does the site have a text-based alternative?
- How many links lead to a dead-end?
- Is this a fee-based site? Can non-members still have access to part of the site?
- Must you register a name and password before using the site?

Other Tips:

Check the header and footer information to determine the author and source.

In the URL, a tilde ~ usually indicated a personal web directory rather than being part of the organization's official web site.

In order to verify an author's credentials, you may need to consult some printed sources such as *Who's Who in America* or the *Biography Index*.

Check and compare the web site to others which are both similar and different.

The following is the DELESE Web site.



Library for Earth System Education

Funded by the National Science Foundation



Getting started with DLESE

What's new at DLESE

- [DLESE at fall conferences](#)
- [New resources & reviews](#)
- [Review DLESE resources](#)

Resource of interest