

# 'Thinking' and 'Experiencing' with Digital Library Resources

## **CONCERT 2012 Conference**

The Innovation and Challenge of Digital Libraries: Moving Towards Knowledge Environments

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# CENGAGE Learning™

Formerly called: Thomson Learning

HQ: Stamford, Connecticut

July 2007 separated from the Thomson Corporation

Sept 2007 changed its name to **CENGAGE Learning**  
(Coined from the phrase “**C**enter of **E**ngagement”)

- **Library Reference (Gale)**
- **ELT**
- **Academic & Professional Group**

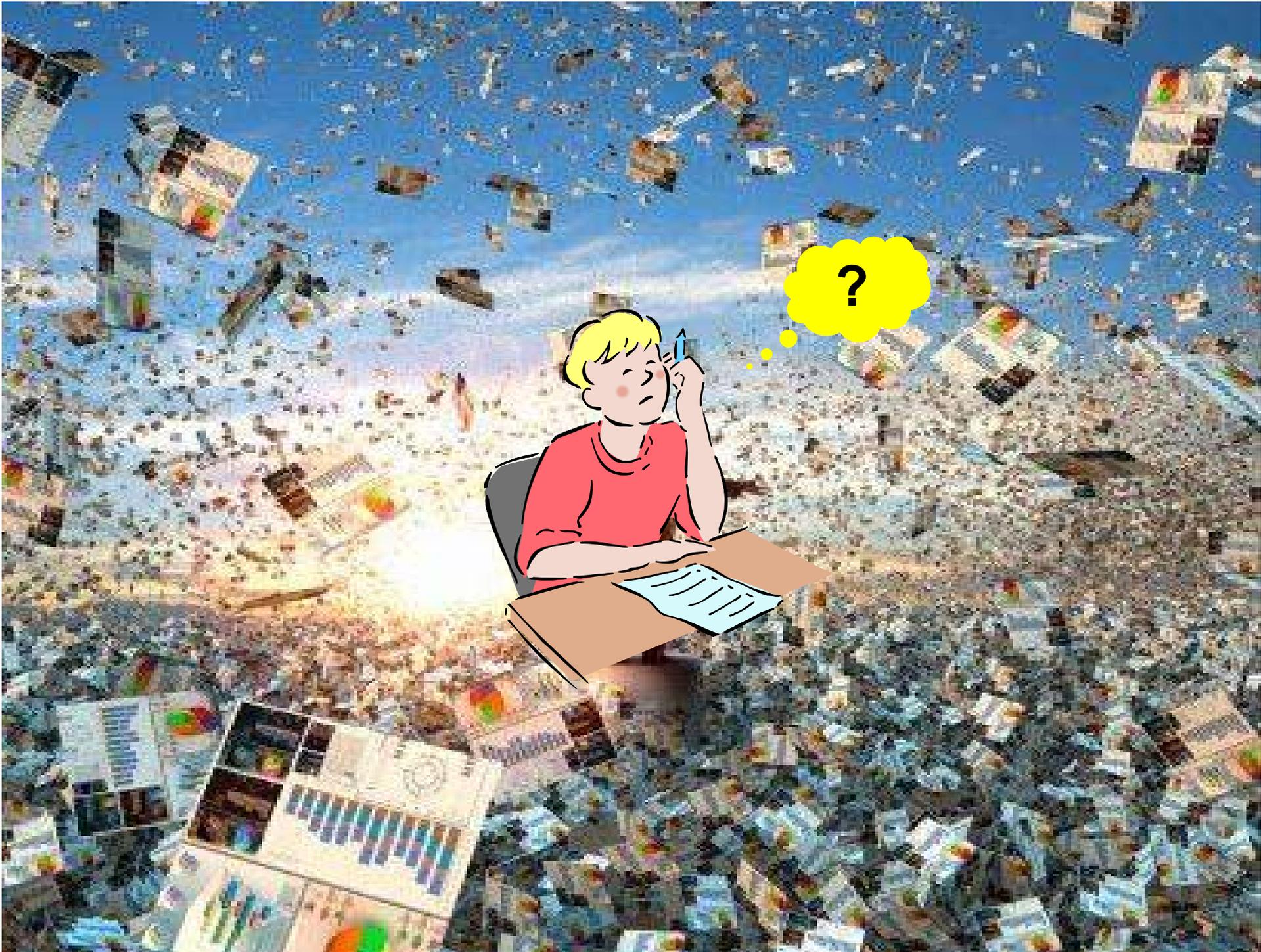
Today's presentation is on products from the Library Reference division



## Gale (Library Reference)

- HQ in Farmington Hills, Michigan, USA
- One of the foremost library reference publishers
- Has many well-established imprints, including:
  - Gale
  - Charles Scribner's Sons
  - Macmillan Reference USA
  - UXL
- Publishing formats include:
  - **Print** library reference such as thematic encyclopedias, annual directories, literary biographies/criticisms, etc.
  - **eBook** versions of print publications and an eBook platform
  - Aggregated **Journal** databases
  - Subject **Portals** and **Databases** combining various content together
  - **Microform** collections and serials
  - **Digital Archives** of primary source material





## 21st Century Skills

“Fifty years ago, the ticket up the economic ladder was content mastery of four or five subjects.

“Today, it is the ability to **think critically, solve problems, communicate, collaborate, use technology, and be globally competent.**”

Ken Kay

President of the Partnership for 21st Century Skills

[www.p21.org](http://www.p21.org)



# Partnership for 21st Century Skills

*Some of the Member Organizations:*



**Follett**



**AP**



Education Networks of America



**Ford Motor Company Fund  
and Community Services**

**PARTNERSHIP FOR  
21ST CENTURY SKILLS**

Gale is a proud member of the Partnership for 21st Century Skills. Click the image for more information. [21stcenturyskills.org](http://21stcenturyskills.org)





# overview

Skills Framework

P21 FAQ

Use of P21 Content

Home ▶ Overview ▶ Skills Framework

## Core Subjects and 21st Century Themes



Mastery of core subjects and 21st century themes is essential for students in the 21st century.

Core subjects include:

- English, reading or language arts
- World languages
- Arts
- Mathematics

In addition to these subjects, we believe schools must move beyond a focus on basic competency in core subjects to promoting understanding of academic content at much higher levels by weaving **21st century interdisciplinary themes** into core subjects:

- **Global awareness**
- **Financial, economic, business and entrepreneurial literacy**
- **Civic literacy**
- **Health literacy**
- **Environmental literacy**

## How is Gale Contributing to 21<sup>st</sup> Century Learning?

*By providing context, not just facts.*

*It's about...*

- **Engaging** users with attractive interfaces and technologies that integrate into their everyday life
- Providing trusted **quality** information from Gale and other sources
- Taking up 21st century interdisciplinary themes such as **global awareness** and **environmental awareness**
- Moving away from the 20th Century **research process** and embodying the 21st Century **critical thinking process**

*The Evolution of Research Databases into  
Knowledge Portals...*

# Engaging Users: Moving away from the “Research Database” model

- An image of a dark, closed “Box” – can’t see what’s inside
- A dark box with a search box
- Uninteresting if you’re not familiar with its contents
- Too stuffy for the Google Generation

Google



# Our previous products were "Databases"

The screenshot displays the History Resource Center website interface. At the top, there are navigation tabs for 'Dictionary', 'Research Guide', 'Faculty Guide', and 'List of Sources'. A prominent search bar is labeled 'BASIC SEARCH' with buttons for 'Search', 'Clear Form', and 'Search History'. Below this, there are sections for 'OTHER SEARCHES' (PERSON, SUBJECT) and a 'TIMELINE' section. The main content area shows a search for 'British Imperialism' with a 'SUBJECT SEARCH' section. A yellow callout box points to the search bar with the text 'Emphasis on search'. Another yellow callout box points to the search results list with the text 'Long list of results'. A third yellow callout box points to a sidebar menu with the text 'Additional Content hidden behind tabs'. The sidebar menu includes links for 'British Colonies', 'British Empire', 'British History', 'British Imperialism', and 'Colonial Africa, 1870-1960'. The search results list includes items like 'The Amritsar Massacre of Indian Civilians, April 13, 1919' and 'Botswana Natives Given Limited Governmental Representation, 1920'.

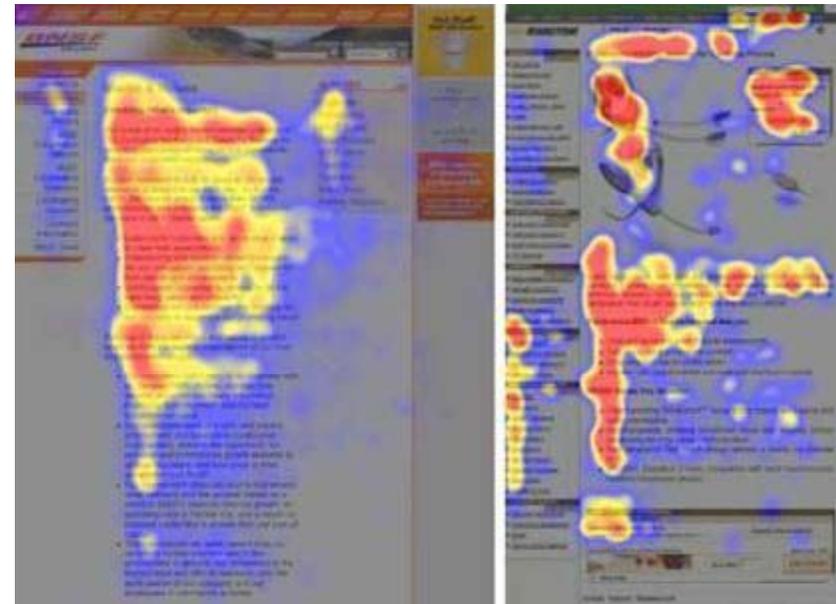
Emphasis on search

Long list of results

Additional Content hidden behind tabs

# The “F” factor – How Users Browse Long “Lists” of Material

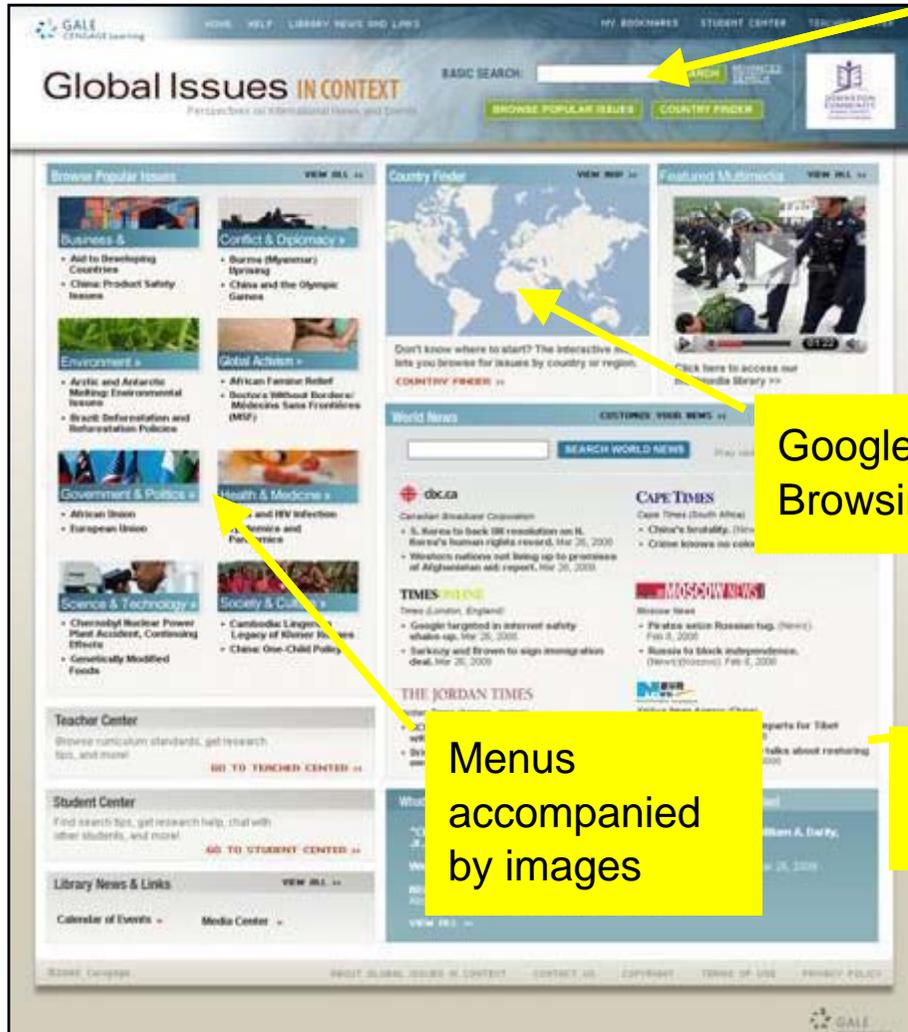
- 80% of web readers “skim” the page
- The user’s eye typically follows an “F” pattern, focusing on:
  - Images
  - Titles
  - Captions
  - Highlighted words and links
  - Bulleted paragraphs
- Users only read the first 2-3 results on each page



Jakob Nielsen’s Website <http://www.useit.com/papers/webwriting/>  
Ibid., Eyetracking Research <http://www.useit.com/eyetracking/>  
Eyetrack III. <http://www.poynterextra.org/eyetrack2004/>

# Transforming the Database into a “Website”

With GIC and GREENR, we transformed our products to a more “webby” interface that resembles a website



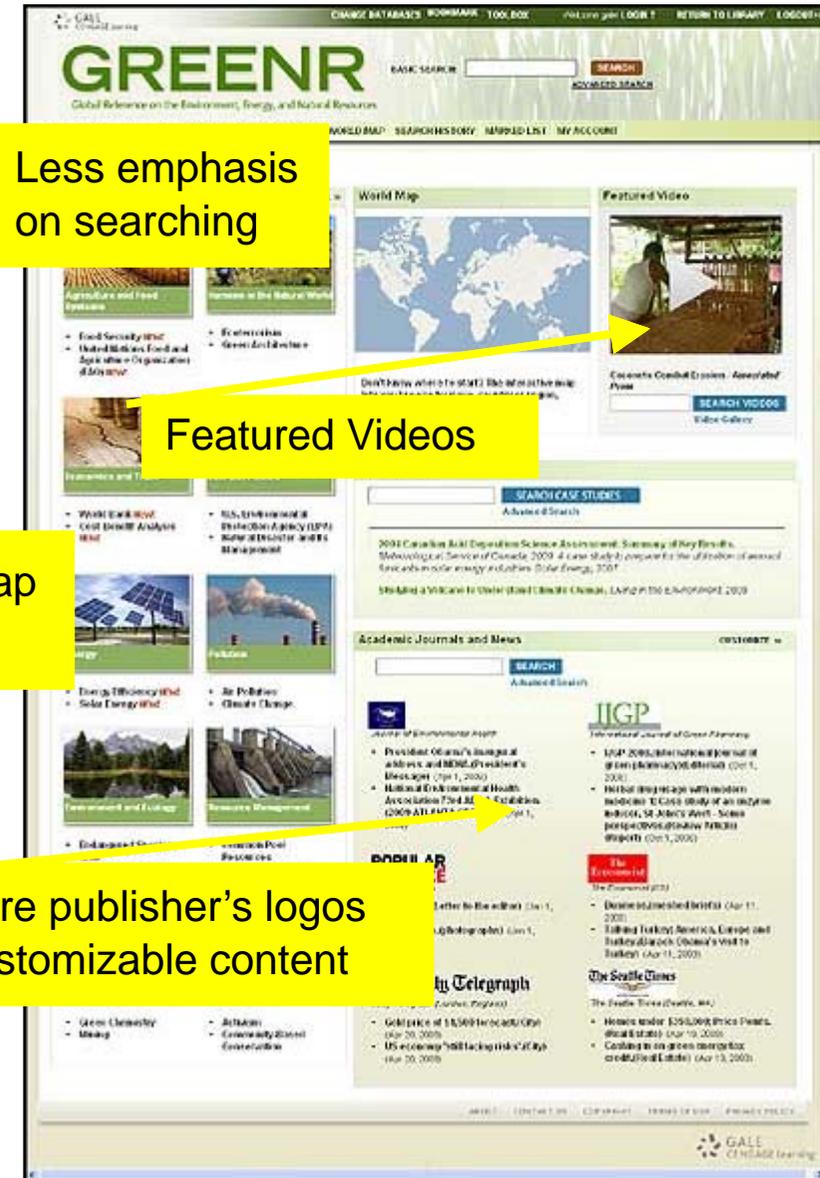
Less emphasis on searching

Featured Videos

Google Map Browsing

Menus accompanied by images

More publisher's logos  
Customizable content



# Topic Page: Replicating the Typical Web Experience

The screenshot shows the GREENR website interface for the 'Carbon Markets' topic. The page is organized into several sections:

- Header:** Includes the GALE CENGAGE Learning logo, navigation links (CHANGE DATABASES, TOOLBOX, NOT SIGNED IN? LOGIN, RETURN TO LIBRARY, LOGOUT), and a search bar.
- Navigation:** A horizontal menu with links for HOME, ADVANCED SEARCH, BROWSE ISSUES AND TOPICS, WORLD MAP, SEARCH HISTORY, MARKED LIST, and GREENR BLOG.
- Main Content Area:**
  - Carbon Markets Overview:** A central text block providing an overview of the carbon market, its history, and its potential.
  - Academic Journals:** A list of journal articles with titles like 'Allocation and leakage in regional cap-and-trade markets for CO<sub>2</sub>' and 'Evaluating the application of different pricing regimes and low carbon investments in the European electricity market'.
  - Statistics:** A section with a 'VIEW ALL 5 >>' link, containing items like 'Carbon Market, 2005 to 2008' and 'Number of Clean Development Pipeline Projects and Developing Countries'.
  - News:** A section with a 'VIEW ALL 1,539 >>' link, featuring an article titled 'European airline rules risk trade war with US'.
- Right Sidebar:**
  - Case Studies:** A section with a 'VIEW ALL' link, containing articles like 'Sharing Benefits from Carbon Finance: Lessons from the Guangxi CDM Project'.
  - Podcasts:** A section with a 'VIEW ALL 2' link, featuring 'NPR: 12-08-2011 Environment'.
  - Websites and Blogs:** A section with a 'VIEW ALL 2' link, containing 'Living on Earth: Australia to Join Carbon Market'.
  - Get Involved:** A section with a 'VIEW ALL 2' link, containing 'Carbon Emissions Offset Your Carbon'.
- Left Sidebar:**
  - Images and Videos:** A section with a 'VIEW ALL >>' link, featuring a photo of a power plant and a video player.
  - Search within this Portal:** A search box with a 'SEARCH' button.
  - Related Portals:** A list of related topics such as 'Air Pollution', 'Climate Change: Economics', 'Mitigation', 'Greenhouse Gas Emissions', and 'Market Mechanisms'.
  - Conference Presentations and Reports:** A section with a 'VIEW ALL 21 >>' link, containing items like 'Carbon Markets USA' and 'Carbon Markets Asia'.

Video and Photos

Overview essay

Case Studies

Podcasts

Max top 3 entries for each content type

Academic Journals

External Links

"View All" link to display complete list

Conference Presentations & Reports

Statistics

News

# Topic Page: Replicating the Typical Web Experience

GALE CENGAGE Learning

CHANGE DATABASES TOOLBOX NOT SIGNED IN? LOGIN RETURN TO LIBRARY LOGOUT>>

# GREENR

Global Reference on the Environment, Energy, and Natural Resources

BASIC SEARCH:  SEARCH [ADVANCED SEARCH](#)

HOME ADVANCED SEARCH BROWSE ISSUES AND TOPICS WORLD MAP SEARCH HISTORY MARKED LIST GREENR BLOG

Home ► Carbon Markets

Images

Carbon Di... in Shippi... been Visi... Robert M...

DETAILS >>

Search with

RELATED P...  
Air Polluti...  
Climate C...  
Climate C...  
Mitigation...  
Greenhou...  
Market Me...

Conference...  
Documentation...  
Reports

Carbon Markets Asia  
Global Reference on the Environment, Energy, and Natural Resources Online Collection, 2012.

The Carbon Trading Summit  
Global Reference on the Environment, Energy, and Natural Resources Online Collection, 2012.

## TOOLS

★ BOOKMARK + SHARE

## Case Studies

Sharing Benefits from Finance: Lessons from Guangxi CDM Project  
Gernot Brodnig. The World Bank, 2010.

10 Years of Experience in Finance: Insights from the Kyoto Mechanism  
The World Bank, 2010.

Towards an Emissions Trading Scheme for Air Pollutants in India  
management, August 01, 2012.

## Statistics

Carbon Market, 2005 to 2008 (New Carbon Finance) GRAPH, INTERACTIVE FEATURE

Number of Clean Development Mechanism Pipeline Projects and Millions of CERs by Developing Countries (United Nations Environment Programme (UNEP) Risoe Center/UNFCCC databases--New Carbon Finance) STATISTICAL TABLE

## News

European airline rules risk trade war with US; A trade war that could cripple transatlantic aviation has moved a step closer with the US passing a Bill which BUSINESS NEWS

## Bookmark & Share

Facebook Twitter  
Email Print  
Reddit StumbleUpon  
Favorites Gmail  
Blogger Tumblr  
LinkedIn More... (328)  
AddThis Settings Privacy



## ... But the Web has Gone Even Further (Too Far, Perhaps)

The Filter Bubble  
What [redacted] the [redacted]  
[redacted]  
[redacted] Internet [redacted]  
[redacted]  
[redacted] Is [redacted]  
[redacted]  
[redacted] Hiding [redacted]  
[redacted]  
[redacted] From [redacted]  
[redacted]  
[redacted] You [redacted]  
**Eli Pariser**



Few people noticed the post that appeared on Google's corporate blog on December 4, 2009. . . .

Starting that morning, Google would use fifty-seven signals . . . to make guesses about who you were and what kinds of sites you'd like. Even if you were logged out, **it would customize its results**, showing you the pages it predicted you were most likely to click on.

# The "Filter Bubble" in Action

Source: www.thefilterbubble.com

## Bing Search for "Climate Change" - International Comparison

### US: Informational Sites

bing "climate change" Web News Videos Blogs More

1-10 of 55,000,000 results

RELATED SEARCHES: Climate Change Myth, Climate Change Wiki, Climate Change Journal, Climate Change over Time, Climate Change and Global Warming, Anthropogenic Climate Change, Evidence of Climate Change, EPA Climate Change

SEARCH HISTORY: "John Boehner", "Barack Obama"

NARROW BY DATE: All results, Past 24 hours, Past week, Past month

ALL RESULTS: Sustainable Development, Chevron & Climate Change, News: "climate change", Climate change and the flood this time, Climate Change: The Test for Our Civilization, Climate change - Wikipedia, the free encyclopedia, Climate Change | U.S. EPA, Climate change: Definition from Answers.com

### EU: Climate Action Sites

bing "climate change" Internet Bücher Mehr

1-10 von 53.500.000 Ergebnissen

ÄHNLICHE SUCHVORGÄNGE: Climate Change Global Warming, Climate Change Conference, Climate Change Summary, Climate Change Effects, Intergovernmental Panel On Climate Change, Stop Climate Change, BBC Climate Change, UV Index

SUCHVERLAUF: john boehner, barack obama, alle anzeigen, alle löschen, deaktivieren

EINSCHRÄNKEN NACH SPRACHE: Nur Deutsch, Mehr

EINSCHRÄNKEN NACH REGION: Nur aus Deutschland

ALLE ERGEBNISSE: Atlas Of Climate Change bei Amazon.de, Siemens antwortet, climate change jetzt informieren & richtig billig kaufen, Stop Climate Change, What we do - About us - Climate Action, Climate change - Wikipedia, the free..., dict.cc | climate change | Wörterbuch Englisch-Deutsch, Klimawechsel - Climate Change - bueltge.de

Realtime

Books

More

New York, NY

Change location

Any time

Latest

Past 24 hours

Past week

Past month

Past year

Custom range...

All results

Wonder wheel

Timeline

Hosni Mubarak - Ancient Egypt - Female genital cutting - History of modern Egypt

Egypt News - The Protests of 2011 - The New York Times

World news about Egypt and the protests of 2011. Breaking news and archival information about its people, politics and economy from The New York Times.

Egypt Travel, Tours, Vacations, Ancient Egypt from Tour Egypt

Information for travelers, resources on history, monuments and activities.

News for Egypt



Why Lara Logan Was Eager to Return to Egypt

By Charlotte Triggs AP Lara Logan had already had one troubling experience in Egypt before last Friday's "brutal and sustained" sexual assault, ...

In Egypt, renewed hope for gender equality

USA Today - 24874 related articles - Shared by 5+

Realtime updates for Egypt (390)

Shopping

Books

More

New York, NY

Change location

Any time

Latest

Past 24 hours

Past week

Past month

Past year

Custom range...

All results

Sites with images

...

Egypt Travel, Tours, Vacations, Ancient Egypt from Tour Egypt

Information for travelers, resources on history, monuments and activities.

Egypt Daily News, Egypt News

Egypt Daily News, covering Egypt News, Arab news, Middle East news and World news. Egyptian Guides, egyptian recipes, egyptian food, egyptian airforce, ...

Images for egypt - Report images



Egypt - CIA - The World Factbook

Feb 1, 2011 ... Features a map and brief descriptions of geography, economy, government, and people.

# The Personalization Effect

Source: [www.ted.com](http://www.ted.com)

"One of the troubling side effects of the friendly-world syndrome is that **some important public problems will disappear**. Few people seek out information on homelessness, or share it, for that matter. In general, dry, complex, slow-moving problems - a lot of truly significant issues - won't make the cut. And while we used to rely on human editors to spotlight these crucial problems, their influence is now waning."



Eli Pariser speaking at TED

# The Personalization Effect



# Can Library Resources be an Alternative to the “Filter Bubble”

The screenshot shows the GREENR website interface. At the top, there's a navigation bar with 'CHANGE DATABASES', 'TOOLBOX', 'NOT SIGNED IN? LOGIN', 'RETURN TO LIBRARY', and 'LOGOUT>>'. The main header features the 'GREENR' logo and the tagline 'Global Reference on the Environment, Energy, and Natural Resources'. A search bar contains the word 'egypt' with a 'SEARCH' button and a link to 'ADVANCED SEARCH'. Below the header, a secondary navigation bar includes 'HOME', 'ADVANCED SEARCH', 'BROWSE ISSUES AND TOPICS', 'WORLD MAP', 'SEARCH HISTORY', 'MARKED LIST', and 'GREENR BLOG'. The main content area is titled 'Home > Egypt' and is divided into several sections: 'OVERVIEW' with a video player and text about Egypt's history; 'Academic Journals' with a list of articles; 'News' with a list of news items; 'Case Studies' with a list of studies; and 'QUICK FACTS' with a table of statistics. A map of the world is also visible on the left side.

**OVERVIEW**

AS ONE OF the oldest civilizations in the world, the Arab Republic of Egypt has a long and rich history. Throughout much of that history, Egypt's prosperity depended on its ability to benefit from the annual flooding of the Nile River as it deposited fertile soil from other countries onto the Egyptian shore. Egypt's system of levees designed to control the Nile has been traced as far back as 3,000 b.c.e. In the capital city of Cairo, the Nile branches to meet the Mediterranean Sea. Egypt's importance to the global transportation sector was renewed in 1869 with the completion of the Suez Canal, linking the Indian Ocean with the Mediterranean Sea. The importance of the canal led Britain to seize control of Egypt in 1882, but independence was regained after World War II.

After a long history of colonization, by the 1950s, Egypt had become one of the poorest nations in ... [VIEW FULL OVERVIEW](#)

**Academic Journals** [VIEW ALL 68 >>](#)

- InSAR study of shoreline change along the Damietta Promontory, Egypt.** REPORT  
Mohamed H. Aly, John R. Giardino, et al. *Journal of Coastal Research*, Sept 2012.  
ABSTRACT Shoreline erosion has been a major problem in the Nile Delta since the full damming of the Nile River in 1970, especially along the two Nile...
- Contribution of satellite altimetry data in the environmental geophysical investigation of the northern Egyptian continental margin.** REPORT  
Hamdy Ahmed Mohamed Abouelma...  
1. Introduction The Earth's surface has been monitored for nearly twenty years from satellites... Global mapping of the Earth gravity fields from different data sources has...
- Improving the prediction accuracy of soil mapping through geostatistics.** REPORT  
Sayed Ewis El-Omran. *International Journal of Geosciences*, August 2012.  
1. Introduction The soil resource inventory, i.e. a map showing distribution of soils and its properties accompanied by a soil survey report, is the end product of...

**News** [VIEW ALL 183 >>](#)

- New Findings in Biological Factors Described from Fayoum University.** REPORT  
*Ecology, Environment & Conservation*, Oct 12, 2012.  
By a News Reporter-Staff News Editor at Ecology, Environment & Conservation -- New research on Biological Factors is the subject of a report. According to news reporting...
- Researchers from National Institute of Standards Report Details of New Studies and Findings in the Area of Radiation and** ARTICLE

**Case Studies** [VIEW ALL 5 >>](#)

- The Southwestern Mediterranean Ecosystem Revisited: Thirty Years after the Construction of the Gibraltar Barrage**
- Official Awareness of Tourism Carrying Capacity Dimensions in the Fayoum Destination's Natural Heritage Sites (Case of the Valley of Whales)**

**QUICK FACTS**

Name	Egypt
Population	78,866,635
Life expectancy at Birth	72 years
Gross Domestic Product (GDP)	\$470.4 billion
Total Land Surface Area	995,450 sq km
Arable Land	2.92%
Surface Area Protected for Biodiversity	8%
Number of Threatened Species	110
Energy Use (1000 metric tons oil equivalent)	60,793
Fossil fuel use (kg oil equivalent/capita)	842
Emissions of CO2 (million metric tons)	123.3
Emissions of CO2 (metric tons/capita)	2
Ecological Footprint (millions of global hectares)	123.3

## By providing:

- Authoritative content
- Balanced coverage
- Multiple viewpoints
- Multiple content types

## And stimulating:

- Comparison/contrast
- Critical reading
- Contextual understanding
- Global and environmental awareness



... and publishers can do more than provide “**alternative viewpoints**”



**Publishers can sometimes alter our viewpoint forever.**

Since its incorporation in 1888, the National Geographic Society has brought the far corners of the world to the doorsteps of millions of its readers.

When asked about the subject of the *National Geographic* magazine, founder Alexander Graham Bell famously replied,

**“The world and all that is in it”**

In an age when images are seemingly so easy to find,

+You Search Images Maps Play YouTube Gmail Documents Calendar Translate More +

Google taiwan   Sign in

Search About 1,130,000,000 results (0.16 seconds) SafeSearch off 

Web  
Images  
Maps  
Videos  
News  
Shopping  
Blogs  
More

Any time  
Past 24 hours  
Past week  
Custom range...

All results  
By subject

Any size  
Large  
Medium  
Icon  
Larger than...  
Exactly...

Any color

Related searches: [justin lee taiwan](#) [taiwan map](#) [taiwan city](#) [taiwan flag](#) [taiwan taipei](#) [taiwan travel](#)



*National Geographic* brings us truly striking images from the far corners of the world



# Earlier coverage can bring **the historical perspective** not found on the web

The screenshot displays the National Geographic Magazine Archive website. The main content area features a large photograph of a man in a red jacket standing next to a taxidermy tiger in a luxurious, ornate room. Below the photo is a caption: "It worked so hard to make money, 'New Formosa,' says David Tang, showing off purchases in his Taipei bedroom. A refugee from communist China, Tang built a fortune on other exports." To the right of the photo is a sidebar with search filters and navigation options. At the bottom, there is a section titled "Feature Articles at a Glance" with three article thumbnails: "Taiwan: The Other China Changes Course", "Dating Troubled Formosa's Crest", and "I Lived on Formosa".

Users can compare how the earth, its inhabitants, and its peoples have changed over time.

This too, stimulates **critical thinking** and allows users to re-experience history



# Creating New Avenues to Explore the Past

**NATIONAL GEOGRAPHIC**  
National Geographic Magazine Archive from 1888 to 1994

HOME EXPLORE THE ARCHIVE IMAGE SEARCH GRAPHING TOOL ABOUT

Print Download

**NATIONAL GEOGRAPHIC**  
National Geographic Magazine Archive from 1888 to 1994

HOME EXPLORE THE ARCHIVE IMAGE SEARCH GRAPHING TOOL ABOUT

### Graphing Tool

Enter a word or phrase to view a graph of how frequently these terms have been used in National Geographic Magazine. You can select your year range and magazine sections below. By clicking on a point, you will retrieve refined search results. You can add multiple phrases and zoom in by clicking and dragging on the graph.

Phrase: pollution and air  
Phrase: greenhouse and gas  
Phrase: petroleum

Year Range: 1888 - 1994

Magazine Section:  
 Feature Articles  
 Departments  
 Map Supplements  
 Advertisements  
 Covers  
 Miscellaneous

Update Chart

Number of Documents By Year, 1888-1994

1956  
petroleum: 29

Number of Documents

pollution and air greenhouse and gas petroleum

Highcharts.com

Here too, the publisher's role lies in providing various avenues for exploring and discovering in different, new ways

For example:

- **Term Clusters** that allow users to visually analyze words that occur together
- **Graphing Tool** that allow users to analyze word occurrence over time periods

## In Summary:

- Globalization and the information age demands the development of new **“21st Century Skills”**
- **User behavior** has changed; the traditional search-and-retrieve database model is often less attractive to today’s end users
- In the age of **personalized web**, web search results can be dangerously tweaked to reinforce users’ preferences and habits
- Libraries and publishers can become important alternatives to the open web by providing **quality information** from a **balanced perspective**
- Publishers should provide **contrasting multiple viewpoints** on any given topic, inviting comparison and debate, which fosters critical thinking
- The **historical perspective** that is often lost in online sources is important for the fostering of critical thinking and providing alternative perspectives
- Publishers must explore and develop **new ways to bring content** to the new generation of users, in-line with the latest technology and user expectations

Thank you very much!

