

library orientation

library user education

bibliographic instruction


information literacy

# Information Literacy

- Information literacy is a set of abilities requiring individuals to "recognize when information is needed and have the ability to locate, evaluate, and use effectively the needed information."
  - ALA President Committee on Information Literacy. Final Report **1989**

A person who is information literate will possess **most** of the following abilities:

<b>1</b> Recognise the <b>need</b> for information.	<b>2</b> Recognise that <b>accurate and complete information</b> is the basis for intelligent decision making.	<b>3</b> Identify potential <b>sources</b> of information.	<b>4</b> Develop successful <b>search</b> strategies.
<b>5</b> <b>Access</b> sources of information, including computer-based and other technologies: <ul style="list-style-type: none"><li>• <b>Evaluate</b> information.</li><li>• <b>Organise</b> information for practical application.</li><li>• <b>Integrate</b> new information into an existing body of knowledge.</li><li>• <b>Use</b> information in critical thinking and problem solving.</li></ul>			



(Doyle, 1992)

**Source**

Doyle, Christina. (1992) Outcome measures for information literacy within the national education goals of 1990: final report of the National Forum on Information Literacy. Summary of findings. Washington, DC: US Department of Education. (ERIC document no; ED 351033).  
[http://eric.ed.gov/ERICDocs/data/ericdocs2/content\\_storage\\_01/0000000b/80/23/4a/12.pdf](http://eric.ed.gov/ERICDocs/data/ericdocs2/content_storage_01/0000000b/80/23/4a/12.pdf)

# Search Process

What are you looking for?

- I want any information on the Utilization of biofuel for environment sustainability

Identify keywords

- Utilization
- Biofuel
- environment sustainability

Change keywords

Identify search engine/databases

- FindMore@NUSL
- Academic databases eg ACM, Scopus, IEEE Xplore etc

Change database

Apply Search Techniques

- Broaden/narrow search
- Advanced search techniques

Change search techniques

Look at results

- Apply evaluation criteria

Satisfied?

NO

End

- Get full-text
  - Subscribe to alerts
- YES

# Evaluation Criteria



## Online collaboration: Scientists and the social network

Giant academic social networks have taken off to a degree that no one expected even a few years ago. A *Nature* survey explores why.

**Richard Van Noorden**

13 August 2014 | Corrected: 15 August 2014



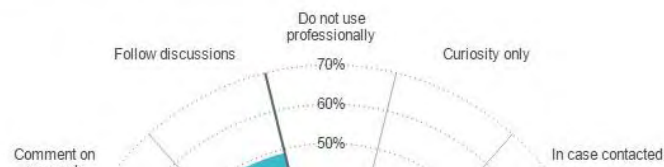
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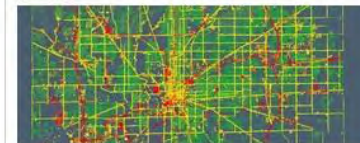
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### Interactive: Why scholars use social media

In *Nature*'s survey, a subset of scholars who said they 'regularly visited' social media sites were quizzed in detail about their activities.



### Hotspots



#### Track urban emissions on a human scale

Cities need to understand and manage their carbon footprint at the level of streets, buildings and communities

**Click here** to explore scientific events across the world



Recent

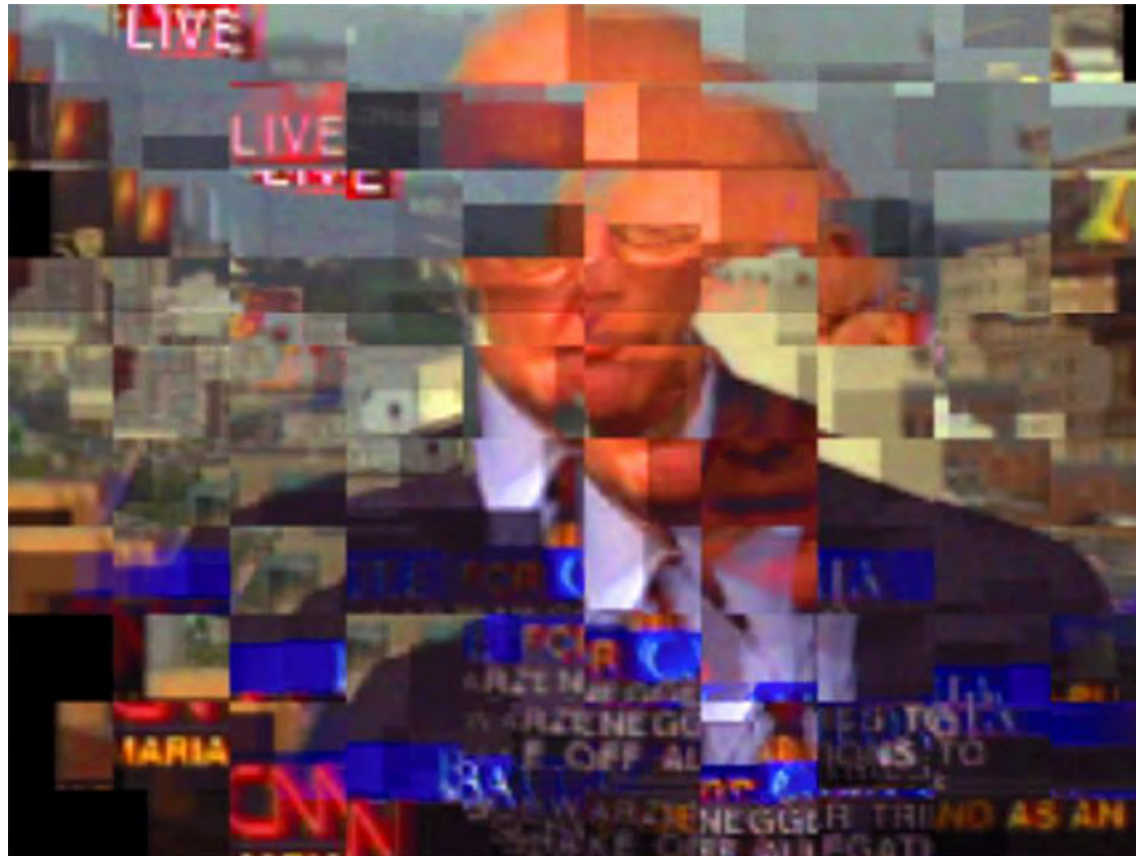
Read

Commented

1. **Genetics: Dawkins, redux**  
*Nature* | 09 September 2015
2. **Q&A: The academic satirist**  
*Nature* | 09 September 2015
3. **Gender balance: Women are funded more fairly in social science**  
*Nature* | 09 September 2015



Media literacy = Deconstruction of  
media message



# Major shifts in news media





# The new players

- ▶ Shrinking newsroom & lack of knowledgeable specialists
- ▶ Citizen journalists
- ▶ Newsmakers influence over first impression
- ▶ Growing cohort of vested interest and non journalistic players (companies think tanks, activists, business professionals, government, lobbyist and partisan NGOs)
- ▶ Power of celebrated journalists





# Participatory Culture

- **Affiliation** – membership formal and informal in online communities centred around forms of media. – Low barrier to social and civic engagement
- **Expressions** – low barrier in creative expression, support for creating and sharing one's creation and members believed their contributions matter

- **Collaborative problem solving :** working together in teams formal and informal to complete tasks and develop new knowledge.  
Informal mentorship of passing on knowledge and experience
- **Circulations :** shaping the flow of media – sharing and dissemination of knowledge and information

# Participatory Culture



## 3 Core Concerns

- Participatory gap
- Transparency gap
- Ethical gap



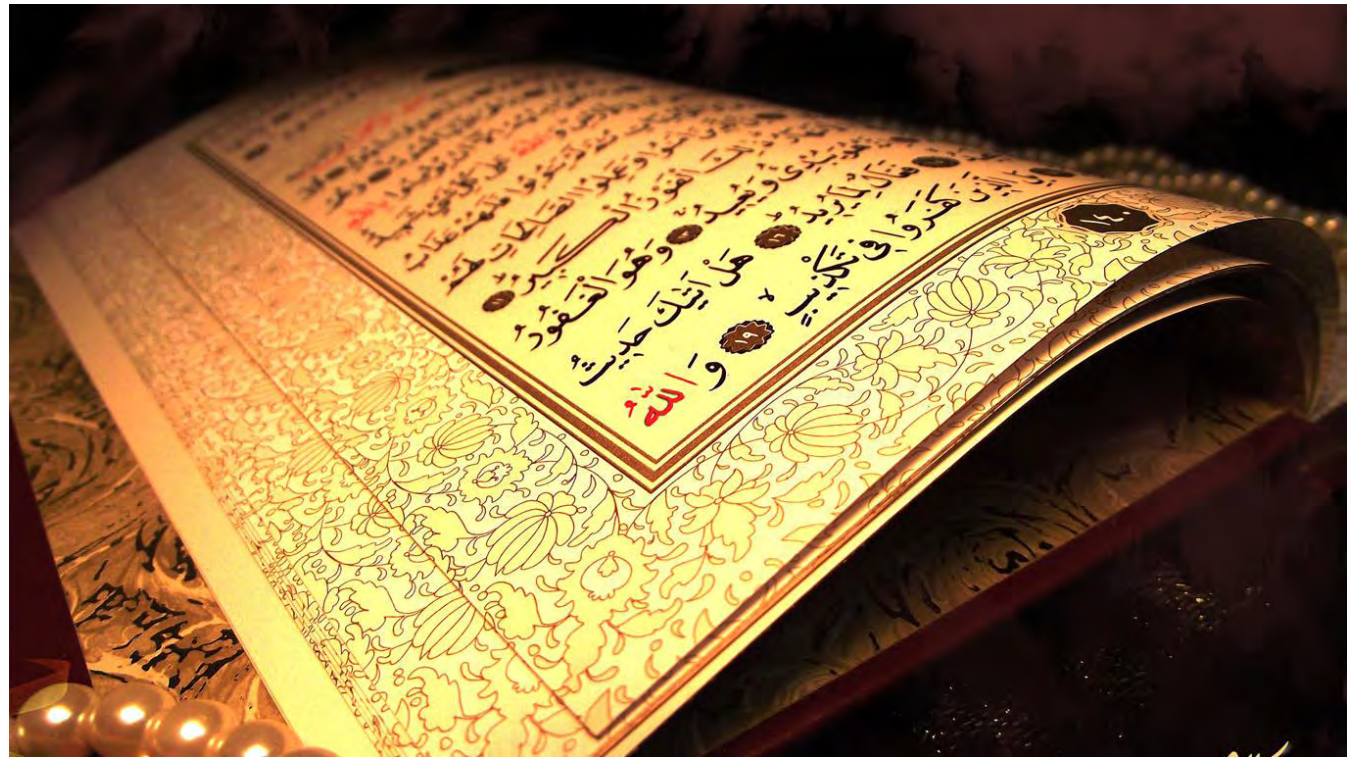
# Education





# Critical literacy

knowledge is mediated by cultural and subcultural systems of signs and symbols



knowledges and truths are  
localised and partial,  
contested and dynamic social  
constructions







*The formation, production, regulation and critique of knowledge necessarily entails relations of power and capital.*

There is no power relation without the correlative constitution of a field of knowledge, nor any knowledge that does not presuppose and constitute at the same time power relations.

Michel Foucault



# Multiliteracies...

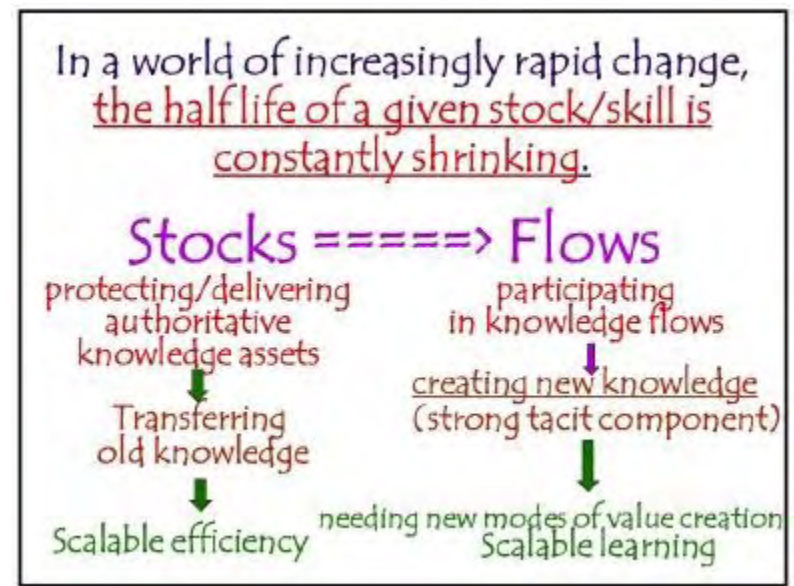
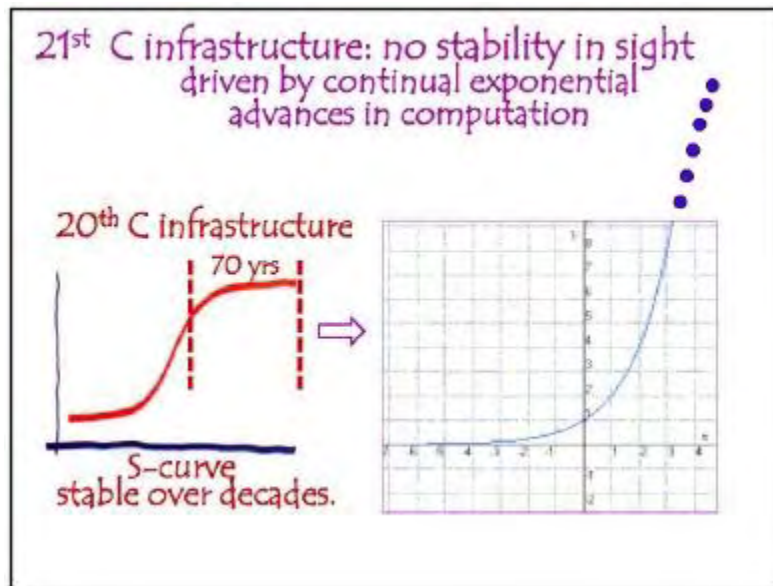


an approach to literacy which focuses on variations in language use according to different social and cultural situations (multi-semiotic) and the intrinsic multimodality of communications.

- Luke and Freebody, *Four resources model in literacy education*



# From scalable efficiency to scalable learning



# Disruptive technologies

“The technology is the easy part. The hard part is figuring the social and institutional structures around the technology”.



# From content to context

How do we move from the transfer model of fixed assets (authoritative knowledge and skill sets) to model that requires participation in an ever changing flow of activities and knowledge.



# Playful tinkering, play of imagination

In a world of rapid change and constant flux, much of what is created is basically tacit. It has not had time to be crystallized out as explicit knowledge.



# ACRL new framework for (Feb 2015)

- Information literacy is the set of integrated abilities encompassing the **reflective discovery** of information, the understanding of **how information is produced and valued**, and the use of information in creating new knowledge and **participating ethically in communities of learning**. ACRL Board

*February 2, 2015*

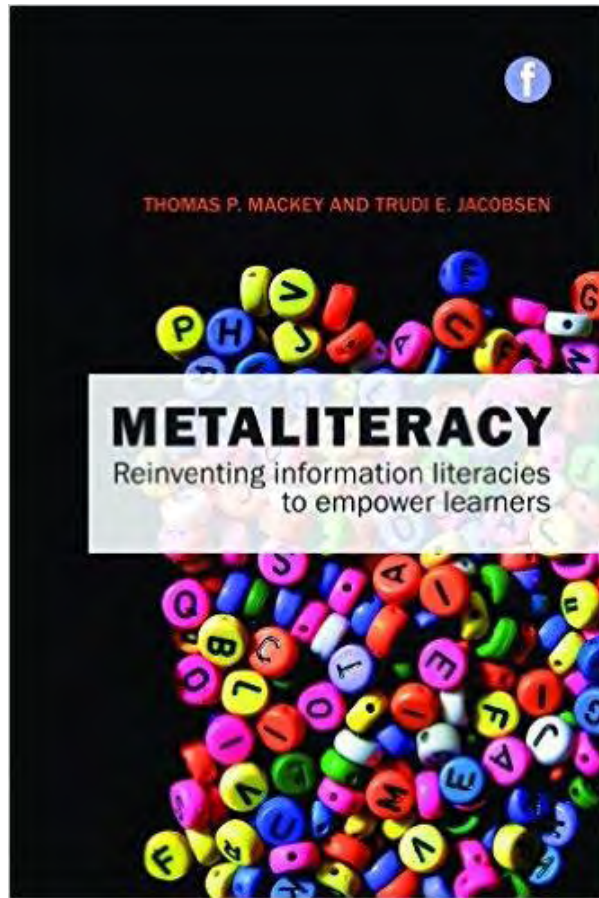


# Key Ideas

information literacy as an **educational reform movement** through a richer, more complex set of core ideas.







metaliteracy, ...as an overarching set of abilities in which *students are consumers and creators of information who can participate successfully in collaborative spaces.*

- Metaliteracy demands *behavioral, affective, cognitive, and metacognitive engagement ... or critical self-reflection*, as crucial to becoming more self-directed in that rapidly changing ecosystem.

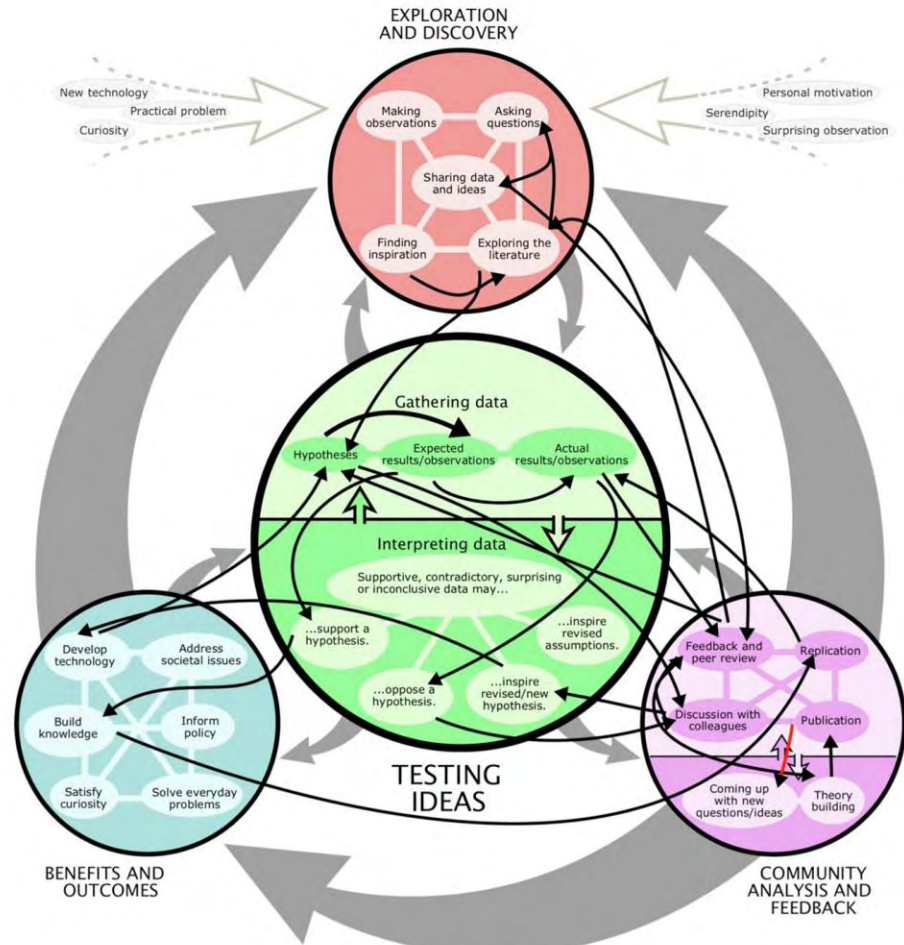


# *Authority Is Constructed and Contextual*

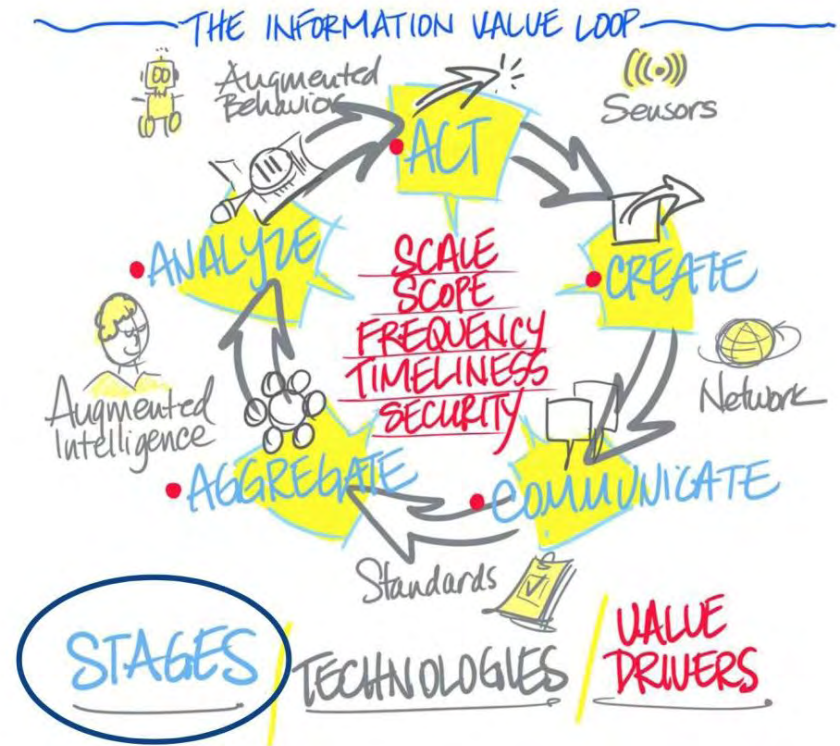




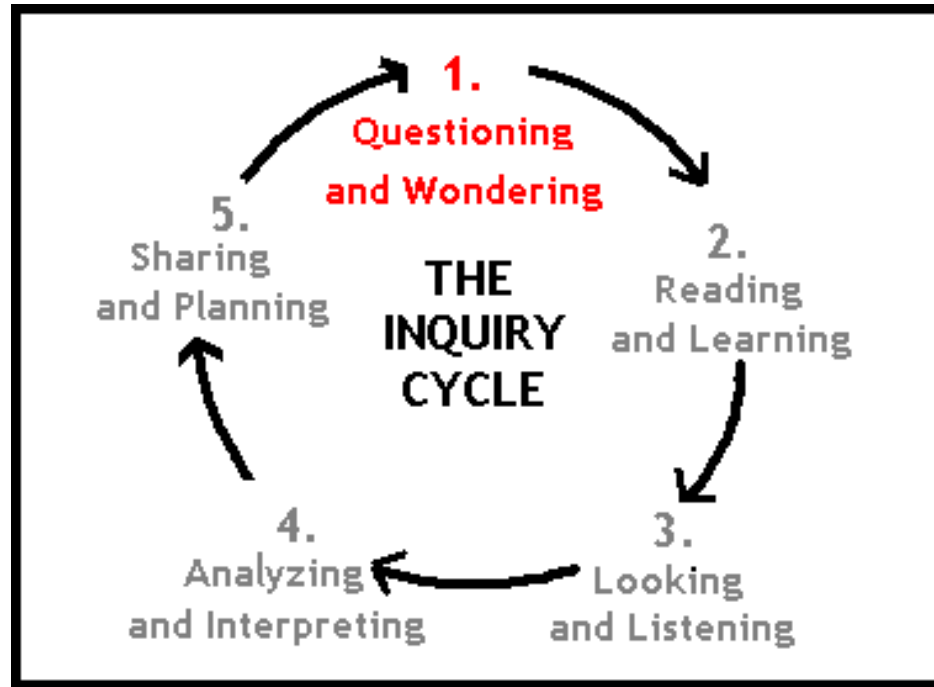
Information Creation as interactive processes vary. Resulting product reflects these differences



Information  
possesses several  
dimensions of value



- Research as inquiry is iterative...asking complex or new questions... new lines of inquiry



- *Scholarship as Conversation*  
sustained discourse ...as a result of  
varied perspectives and  
interpretations.





- Searching as strategic exploration...nonlinear and iterative ...mental flexibility to pursue alternate avenues as new understanding develops.



# Cultural competencies and social skills for new literacies

Play

Performance

Simulation

Appropriation

Multitasking

Distributed cognition

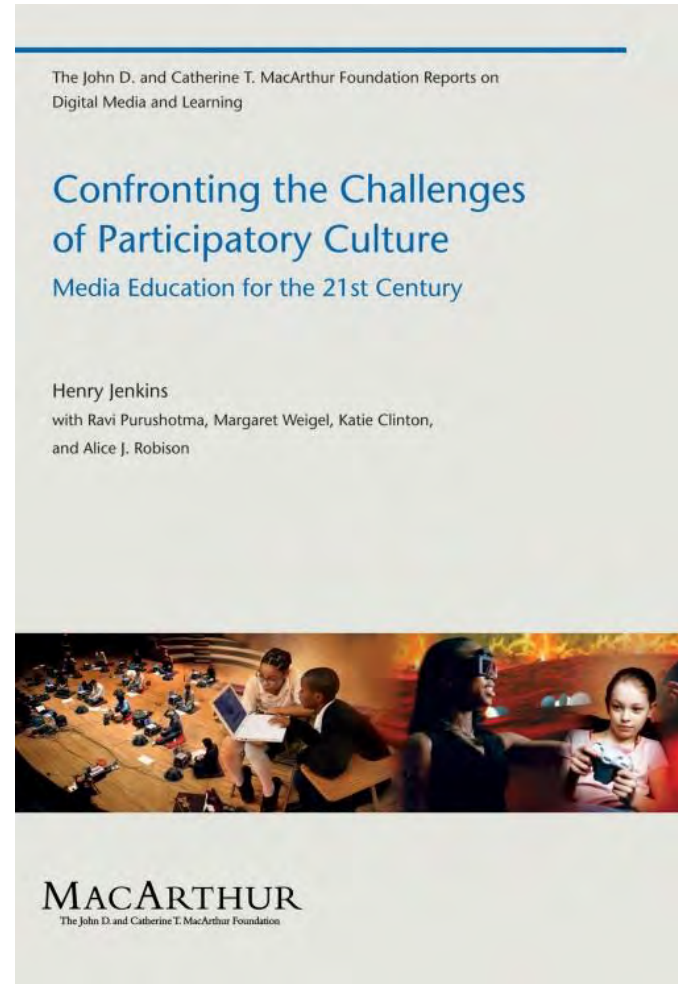
Collaborative  
intelligence

Judgement

Transmedia  
navigation

Networking

Negotiation



- **Play** The capacity to experiment with the surroundings as a form of problem solving.
- **Performance** The ability to adopt alternative identities for the purpose of improvisation and discovery.
- **Simulation** The ability to interpret and construct dynamic models of real-world processes.

- **Appropriation** The ability to meaningfully sample and remix media content.
- **Multitasking** The ability to scan the environment and shift focus onto salient details.
- **Distributed cognition** The ability to interact meaningfully with tools that expand mental capacities.




- **Collective intelligence** The ability to pool knowledge and compare notes with others toward a common goal.
- **Judgment** The ability to evaluate the reliability and credibility of different information sources.
- **Transmedia navigation** The ability to follow the flow of stories and information across multiple modalities.

- **Networking** The ability to search for, synthesize, and disseminate information.
- **Negotiation** The ability to travel across diverse communities, discerning and respecting multiple perspectives, and grasping and following alternative norms.

Deeper connections to the curriculum,  
adapting to new modes of pedagogy,  
linking technology-rich and  
collaborative spaces in libraries to  
learning





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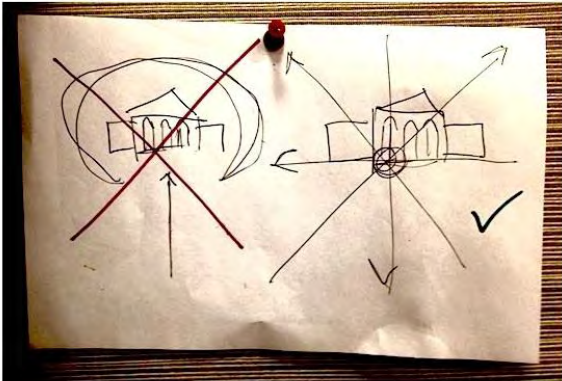
Find books, music, movies and more
Classic Catalog

My NYPL
Explore
Research
Using the Library
Locations
Classes & Events
Support the Library
Help

books, DVDs & More

NYPL Labs

Like 237
RECOMMEND
+1 17
Tweet 146
EMAIL
PRINT
SHARE



DONATE

ASKEN
Chat with a librarian

FROM OUR BLOG
The Library is in:
We have a Crafter Tuesday at the BE

## NYPL Labs

An interdisciplinary team working to reformat and reposition the Library's knowledge for the Internet age. Labs combines core digital library operations (digitization, metadata, permissions/reproductions, etc.) with a publicly engaged tech, design, and outreach team focused on enabling new uses of collections and data, collaborating with users on the creation of digital resources, and applying new technologies to library problem-solving.



# FIND THE FUTURE

## THE GAME

### AT THE NEW YORK PUBLIC LIBRARY

1:35 / 1:41

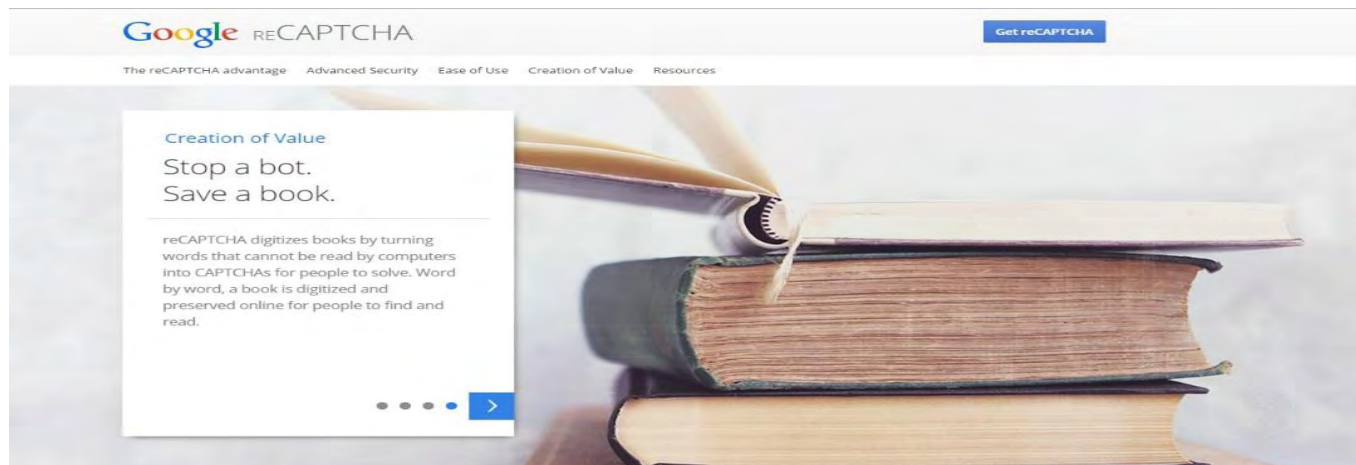
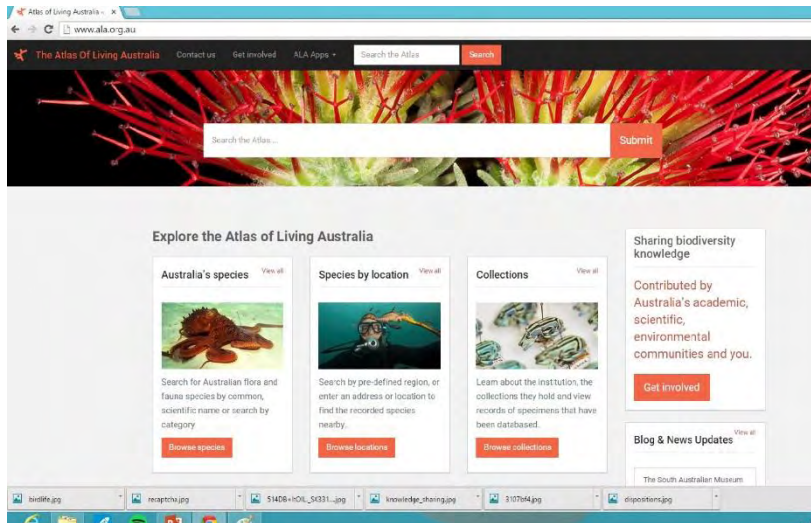
HD

“The game is designed to empower young people to find their own futures by bringing them face-to-face with the writings and objects of people who made an extraordinary difference,” says [McGonigal](#).

*Embracing roles that include  
laboratory, museum, gallery,  
performance space, and civic meeting  
site*



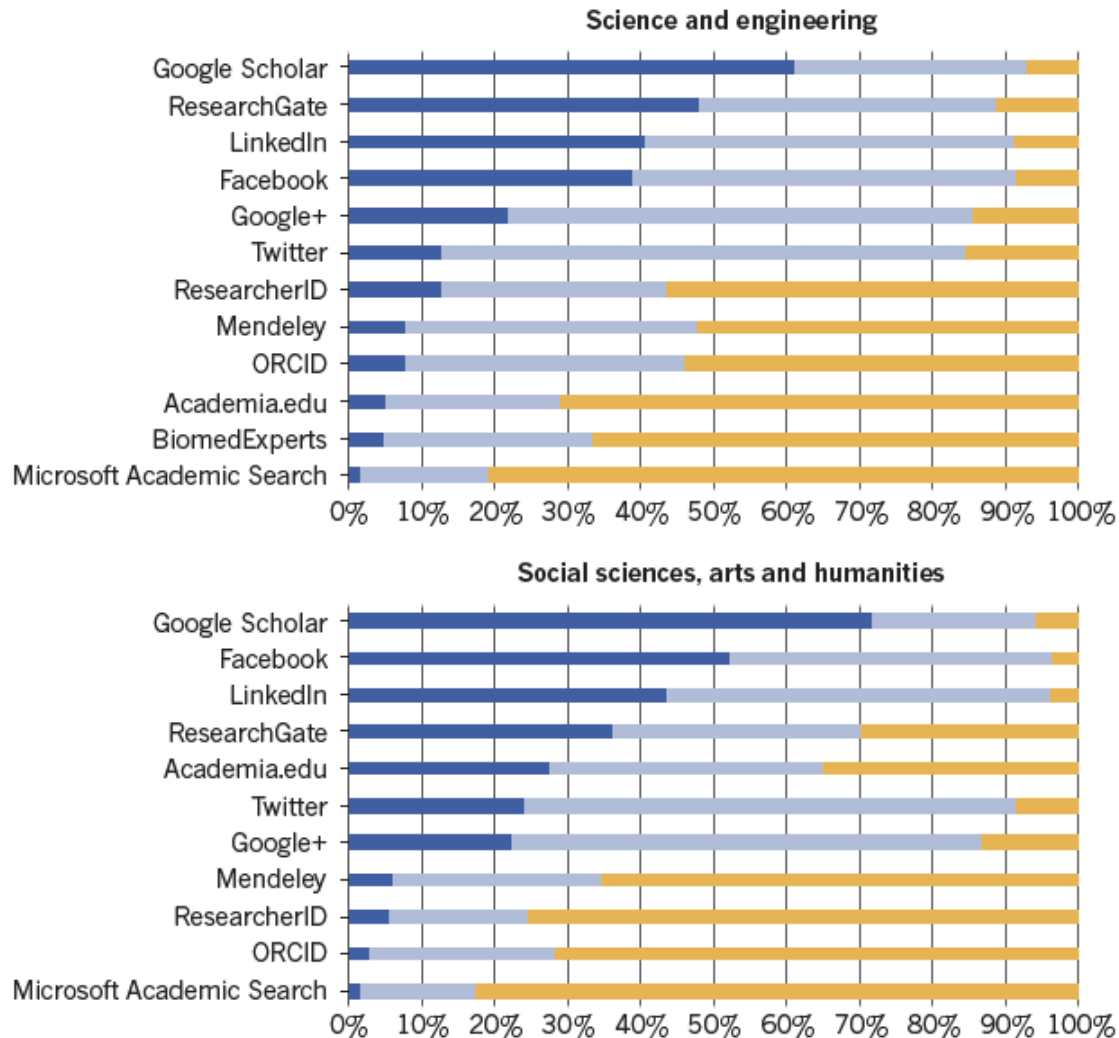
# Crowdsourcing and collaborative projects



# REMARKABLE REACH

More than 3,000 scientists and engineers told Nature about their awareness of various giant social networks and research-profiling sites. Just under half said that they visit ResearchGate regularly. Another 480 respondents in the humanities, arts and social sciences were less keen on ResearchGate.

- I am aware of this site and visit regularly
- I am aware of this site but do not visit regularly
- I am not aware of this site





# IDLE, BROWSE OR CHAT?

Nature asked a subset of regular visitors to social networks how they used the sites professionally. (Each person was asked to tick all activities that applied.) The results suggest that Facebook is not widely used professionally; that researchers on Twitter are very active and social; and that many users of Academia.edu and ResearchGate signed up in case someone wants to contact them — but are not chatty themselves. Full results are available at [go.nature.com/yx7pl](http://go.nature.com/yx7pl).

Each wedge in the circular charts corresponds to a question on the right. The answers are grouped by the intensity of user engagement they imply: low (green), medium (yellow) and high (blue).



1. Do not use professionally
2. Curiosity only; not maintaining profile
3. In case contacted



4. Track metrics
5. Discover jobs
6. Discover peers
7. Discover recommended papers



8. Contact peers
9. Post (work) content
10. Share links to authored content
11. Actively discuss research
12. Comment on research
13. Follow discussions

### RESEARCHGATE

1,589 regular visitors



How do you use this site professionally?

Approximately how often do you visit this site in a professional capacity?

How long have you had a profile on this site?



"Mainly, a source of stress every time an e-mail pops in showing that my colleagues/competitors are publishing more than myself."  
AGE 35-44, PROFESSOR, BRAZIL  
"It is the only useful community website for research purposes."  
AGE 55-64, PROFESSOR, HUNGARY

### ACADEMIA.EDU

283 regular visitors



"Has led to invites to referee papers/external assessments."  
AGE 45-54, POSTDOCTORAL FELLOW, UNITED KINGDOM  
"I have been able to post old papers which otherwise would be inaccessible to people."  
AGE 55-64, PROFESSOR, UNITED STATES

### MENDELEY

198 regular visitors



"Primarily still a reference manager for me. The social component is less important."  
AGE 35-44, RESEARCH SCIENTIST, CANADA  
"Fairly useful as a documents clearinghouse for lab group."  
AGE 25-34, POSTDOCTORAL FELLOW, UNITED STATES

### TWITTER

330 regular visitors



How do you use this site professionally?

Approximately how often do you visit this site in a professional capacity?

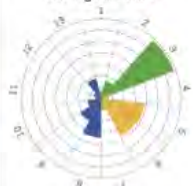
How long have you had a profile on this site?



"Extremely useful in conference settings."  
AGE 35-44, RESEARCH SCIENTIST, UNITED STATES  
"Great way to keep up-to-date on what is happening NOW in the research community."  
AGE 45-54, HEAD OF ACADEMIC DEPARTMENT, UNITED STATES

### LINKEDIN

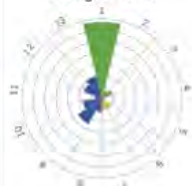
389 regular visitors



"Mainly useful for job hunting."  
AGE 25-34, PHD STUDENT, UNITED STATES  
"It is too much like Facebook — fluffy forwards and such that are not scientific or related to professionalism."  
AGE 45-54, ASSOCIATE PROFESSOR, UNITED STATES

### FACEBOOK

340 regular visitors



"Facebook has zero credibility in my professional life."  
AGE 35-44, STAFF SCIENTIST, UNITED STATES  
"The (invitation-only) groups for professional astronomers and pulsar astronomers have become vibrant discussion fora."  
35-44, RESEARCH SCIENTISTS, UNITED STATES

# *Crowdsourcing* Daren C. Brabham, 2013

- **Knowledge Discovery & Management** –Organization tasks a crowd with finding and collecting information into a common location and format
- **Broadcast Search** - Organization tasks a crowd with solving empirical problems
- **Peer-Vetted Creative Production** – Organization tasks a crowd with creating and selecting creative ideas
- **Distributed Human Intelligence Tasking** – Organization tasks a crowd with analyzing large amounts of information

# CROWDSOURCING

DAREN C. BRABHAM



THE MIT PRESS ESSENTIAL KNOWLEDGE SERIES

- An online, distributed problem-solving and production model that leverages the collective intelligence of online communities to serve specific organizational goals. - *Crowdsourcing* Daren C. Brabham, 2013

# Participatory Culture



## 3 Core Concerns

- **Participatory gap**
- **Transparency gap**
- **Ethical gap**

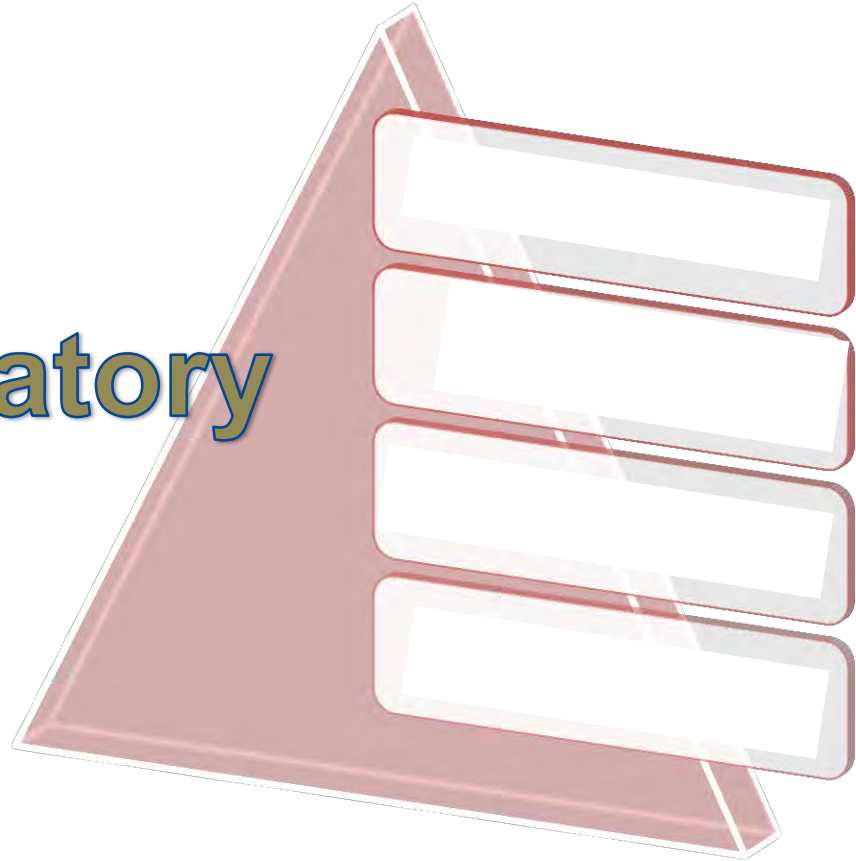


# Participatory culture

- Low barrier to artistic expression and civic engagement
- Support of creating and sharing one's creations
- Informal mentorship of passing on knowledge and experience
- Members believed their contributions matter
- Some degree of social connectedness

# Participatory Culture

Participatory  
Culture



***Multiliteracies..*** an approach to literacy which focuses on variations in language use according to different social and cultural situations (multi-semiotic) and the intrinsic multimodality of communications.

- Luke and Freebody, 1999, *Four resources model in literacy education*

# Four resources model in literacy education

*Luke and Peabody*

- Coding competence
- Semantic competence
- Pragmatic competence
- Critical competence

***Multiliteracies..*** an approach to literacy which focuses on variations in language use according to different social and cultural situations (multi-semiotic) and the intrinsic multimodality of communications.



# Newspaper of Records

- Newspaper of public records
  - Paper authorised by government to publish public records eg Straits Settlements Government gazette, Republic of Singapore Government gazette
- Newspaper of records by reputation
  - archival chronicle of past events and a reference source of societal opinions at the time of printing



# Life Beneath The Platforms

For over 30 years, Brunei Shell Petroleum's offshore installations have slowly been turning into the most magnificent artificial reefs. They have been called the biggest protected marine park in the South China Sea.

An environmental study of the diversity and abundance of life beneath the platforms have been carried out by the Brunei Shell Petroleum's Panaga Sub Aqua Club, through a project called 'Life Beneath the Platforms'.

This project has received a prestigious accolade, The Duke of Edinburgh Award in 2005. This is an example of sustainable development in action, nature and industry in harmony.

## Newspaper in Education

### The Jackson Sun

First in News. [jacksonsun.com](http://jacksonsun.com)

**Ahead at Home**  
Anthony Lewis  
*The Clinton Mystery*

**Under Fire**  
The A.D.L. Under Fire  
*Its Shift to the Right Has Led to Scandal*

**On My Mind**  
A. M. B. B. B. B. B.  
*Clinton Voter Stays Glad!*

**The Clinton Mystery**  
By Anthony Lewis  
The Clinton mystery is not a new one. It has been a long time since the Clintons were in the White House. But now, as the Clinton family moves back into the White House, the mystery is back. The Clinton family has been in the White House for a long time. But now, as the Clinton family moves back into the White House, the mystery is back. The Clinton family has been in the White House for a long time. But now, as the Clinton family moves back into the White House, the mystery is back.

**Under Fire**  
The A.D.L. Under Fire  
The A.D.L. Under Fire is a book by Anthony Lewis. It is a book about the A.D.L. and its shift to the right. The A.D.L. is a group of people who are interested in the A.D.L. and its shift to the right. The A.D.L. is a group of people who are interested in the A.D.L. and its shift to the right.

**Clinton Voter Stays Glad!**  
A. M. B. B. B. B. B.  
Clinton Voter Stays Glad! is a book by A. M. B. B. B. B. B. It is a book about Clinton voters and how they feel about Clinton. Clinton voters are glad that Clinton is back in the White House. Clinton voters are glad that Clinton is back in the White House.



# Blurring of lines

- Lines have blurred between commentary and reporting and between entertainment and news.
- Punditry overwhelming reporting



# Shallowness

News media pay “too little attention to complex issues,”

**BREAKING NEWS**



# Errors and sloppy reporting

- A growing number of reporters, editors and news executives also say that news reports are full of factual errors and sloppy reporting.

## The Times Plagiarism Scandal

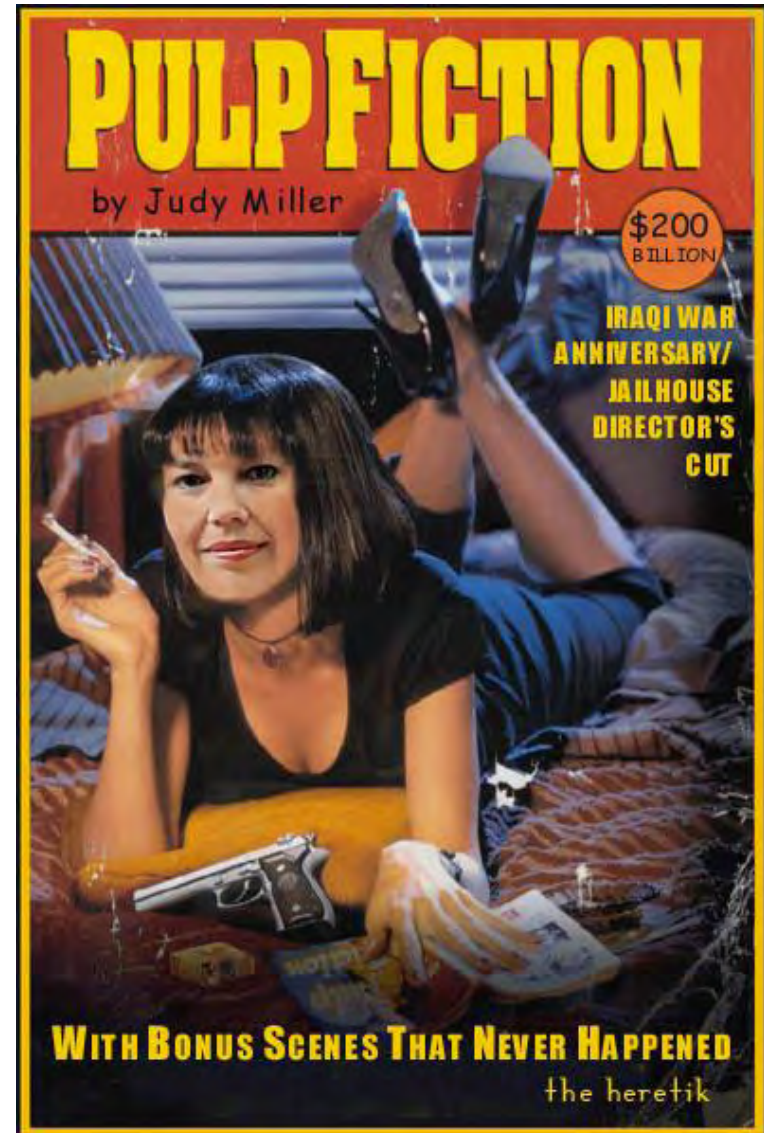
Last week, Jayson Blair resigned as a national reporter for *The New York Times* amid charges that he plagiarized and falsified stories. Among the misdeeds:

- ▶ Claimed to be phoning in story from Pakistan when actually at home masturbating to Spice Channel
- ▶ Lead paragraph in story about Beltway sniper lifted wholesale from back of Cheetos bag
- ▶ Wrote fabricated story about Iraq possessing massive stockpiles of weapons of mass destruction
- ▶ Greatly exaggerated homosexual affair between Secretary of Commerce Don Evans and Secretary of Transportation Norman Mineta
- ▶ Gave Mick Jagger solo album five stars
- ▶ Copied line, "Japan is a geographically diverse nation with a rich and colorful history" straight from *World Book Encyclopedia*
- ▶ Quotes attributed to Saddam Hussein actually from actress Victoria Principal
- ▶ Lied about rinsing out break-room coffee mug after using it

A portrait of Jayson Blair, a Black man with short hair and glasses, wearing a grey suit jacket over a dark shirt. He is smiling slightly and looking towards the camera.

# Credibility

- Lack of credibility is the single issue most often cited by the news media as the most important problem facing journalism



# Metaliteracy (Mackey and Jacobson, 2011)

- Metaliteracy promotes critical thinking and collaboration in a digital age, providing a comprehensive framework to effectively participate in social media and online communities. It is a unified construct that supports the acquisition, production, and sharing of knowledge in collaborative on-line communities.

## *Leveraging on diversity*

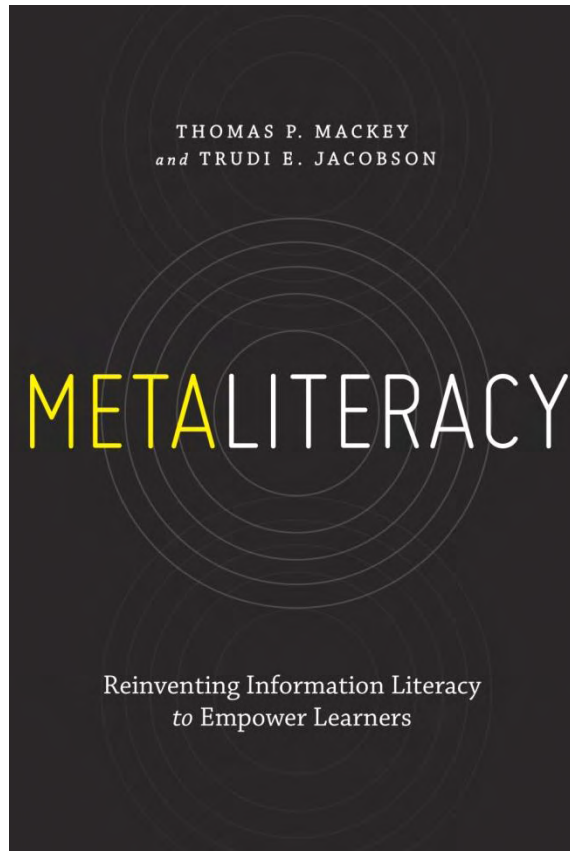
The world came together so quickly in this network age. We have little understanding of its true diversity...Understanding how to leverage on diversity is going to be increasingly important”

# Big shift and Scalable learning

- From scalable efficiency to scalable learning
- From explicit to tacit knowledge
- From individual learning to social participation
- From emphasis on content to context
- Passive learning to playful tinkering and play of imagination



- the importance of decisions being made today about information – who has access, who controls it, how we can participate in creating it, and whether information is a public good or private property.



- “Metaliteracy expands the scope of traditional information skills (i.e., determine, access, locate, understand, produce, and use information) to include the collaborative production and sharing of information in participatory digital environments... requires an ongoing adaptation to emerging technologies and an understanding of the critical thinking and reflection required to engage in these spaces as producers, collaborators, and distributors”

*Mackey and Jacobson 2014*