



## **NSDL/NSTA Web Seminar**

### **Media Literacy in the 21st Century**



Wednesday, January 28, 2009



## Today's NSDL Experts



Daniella Quiñones, Marketing Coordinator,  
WGBH Teachers' Domain



Dr. Russanne Low, Senior Research Associate,  
CCB, INSTAAR, University of Colorado

Resource list for tonight's presentation:

<http://www.diigo.com/list/nsdlworkshops/web-sem-wgbh>

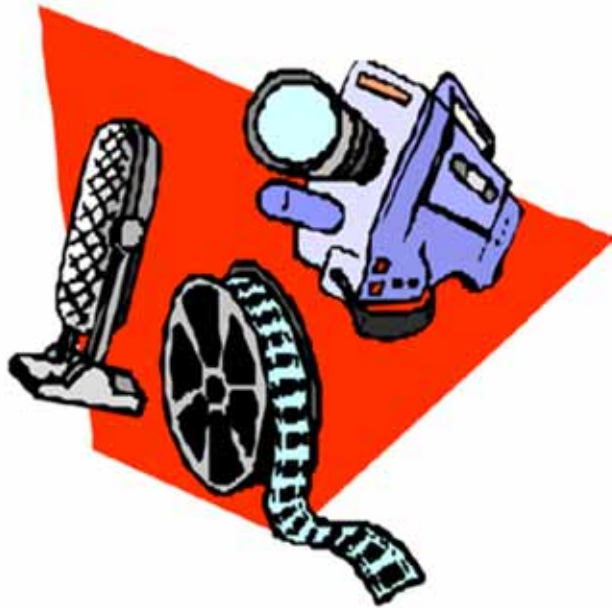


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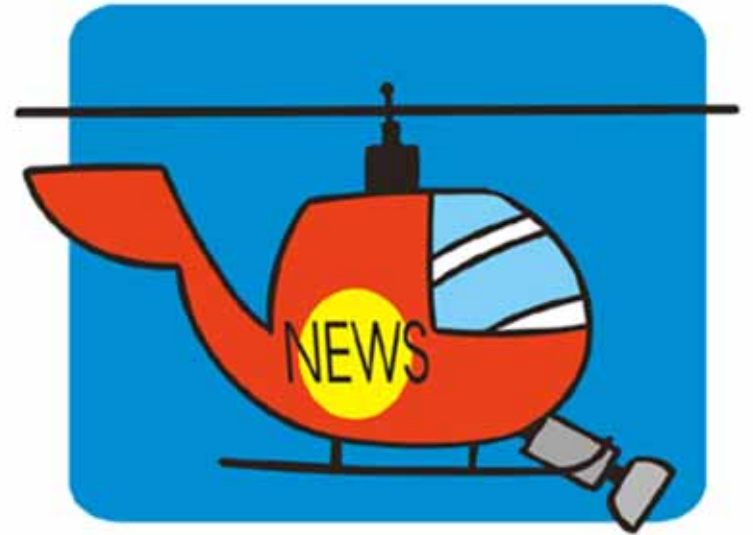
## My Knowledge/Understanding of Media Literacy is...



- A. Basic
- B. Moderate
- C. Excellent
- D. None, but I'm here to learn



Media literacy involves...  
(Stamp all that apply)



Accessing	Analyzing	Evaluating	Creating



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## True or False

The purpose of media literacy education is to: (stamp your answers)

	True	False
Help students critically analyze messages to detect biases.		
Enable students to create/produce their own media messages.		
Understand the role of media in constructing views of reality.		



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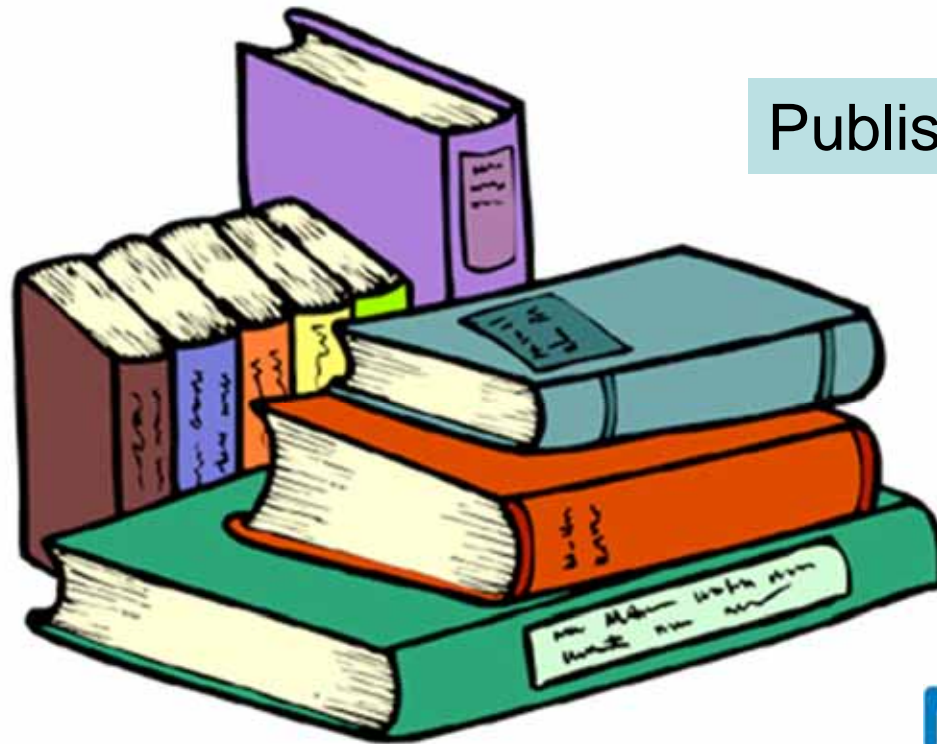


# Evaluating What You Find

Things to Consider...

Authorship

Publishing Body







# Evaluating What You Find

Things to Consider...

Verifiability



Point of View





# Evaluating What You Find

Things to Consider...



Currency & Timeliness



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Let's pause for  
questions from  
the audience....



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You have access to the WWW and need to find the best resource to answer a question about climate change. You are not a specialist in this field. How do you select the right resource?

What do you look for? Type your answers here:

A large, empty light blue rectangular box with a thin black border, intended for users to type their answers to the question above.

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Let's do a search and take a  
look at implementing some of  
these criteria



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RealClimate

http://www.realclimate.org/

home about index RC Wiki archive start here

Search

Site Google Custom Search

**RealClimate**  
Climate science from climate scientists

21 January 2009

**State of Antarctica: red or blue?**

Filed under: [Arctic and Antarctic Instrumental Record](#) [Climate modeling](#) [Climate Science](#) — eric @ 1:10 PM

A couple of us (Eric and Mike) are co-authors on a [paper coming out in Nature](#) this week (Jan. 22, 09). We have already seen misleading interpretations of our results in the popular press and the blogosphere, and so we thought we would nip such speculation in the bud.

The paper shows that Antarctica has been warming for the last 50 years, and that it has been warming especially in West Antarctica (see the figure). The results are based on a statistical blending of satellite data and temperature data from weather stations. The results don't depend on the statistics alone. They are backed up by independent data from automatic weather stations, as shown in our paper as well as in updated work by Bromwich, Monaghan and others (see their AGU abstract, [here](#)), whose [earlier work in JGR](#) was taken as contradicting ours. There is also a paper in press in *Climate Dynamics* ([Goosse et al.](#)) that uses a [GCM](#) with data assimilation (and without the satellite data we use) and gets the same result. Furthermore, speculation that our results somehow simply reflect changes in the near-surface inversion is ruled out by completely independent results showing that significant warming in West Antarctica extends [well into the troposphere](#). And finally, our results have already been validated by borehole

Decadal temperature trend over the last 50 years (1957-2006)

Antarctic Peninsula

West Antarctica

East Antarctica

trend °C/decade

SCIENTIFIC AMERICAN  
2005  
Science & Technology  
WEB AWARDS

Top Blogs  
Science 28

Guardian Environment Network

Recent Comments

CNN is spun right round, baby, right round (458)  
Dan  
Joepublic  
Mark  
James  
State of Antarctica: red or blue? (68)  
Joe Hunkins  
Maya  
Curious  
Marion Delgado  
The Younger Dryas comet-impact hypothesis: gem of an idea or fool's gold? (205)  
David B. Benson  
FAQ on climate models: Part II (149)  
Mark

...With Inline Responses

Joe Hunkins  
Chip Knappenberger  
dave p  
Bryan S  
pascal

Categories

Climate Science  
Aerosols  
Arctic and Antarctic  
Climate modelling  
El Nino  
Geoengineering  
Greenhouse gases  
Hurricanes  
Instrumental Record



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# How would you vet this resource?

Loading "Welcome to CO2 & Climate"

http://web.archive.org/web/20050620083616/http://www.greeningearthsociety.org/

Apple Dashboard | Diigo | WarrenTech | NSDL.org - The National Science Digital Library | Yahoo! | Google Maps | YouTube | Wikipedia | News (112) | P

**CO<sub>2</sub> & CLIMATE**

A Service of The Greening Earth Society 1/22/2009

Sign Up for E-mail Alerts World Climate Report Archive

ABOUT US JOIN REFERENCE CENTER CONTACT US

CO2andClimate.org reveals fundamental reasons for skepticism about the link between human activity and potential catastrophic changes in climate. Explore our site for more than a decade's reporting on this issue and sign-up for email notification to keep current.

Content Search:  
Enter detailed description of request. Example below:  
Recent articles contesting the validity of drastic climate change due to global warming

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World Climate Report Archive

Real World Climatology: Records and Observations

**LATEST NEWS: WORLD CLIMATE ALERTS**

**Climate Models**  
*No proof is sufficient: In the face of evidence resulting from their own research, some scientists refuse to abandon their preconception that computer-based climate models reliably forecast future climate. As usual, the models do a poor job of capturing observed behavior.*  
**Key words:** Robock, Ukraine, soil moisture, scientific bias, climate models, Landsea, Trenberth, IPCC TAR, Hansen  
[Read More](#)

**Climate History**  
*Timetable of Doom: United Kingdom newspaper The Independent loses credibility as its tales of global warming doom and gloom grow increasingly outrageous. There is a name for this genre: science fiction. Scary scenarios of our planet devastated by ecological catastrophe as a result of rapidly rising temperatures are not supported by the best available science.*  
**Key words:** global warming timeline, extreme scenarios, The Independent, models  
[Read More](#)

**Climate History**  
*Disaster averted: New research suggests human activity over the last 8,000 years may have headed off an impending next ice age. That's a good thing, right?*  
**Key words:** Ice Age, human activities, global warming, Ruddiman, ICCT



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WORLD CLIMATE ALERTS ARCHIVE

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Recent articles contesting the  
validity of drastic climate  
change due to global warming

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Contact Us  
The Greening Earth Society welcomes your comments.  
You can reach us by letter, phone, fax or e-mail.

Greening Earth Society  
333 John Carlyle Street, Suite 530  
Alexandria, VA 22314  
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703-684-6297 (fax)  
800-529-4503 (Toll Free)

[info@co2andclimate.org](mailto:info@co2andclimate.org)

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[Greening Alert Archive](#)  
[World Climate Report Archive](#)

[The Greening of  
Planet Earth Videos](#)

[Climate Change FAQ's](#)

Real World Climatology:  
[Records and Observations](#)

Have comments or questions?  
Contact us at  
[editor@CO2andclimate.org](mailto:editor@CO2andclimate.org)

A reliable source?



<http://nsdl.org>







Help for teachers, students, and scholars in determining the accuracy of a digital resource:

**INTEGRITY in SCIENCE**  
A C S P I P R O J E C T  
The Integrity in Science Database

**Search the Database**  
**About the Integrity in Science Project**  
**Project Activities**  
**Reports**  
**Integrity in Science Watch**  
**Integrity in Science Watch Archives**  
**Press Releases**  
**Resources**  
**Conferences**  
**Contact Us**

**Monitoring, Exposing, and Opposing Conflicts**  
The Integrity in Science (ISS) Project combats corporate influence on science and science-based public policy. We scrutinize more than 200 science-based federal advisory committees for undisclosed conflicts of interest, monitor the media and scientific literature for failure to disclose, and encourage the adoption of strong disclosure policies. ISS publishes the weekly [Integrity in Science Watch e-Newsletter](#) and maintains an open database of public records of scientists' ties to industry.

**Search the Database**  
Do your own conflict of interest research in our database of over 4,000 scientists. You should know that the database is not comprehensive and does not imply that anyone acted improperly or the results of industry-funded activities are invalid. Likewise, exclusion from the database should not be interpreted as the absence of corporate ties.

**SEARCH SCIENTISTS' TIES TO INDUSTRY**  
[Text Input Field] [Search]  
☒ Last Name ☐ Topic ☐ University ☐ Company  
**SEARCH** Universities and Non-Profits



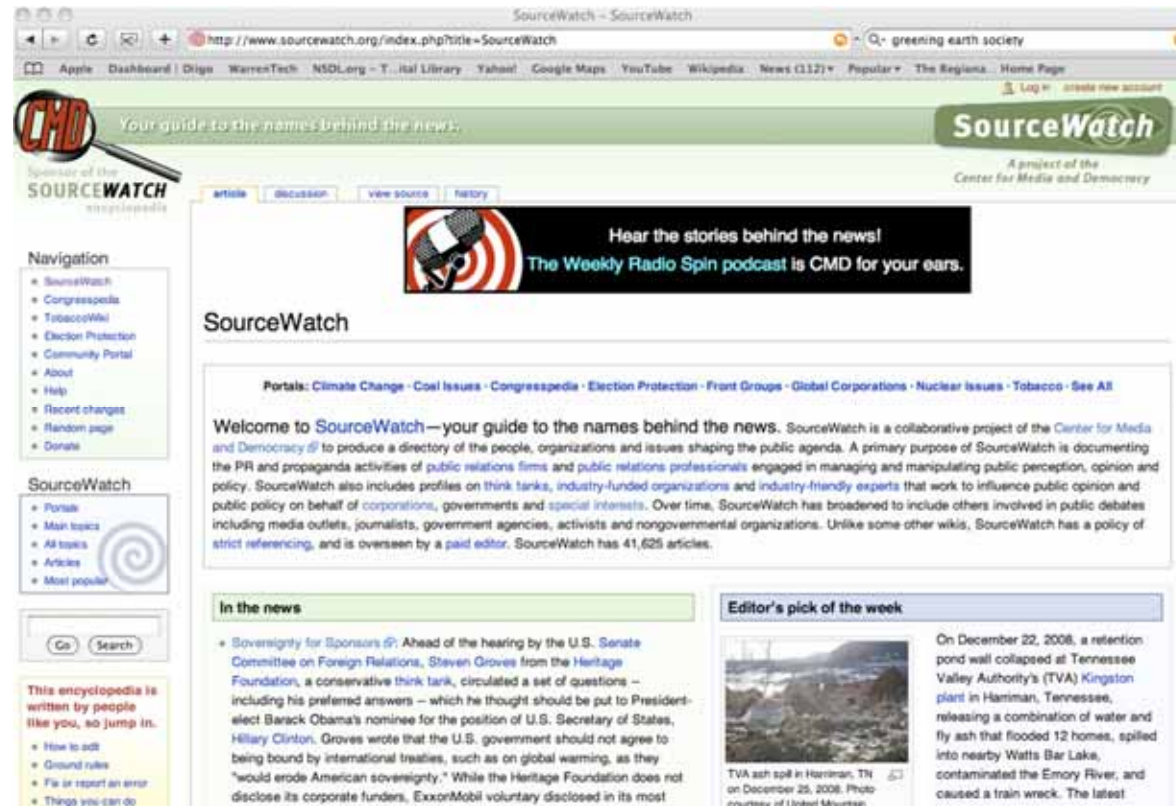
<http://nsdl.org>

[www.cspinet.org/integrity](http://www.cspinet.org/integrity)





Help for teachers, students, and scholars in determining the accuracy of a digital resource:



www.sourcewatch.org



<http://nsdl.org>





On-line resources to assist teachers with ensuring sources are valid and reputable:

Teachers Domain [www.teachersdomain.org](http://www.teachersdomain.org)

teachers' domain Digital Media for the Classroom and Professional Development

TD Home • Science • Earth and Space Science • Earth System, Structure, and Processes • Internal Earth Processes

Search  User: russanne Low of DIGITAL LIBRARY FOR EARTH SYSTEM EDUCATION

Advanced Search My Folders My Groups My Profile Help Sign out

Subtopic: **Internal Earth Processes**

49 out of 49 resources are within grades K-12 [Change grade range](#)

Resource	Grade Level	Media Type
<b>Anatomy of a Tsunami</b> Using visual models and other graphics, this interactive activity from NOVA Online reveals details of the December 26, 2004 tsunami that collided with coasts around the Indian Ocean.	6-12	Flash Interactive <a href="#">View</a>
<b>Anatomy of a Volcano</b> In this interactive activity from NOVA Online, explore the main features of the Nyiragongo volcano, located in the Democratic Republic of Congo, and learn what risks it poses to the 500,000 people who live in its shadow.	6-12	Flash Interactive <a href="#">View</a>
<b>Build an Island</b> This interactive resource from NOVA Online shows how an atoll is formed from a volcanic island and describes the role coral reefs play in this process.	6-12	Flash Interactive <a href="#">View</a>
<b>Cave Formation: Biogeochemical Cycles</b> This video segment adapted from NOVA chronicles the discoveries that led to a radical new theory in which living organisms, not just geological processes, play an active role in cave formation.	6-12	QuickTime Video <a href="#">View</a>
<b>Cave Formation: Karst Cave</b> This video segment adapted from NOVA describes a simple experiment that confirmed the idea that microbes can accelerate the biogeochemical process of cave formation.	6-12	QuickTime Video <a href="#">View</a>
<b>Collecting Data Below the Earth's Surface</b> This video segment adapted from Discovering Women demonstrates how scientists use sound waves to collect data about the structure of Earth's crust.	6-12	QuickTime Video <a href="#">View</a>
<b>Dating Lava Flows on Mauna Loa Volcano, Hawaii</b> In this video segment adapted from NOVA, scientists search for carbonized remains of plants preserved in lava flows to find out how long it has taken rain forests on Hawaii to regenerate after a volcanic eruption.	3-12	QuickTime Video <a href="#">View</a>



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On-line resources to assist teachers with ensuring sources are valid and reputable:

Teachers Domain [www.teachersdomain.org](http://www.teachersdomain.org)

The screenshot shows the Teachers' Domain website. At the top is the logo "teachers'domain Digital Media for Education". Below it is a navigation bar with "TD Home" and "About Teachers' Domain". The main heading is "About Teachers' Domain". On the left is a sidebar with links: "About Teachers' Domain", "Teachers' Domain Editions", "Professional Development Courses", "Contact Us", and "Frequently Asked Questions". Below this is a registration prompt: "Not yet registered? Register now to download, share, and save resources. It's simple, safe, and free!" with a "Learn More" link and a "Register Now" button. Below that is a link to the "Collection Policy". The main content area has a heading "About Us" and a paragraph describing the site as an online library of more than 1,000 free media resources from public television. It lists partners like HQVA, Frontline, Design Squad, American Experience, and others. A small video player shows a classroom scene with a "View" button and the text "Watch a classroom video of Teachers' Domain in action!". Below the paragraph is another paragraph stating the site's goal to strengthen teacher knowledge and inspire students to learn.

#### About Our Funders

Teachers' Domain is a Pathways project of the National Science Digital Library. Major funding for Teachers' Domain is provided by the National Science Foundation.



Additional funding comes from different grants generously provided by:

National Science Foundation  
Institute of Museum and Library Services  
Open Society Institute  
Argosy Foundation  
WPPSEF  
U.S. Department of Education  
The Camille and Henry Dreyfus Foundation  
The John D. and Catherine T. MacArthur Foundation  
Education through Cultural and Historical Organizations  
The William and Flora Hewlett Foundation  
Corporation for Public Broadcasting  
Partnership for a Nation of Learners  
Pennsylvania Public Television Network  
Vulcan Productions, Inc.  
T3 - Teachers Teaching with Technology & Professional Development Services from Texas Instruments  
NASA  
PA Space Grant  
Lehigh Valley Workforce Investment Board, Inc.  
PSEA, Pennsylvania State Education Association  
Poetry Foundation  
National Institutes of Health/National Institute of Allergy and Infectious Diseases  
NEA  
Bernard Osher Foundation  
Jack Kent Cooke Foundation  
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WPSU  
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HHMI  
Ohio Digital Classroom  
Leon Lowenstein Foundation  
Ocean Futures Society



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On-line resources to assist teachers with ensuring sources are valid and reputable:

1. Teachers Domain [www.teachersdomain.org](http://www.teachersdomain.org)
2. DLESE [www.dlese.org](http://www.dlese.org)



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On-line resources to assist teachers with ensuring sources are valid and reputable, and prevent understandable mistakes in selection of resources:



<http://nsdl.org>







In the information age, it is critical that teachers spend time developing their students' skills in media literacy.



## THE FLAT EARTH SOCIETY

*"Deprogramming the masses since 1947"*

Welcome to the Flat Earth Society Homepage! Please, be our guest. Just sit back at your computer, and let us do the talking. We'll tell you who we are, what we're doing, and what we're accomplishing in the world. You can look at some of our latest theories and insights, and, if you're interested, you can even become an honorary member of the Flat Earth Society. So stick around.

### Mission Statement-

- Background information on the Flat Earth Society
- The Flat Earth Society's purpose - why we do what we do

### Why a Flat Earth?

- Why we don't believe the world is round
- Scientific data and measurements backing up our claims

### Fighting the "Evidence"-

- Dispelling common myths about "proof" regarding round earth theory
- Uncovering the conspiracy to withhold the truth from the public

### Current Events-

- What the Flat Earth Society is doing
- What you can do to help out in your own community

### Join the Flat Earth Society-



<http://nsdl.org>





Let's pause for  
questions from  
the audience....



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# teachers'domain<sup>®</sup>



Digital Media Resources for the Classroom

[www.teachersdomain.org](http://www.teachersdomain.org)



Major funding for this project  
is provided by the National  
Science Foundation



A collection of the National  
Science Digital Library



Teachers' Domain is  
produced by WGBH Boston



# What is Teachers' Domain?

- Free online media resources from public television and other trusted sources



- Professional development science courses feature the resources in the collections



<http://nsdl.org>







# Teachers' Domain Content Meets Teachers' Needs

## National Science Education Standards

US.NSES.5-8.sci.A

CONTENT STANDARD A:

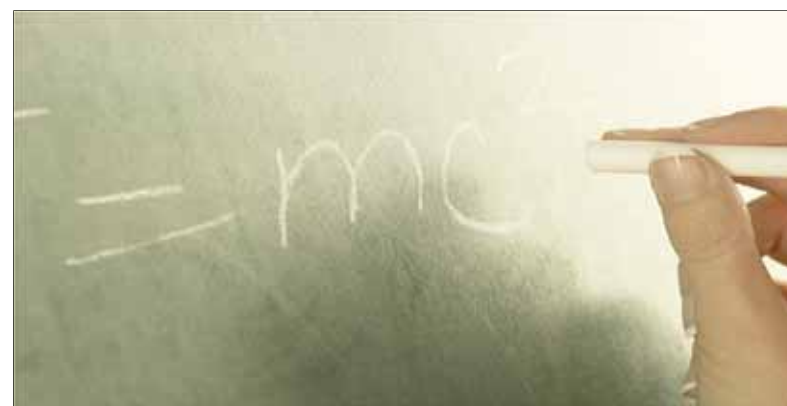
US.NSES.5-8.sci.A.1

ABILITIES NECESSARY TO DO SCIENTIFIC INQUIRY

US.NSES.5-8.sci.A.1.a

IDENTIFY QUESTIONS THAT CAN BE ANSWERED THROUGH SCIENTIFIC INVESTIGATIONS.

Students should develop the ability to refine and refocus broad and ill-defined questions. An important aspect of this ability consists of students' ability to clarify questions and inquiries and direct them toward objects and phenomena that can be described, explained, or predicted by scientific investigations. Students should develop the ability to identify their questions with scientific ideas, concepts, and quantitative relationships that guide investigation.



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Register now to download, share, and save resources. It's simple, safe, and free! [Learn More](#)

## Announcements

Teachers' Domain now includes Math, Language Arts, Social Studies, and Arts, in addition to our core Science resources! [more...](#)

Teachers' Domain offers standards-based professional development courses in Science. [more...](#)

Celebrate International Literacy Day this September with Poetry Everywhere. [more...](#)

College faculty and students, do you know about Teachers' Domain College Edition? [more...](#)

Stay in touch with updates and promotions! [more...](#)

## Browse:

By K-12 Subject

[Special Collections](#)

[Professional Development Courses](#)

## Arts

- ▷ [Dance](#) (2 resources)
- ▷ [Music](#) (10)
- ▷ [Theatre](#) (27)
- ▷ [Visual Arts](#) (4)

## English Language Arts

- ▷ [Reading and Viewing](#) (158 resources)
- ▷ [Writing and Speaking](#) (66)

## Mathematics

- ▷ [Number and Operations](#) (57 resources)
- ▷ [Algebra](#) (12)
- ▷ [Geometry](#) (11)
- ▷ [Measurement](#) (19)
- ▷ [Data Analysis and Probability](#) (9)

## Science

- ▷ [Earth and Space Science](#) (303 resources)
- ▷ [Engineering](#) (208)
- ▷ [Life Science](#) (419)
- ▷ [Physical Science](#) (396)

## Social Studies

- ▷ [U.S. History](#) (95)
- ▷ [World History](#) (119)

## Resource Highlight



[Gallery of Visual Illusions](#)

Type: Flash Interactive

Are your eyes playing tricks on you? Discover more about eyesight and the brain as you test your eyes with these visual illusions adapted from the University of Washington's Neuroscience for Kids Web site.

Permitted use:

Download, share, and use

# Let's Explore...



## Resource topic: Plate Tectonics

## Break Out: Main Room



### Authorship

Author:  
Are they reputable?:  
Institutional affiliation:



### Publishing body

Org name:  
Org recognized in field of study?:  
Org suitable to address topic?:



### Point of View

URL on web server from org with  
a clear stake in the issue?:  
Org has political or philosophical agenda?:



### Verifiability

Includes bibliography?:  
Includes related resources?:



### Currency/Timeliness

Publication date:  
Copyright date:

# Media Literacy is a 21st Century Skill





Daniella Quiñones  
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Dr. Russanne Low  
rustylow@mac.com

**THANK  
YOU!**

Resource list for tonight's presentation:  
<http://www.diigo.com/list/nsdlworkshops/web-sem-wgbh>



<http://nsdl.org>



## Resources from this seminar:

<http://www.diigo.com/list/nsdlworkshops/web-sem-wgbh>

Search for “diigo nsdl workshops wgbh”

Learn about new tools and resources, discuss issues related to science education, find out about ways to enhance your teaching at:

<http://expertvoices.nsdl.org/learningdigitalK12>



<http://nsdl.org>





<http://www.elluminate.com>



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### Welcome to Your Professional Development

The Learning Center is NSTA's e-professional development portal to help you address your classroom needs and busy schedule. You can gain access to more than 2,600 different resources that cater to your preference for learning. Over 700 hundred resources, such as journal articles, science objects and web seminars are available **for free**. A suite of practical tools such as My Library, My Transcript, and My Professional Development Plan and Portfolio tool help you organize, personalize, and document your growth over time.



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- I'm an NSTA member and I don't have a password
- Lost password? Recover it here.
- Register now

### Explore Learning Opportunities

[See all FREE Resources](#)
   
[Advanced Search](#)

By Subject	By Grade Level	By State Standards
<ul style="list-style-type: none"> <li>Earth &amp; Space Science</li> <li>Life Science</li> <li>Physical Science</li> </ul>	<ul style="list-style-type: none"> <li>Elementary</li> <li>Middle School</li> <li>High School</li> <li>College</li> </ul>	<p>Many resources now permit you to select your grade, standard document, and state to view the standards that align to the resource you've selected.</p>



#### Do-It-Yourself Learning

Learn at your own pace online with these 1-2 or 6-10 hour interactive activities.

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Learn online from certified instructors with your colleagues. 1-2 hour seminars, week and month long courses are available. Earn state and university credit.

[SEE ALL ONLINE EVENTS](#)



#### Books & Articles

- Books
- Book Chapters



#### In Person Experiences

Attend an NSTA workshop in person to learn hands-on techniques with other teachers. Earn state and university credit.

[View Overview of the NSTA Learning Center](#)


Flash Player Required

[Free Learning Resources](#)



[Plate Tectonics: Layered Earth](#)  
2 hr Do-It-Yourself Science Object



[Oceans Effect on Climate and Weather: Global](#)

<http://learningcenter.nsta.org>



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Jeff Layman, Technical Coordinator

