

# Over Two-Hundred Education & Science Blogs \* † ‡

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This compilation, an expansion of the earlier “Over Sixty Education Blogs,” lists over two-hundred education and science blogs, providing for each blog: the author’s name and background; the blog title, focus, and URL; and (where available) the *Technorati Authority* [TA] (number of blogs linking to the website in the last six months) and the *Blogged Rating* [BR]. Appendix A discusses the Academic Discussion List Sphere (ADLsphere) and the Blog Sphere (Blogosphere), indicating some strengths and weaknesses of each. Appendix B considers the ADLsphere and the Blogosphere as harbingers of a collective short-term working memory. Appendix C discusses the *International Edubloggers Directory*, *Technorati*, *Blogged*, *ScienceBlogs*; other blog directories and lists; and other social networking sites. The *REFERENCES* contain over 100 general citations to open access, internet usage, the ADLsphere, and the Blogosphere.

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<<http://www.physics.indiana.edu/~hake>>.

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‡ All URL’s are hot-linked; accessed on 16-21 March 2009. Tiny URL’s courtesy  
<<http://tinyurl.com/create.php>>.

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## OVER TWO-HUNDRED EDUCATION & SCIENCE BLOGS

*A Window Into the Vast Education/Science Blogosphere*

[All URL's were accessed on 16-19 March 2009.]

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### CODE:

1. The notation [TA=N] means that in early March 2009 *Technorati* (2009) had assigned a *Technorati Authority* (TA) number of N to the blog, where TA is the number of blogs linking to the website in the last six months, and [TA=??] means that either no rating or a response “No authority yet” was obtained at Technorati’s Advanced Search <<http://technorati.com/search?advanced>> of Blogs (*not* Posts).

2. The notation [BR=N] means that in early March 2009 *Blogged* (2009) had assigned a *Blogged Rating* (BR) of N to the blog, and [BR=??] means that no rating was given at <<http://www.blogged.com/>>.

3. A preceding asterisk \* indicates that on 16 Feb 2009 the blog was listed on Patricia Donaghy’s *International Directory of Edubloggers* <<http://edubloggerdir.blogspot.com/>>.

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\*Devon ADAMS (“Adjunct professor and full time Web 2.0 teacher molding the minds of our 21st century students.”) - *Teacher2.0*: <<http://dcamd.com/>> [TA=??] [BR=??].

Christopher ALTMAN (“US graduate student in applied physics, Kavli Institute of Nanoscience TU Delft. Research foci include advanced research and development initiatives at the confluence of quantum mechanics and information science — coherence and entanglement in solid-state superconducting nanoelectronics; Josephson junction dynamics; adaptive quantum networks.”) – *coherence*, superconducting quantum computing, superposed quantum networks: <<http://superconducting.blogspot.com/>> [TA=??] [BR=??].

APS Physics Central <<http://www.physicscentral.com/>> - *Physics Buzz*, Physics Fun and Science News, socks optional: <<http://physicsbuzz.physicscentral.com/>> [TA=22] [BR=??].

Lloyd ARMSTRONG (“I am University Professor and Provost Emeritus at the University of Southern California, and hold appointments in the USC Rossier School of Education and the USC College of Letters, Arts and Sciences. My research interest is on the research university of the future, with particular focus on the globalization of higher education. . . I served on the Advisory Board of the Institute for Theoretical Physics in Santa Barbara (1992-96, chair 1994-95), of the Institute for Theoretical Atomic, Molecular and Optical Physics at Harvard (1994-97), and the Advisory Board of the Rochester Theory Center for Optical Science and Engineering (1996- 98, chair 1997-98).”) - *Changing Higher Education*, major changes occurring in the world are redefining the metrics of excellence for higher education: <<http://www.changinghighereducation.com/>> [TA=7] [BR=??].

Michael ARNZEN (“I am a full-time Associate Professor of English with tenure at Seton Hill University. My courses in English run the gamut from expository and creative writing to literary criticism and film history.”) – *Pedablogue*, a personal inquiry into the scholarship of teaching: <<http://blogs.setonhill.edu/MikeArnzen/>> [TA=12] [BR=7.5].

Michael ARRINGTON (“I majored in economics . . . [at Claremont McKenna]. . . I went straight from college to law school at Stanford in 1992, and graduated in 1995. . . . In September 2007, I was named one of the 25 most influential people on the web) & Erick Schonfeld (“ . . .has been covering startups and technology news for 14 years.. . . He appears regularly on CNBC, CNN, and NY1, and is a frequent speaker at industry conferences. Schonfeld graduated magna cum laude from Cornell University in 1993”) – *TechCrunch*, “a weblog dedicated to obsessively profiling and reviewing new Internet products and companies. In addition to covering new companies, we profile existing companies that are making an impact (commercial and/or cultural) on the new web space.”): <<http://www.techcrunch.com/>> [TA=15,996] [BR=10].

\*James ATHERTON [“Semi-retired teacher educator and educational developer, in further education and the university sector, moderately well-educated (degrees in European Studies, Religious Studies, and Education, Ph.D in Education)”] – *Recent Reflection*, reflections and commentary on teaching and learning issues, from practice to theory and back again. Sympathetically sceptical about e-learning and over-use of technology <<http://www.doceo.co.uk/reflection/rrr.htm>> [TA=5] [BR=??].

Leslie ATKINS (Assistant Professor of Physics, California State University, Chico) – *Science Thinking* Summaries, quotes and thoughts on articles and talks in science education, physics education, and scientific inquiry. Particular interests in discourse and analogy in science classrooms: <<http://sciencethinking.blogspot.com/>> [TA=??] [BR=??].

Jason R. ATWOOD (“ . . . a doctoral student at U.C. Berkeley with research interests in the fields of psychology and education. This blog is a forum to share some of my thoughts and the news related to brain and exercise science.”) – *Playthink*, exercising the mind and the body <<http://playthink.wordpress.com/>> [TA=9] [BR=??].

Dave BACON (“ . . . a theoretical ski bum who is also an assistant research professor at the University of Washington in Seattle. His research is on quantum computing, his scientific passions extend to everything in physics, mathematics, computer science and beyond. . .”) – *The Quantum Pontiff*: <<http://scienceblogs.com/pontiff/>> [TA=75] [BR=??].

Eric BACON, Gina Barreca, Mark Bauerlein, Marc Bousquet, Kevin Carey, Laurie Fendrich, John L. Jackson, Jr., Stan Katz, Graham Spanier (see their mini-bios in the right-hand column at <<http://chronicle.com/review/brainstorm/>> ) – *Brainstorm, Lives of the mind*: <<http://chronicle.com/review/brainstorm/>> [TA=??][BR=??]. [See especially Kevin Carey’s post “Burden of Proof” at <<http://chronicle.com/review/brainstorm/carey/the-burden-of-proof/>> and my response at <<http://hakesedstuff.blogspot.com/2009/02/burden-of-proof-2.html>>.]

Eric BAUMGARTNER (Co-founder and lead designer at Inquirium <<http://www.inquirium.net/>>; participated in the work of the “Design-based Research Collective” <<http://www.designbasedresearch.org/>>; Matthew Brown (former teacher at both the high school and middle school levels; Ben Loh (his research focuses on the design of software that promotes reflective thinking through the use of visual information tools). The above three are all directors of Inquirium and hold PhD’s from Northwestern University’s Learning Sciences program <<http://www.sesp.northwestern.edu/lr/>> – *InqBlot* Inquirium on Learning, Technology, and Design: science education <<http://inquirium.net/blog/>> [TA=??][BR=??].

Carla BEARD (“teaches high school English in the Midwest) – *The English Teacher Blog*, information relevant to English teachers all over the world:  
<<http://www.enotes.com/blogs/english-teacher-blog/>> [TA=??][BR=??].

Ian BEATTY (educational researcher) - think twice, *thinking about thought*, perception, communication, learning, culture, and the human condition: <<http://ianbeatty.com/blog/>> [TA=3] [BR=??].

Gary BECKER (University Professor, Department of Economics and Sociology, Professor Graduate School of Business, The University of Chicago  
<<http://home.uchicago.edu/~gbecker/>>) and Richard Posner (Judge, United States Seventh Circuit Court of Appeals, Senior Lecturer, University of Chicago Law School  
<<http://home.uchicago.edu/~rposner/>>) - *The Becker-Posner Blog*:  
<<http://www.becker-posner-blog.com/index.html>> [TA=706] [BR=7.4].

Eric BEERKENS (“I work at the Knowledge & Innovation Directorate  
<<http://www.nuffic.nl/homeabout-nuffic/directorates>> of the Netherlands Organisation for International Cooperation in Higher Education (NUFFIC). . . .My professional interests are in policies and politics in the fields of higher education and science & technology, especially issues related to internationalisation, globalisation, international cooperation and regional integration.”)  
– *Beerkens’ Blog*, Higher Education, Science & Innovation From a Global Perspective:  
<<http://blog.beerkens.info/>> [TA=??] [BR=??].

Jim BELK (post-doc at Texas A&M. . . graduated from Cornell in 2004); Greg Muller (graduate student at Cornell); Matt Noonan (graduate student at Cornell) - *The Everything Seminar*, Geometry, Categories, Groups, Physics. . . Everything: <<http://cornellmath.wordpress.com/>> [TA=31][BR=8.5].

Philip BELL (Associate Professor of the Learning Sciences, University of Washington) - *How We Learn: Research, News & Perspectives*; provides a stream of information on how people learn. The focus is on cognitive, sociocultural, developmental, and neurobiological research and related news: <<http://how-we-learn.blogspot.com/>> [TA=??] [BR=??].

Scott BERKUN (essayist <<http://www.scottberkun.com/essays/>> and author of two bestselling books, “Making things happen” <<http://www.scottberkun.com/making-things-happen/>> and “The Myths of Innovation <<http://tinyurl.com/2tufac>>) - *The Berkun Blog*, management and creative thinking: <<http://www.scottberkun.com/blog/>> [TA=183] [BR=??].

Joel BEST, John Allen Paulos, Gerald Bracey, Howard Wainer, Gerd Gigerenzer, & Dennis Haack - *Statistical Literacy*: <<http://www.statlit.org/>> (click on each of the five brown boxes at the top of the page) [TA=??] [BR=??].

Biplab BHAWAL (See at <<http://www.ligo.caltech.edu/~bbhawal/>>, co-editor of *Black Holes, Gravitational Radiation and the Universe: Essays in Honor of C.V. Vishveshwara*  
<<http://tinyurl.com/9th56w>>) – *2Physics*, Reporting Key developments in Physics:  
<<http://www.2physics.com/>> [TA= ??] [BR=??].

Lawrence BIEMILLER (“writes about architecture and facilities and contributes to ‘Notes from Academe,’ what’s happening on your campus”) & Scott Carlson (“writes about architecture, facilities, energy, and sustainability, among other topics”) – *Buildings Grounds*:  
<<http://chronicle.com/blogs/architecture>> [TA= ??] [BR=??].

\*Shelly BLAKE-PLOCK (“. . . avant-garde Baltimore musician and composer [during the day] dons the attire of a fair-mannered Latin and Art History teacher at Bel Air’s John Carroll School. He does, however, manage to pull a little of the avant-garde into the classroom. . . .which is paperless.”): *TeachPaperless*, helping teachers create paperless classrooms:  
<<http://teachpaperless.blogspot.com/>> [TA=5] [BR=??].

Two Blogs: Deirdre BONNYCASTLE (Clinical Teaching Development Coordinator, University of Saskatchewan) -

(a) *Medical Education Blog*: <[http://blogs.usask.ca/medical\\_education/](http://blogs.usask.ca/medical_education/)> [TA=12][BR=7.0], and  
\*(b) *Active Learning Blog Carnival*, an aggregator of the best current articles about engaging students in learning: <<http://activelearningcarnival.blogspot.com/>> [TA=??] [BR=??].

\*Jeff BORDEN (“As a professor, speaker, consultant, and stand-up comedian, Jeff Borden knows how to work a crowd. Jeff’s been teaching college and Master’s level students how to communicate for a dozen years, focusing on public speaking, interpersonal, small group, intercultural, and organizational communication.”) - *jeffpresents.com* - *Jeff Borden’s Weekly Weblog*: <<http://jeffpresents.wordpress.com>> [TA=??] [BR=??].

Gerald BRACEY (“currently an associate of the High/Scope Educational Research Foundation <<http://www.highscope.org>>, a fellow at the Education Policy Studies Laboratory at Arizona State University <<http://epsl.asu.edu/epru/>>, and a fellow at the Education and the Public Interest Center at the University of Colorado at Boulder <<http://www.epicpolicy.org/>>. He maintains a website, the Education Disinformation Detection and Reporting Agency <<http://www.america-tomorrow.com/bracey/EDDRA/>>, dedicated to using the real-time power of the Net to debunk dis- and mis-information about public schools”. . . . See also his Academic Discussion List EDDRA with archives at <<http://groups.yahoo.com/group/eddra/>>. He blogs on the Huffington post [TA=29,972] [BR=9.7]. - see <<http://tinyurl.com/5zodxv>>

\*Bill BRENNAN (“I have spent the last eight years as a science teacher and now Director of Technology for a school in Long Island, New York . . . . Effective July 2008, I will be the Director of Math, Science and Technology for my district. . . . This April, I will begin working part-time as a professor at Stony Brook University.”) *K12Edutalk*: <<http://k12edutalk.com/>> [TA=2] [BR=??].

*BRITANNICA BLOG*, “Where Ideas Matter”: <<http://www.britannica.com/blogs/>> [TA=682] [BR=??]. [“Britannica Blog is a place for smart, lively conversations about a broad range of topics. Art, science, history, current events – it’s all grist for the mill. We’ve given our writers encouragement and a lot of freedom, so the opinions here are theirs, not the company’s. Please jump in and add your own thoughts.” For the authors see <<http://www.britannica.com/blogs/authors>>]

John Seely BROWN (“...visting scholar at USC and the independent co-chairman of the Deloitte Center for Edge Innovation <<http://tinyurl.com/c4d2tg>>. In a previous life, I was the Chief Scientist of Xerox Corporation and the director of its Palo Alto Research Center (PARC). I was deeply involved in the management of radical innovation and in the formation of corporate strategy and strategic positioning of Xerox as The Document Company. Today, I'm Chief of Confusion, helping people ask the right questions, trying to make a difference through my work-speaking, writing, teaching.”) - *John Seely Brown*, Chief of Confusion: <<http://www.johnseelybrown.com/>> [TA=??] [BR=??].

Bertrum Chip BRUCE (Professor in Library & Information Science, Curriculum & Instruction, Bioengineering, the Center for Writing Studies, and the Center for East Asian & Pacific Studies at the University of Illinois at Urbana-Champaign. Co-editor of “Libr@ries Changing Information Space and Practice” <<http://www.routledge.com/books/Librries-isbn9780805854817>>) - *Chip's journey*, thoughts about community, learning, and life: <<http://chipbruce.wordpress.com/>> [TA=4] [BR=??].

Derek BRUFF (“assistant director of the Vanderbilt Center for Teaching and a senior lecturer in the Vanderbilt Department of Mathematics) – *Teaching with Classroom Response Systems*, Resources for engaging and assessing students with clickers <<http://derekbruff.com/teachingwithcrs/>> [TA=??] [BR=??].

Kevin BUSHWELLER (“an award-winning assistant managing editor for edweek.org and executive editor of Education Week's Digital Directions) & Katie Ash (“a reporter-researcher for Education Week”). - Motivation Matters, “Kevin and Katie are particularly interested in tackling the question: What works, and what doesn't work, to motivate students to do better in school?”: <<http://blogs.edweek.org/edweek/motivation/>> [TA=5] [BR=??].

Dan BUTIN [“. . . assistant dean of Cambridge College's school of education. He is the editor of *Service-Learning in Higher Education* (2005, Palgrave) and *Teaching Social Foundations of Education* (2005, Lawrence Erlbaum Publishers), and author, most recently, of *Rethinking Service-Learning: Embracing the Scholarship of Engagement within Higher Education* (forthcoming, Stylus”) – *Britannica Blog*: <<http://www.britannica.com/blogs/author/dbutin>> [TA=??] [BR=??].

Ron CANUEL, Michael Paul Goldenberg, Ken Goodman, Dan Kinnaman, Zach Miners, Monty Neill, Susan Ohanian, Linda Polin, Roger Schank, & Gary Stager – “The Pulse” from *DistrictAdministration*, Education's Place for Debate: <<http://www.districtadministration.com/pulse/>> [TA=104] [BR=??]. This URL did not respond on 17 March 2009 but it may recover. [To see posts by e.g., Roger Schank scroll down to “Contributors” and click on his name. For more recent posts by Schank see below under “Roger Schank.”]

Kevin CAREY (Research and Policy Manager of the Education Sector <<http://www.educationsector.org/>>) and other Education Sector policy staff: Chad Aldeman (Policy Associate), Erin Dillon (Policy Analyst), Andrew J. Rotherham (Co-director - who also blogs at Eduwonk <<http://www.eduwonk.com/>>), Elena Silva (Senior Policy Analyst), Thomas Toch, & Bill Tucker (Chief Operating Officer) *The Quick and the Ed*: <<http://www.QuickAndEd.com/>> [TA=96] [BR=??]. (See the extensive “Blog Roll” in the lower right column).

Nicholas CARR (author of *Big Switch – Rewiring the World, from Edison to Google* <<http://tinyurl.com/5w2v3e>>, “Does It Matter – Information Technology and the Corrosion of Competitive Advantage” <<http://tinyurl.com/5hab9y>>, and “Is Google Making Us Stupid” <<http://www.theatlantic.com/doc/200807/google>>. ) – *Rough Type*: <<http://www.routhtype.com/index.php>> [TA=944] [BR=??].

Two Blogs: Rhonda CARRIER (“. . . international educator who has worked in Malaysia, the Philippines, Indonesia, Singapore, Jordan, Japan and the U.S. She has been a ES/MS/HS teacher, head of department, technology director, curriculum coordinator, house parent, university lecturer, adjunct professor. Current Position: Director of Technology and Curriculum Coodinator, Canadian Academy, Kobe, Japan) –

(a) *Flat World Education* – Reflections on Education: <<http://rcarrier.edublogs.org>> [TA=2] [BR=??].

\*(b) *Flat World Schools* SWOT, ICT Strengths Weaknesses Opportunities Threats: <<http://flatworldschools.blogspot.com/>> [TA=9] [BR=??].

\*Bill CAROZZA (“a classroom teacher in elementary and secondary schools for 13 years before becoming an elementary school Principal 12 years ago. He has served as Adjunct Professor at the University of New Hampshire and New England College in areas of curriculum and instruction and social studies education. . . .Bill serves on the Executive Board for the New Hampshire Association of Supervision and Curriculum Development (NHASCD), was appointed by Governor Lynch to the New Hampshire Special Education Advisory Board and served as President of the New Hampshire Council for the Social Studies.”) - *Reflections of an Elementary Principal*, for both my local parents in Hopkinton, NH as well as international readers interested in progressive education and the role of technology in teaching and learning: <<http://billcarozza.com/>> [TA=??] [BR=??].

Eric CAVALCANTI (“. . . physicist, currently a research fellow at the Centre for Quantum Dynamics at Griffith University, in sunny Brisbane, Australia, after finishing my PhD at the University of Queensland. . . I do research in the areas of quantum information and foundations of quantum mechanics, especially on topics such as quantum nonlocality, steering, Bell inequalities, macroscopic superpositions, and the like) – *quantum communications*: <<http://ericcavalcanti.wordpress.com/>> [TA=??] [BR=??].

Sean CAVANAGH (“has been a reporter at 'Education Week' since 2002, and he's covered math and science topics for the past four years.”) & Kathleen Kennedy Manzo (“has been covering curriculum and standards for 'Education Week' since 1996, including federal, state, and local policies, and classroom practices related to reading/language arts, social studies, the arts, and other subjects” - *Curriculum Matters*, a wide-ranging forum for discussing school curriculum across the subject areas: <<http://blogs.edweek.org/edweek/curriculum/>> [TA=22] [BR=??].

CES (sponsored by the Coalition of Essential Schools <<http://www.essentialschools.org/>> founded by Ted Sizer <<http://tinyurl.com/yqc57l>>, “(CES) has been at the forefront of creating and sustaining personalized, equitable, and intellectually challenging schools. Essential schools are places of powerful student learning where all students have the chance to reach their fullest potential) – *The EssentialBlog*, a place for members of the CES network to interact, chat, create synergy, and share ideas” <<http://www.essentialblog.org/>> [TA=8] [BR=??]. Note the extensive “Essential Blog Friends” in the right-hand column.

Stephanie Viola CHASTEEN (“I am a physicist, writer, podcaster, and educator in Boulder, CO. On this blog I get to wax on about science stuff I think is cool (like weird science, or stuff we think is true but isn’t), K-12 science education, hands-on science activities, teaching pedagogy, and how to communicate science.”) - *sciencegeekgirl*, the intersection of science, education, communication, and me: <<http://sciencegeekgirl.wordpress.com/>> [TA=38] [BR=?].

CHRONICLE of Higher Education – *News Blog*, Higher-education news from around the Web: <<http://chronicle.com/news/>> [TA=?] [BR=?].

CHRONICLE of Higher Education – *The Wired Campus*, Education technology from around the web: <<http://chronicle.com/wiredcampus/>> [TA=722] [BR=?].

Mark CHU-CARROLL (“PhD Computer Scientist, who works for Google as a Software Engineer. My professional interests center on programming languages and tools, and how to improve the languages and tools that are used for building complex software systems.”) – *Good Math, Bad Math*, Finding the fun in good math, squashing the bad math and the fools who promote it: <<http://scienceblogs.com/goodmath/>> [TA=273] [BR=?].

Andrew R. CLINE (former journalist, now a professor of journalism at Missouri State University) - *Rhetorica*, offers analysis and commentary about the rhetoric, propaganda, and spin of journalism and politics, including analysis of presidential speeches and election campaigns: <<http://rhetorica.net/>> [TA=42] [BR=?].

CONCORD Consortium (<<http://www.concord.org/>>, “a nonprofit educational research and development organization based in Concord, Massachusetts. We create interactive materials that exploit the power of information technologies. Our primary goal in all our work is *digital equity*— improving learning opportunities for all students.” Its president and founder is physicist Robert Tinker, internationally recognized as a pioneer in constructivist uses of educational technology) - *Concord Consortium Blog*, discussing the promise of Educational Technology: <<http://blog.concord.org/>> [TA=?] [BR=?].

Gabriele CONTESSA [<<http://g.contessa.googlepages.com/home>>, Assistant Professor of Philosophy, Carlton University] with Otavio Bueno (Miami), Craig Callender (UCSD), Roman Frigg (LSE), Marc Lange (UNC), Chris Pincock (Purdue), Stathis Psillos (Athens), Mauricio Suarez (Madrid), & Michael Weisberg (Pennsylvania)] - *It’s Only a Theory*, a blog devoted to general philosophy of science: <<http://itisonlyatheory.blogspot.com/>> [TA=?] [BR=?].

\*Alec COUROS (“ . . . a professor of educational technology and media at the Faculty of Education, University of Regina.”) - *Open Thinking & Digital Pedagogy*, Rants & Resources from An Open Educator: <<http://educationaltechnology.ca/couros/>> [TA=97] [BR=?].

Susanne CROASDAILE (Program Specialist, Virginia Commonwealth University Training and Technical Assistance Center - *Assistive Technology Blog* <<http://www.assistivetechology.vcu.edu/>> [TA=?] [BR=?].



David CROTTY, (Executive Editor of Cold Spring Harbor Protocols. His focus is the discussion of methods used in the biology laboratory) - Cold Spring Harbor Protocols, *Bench Marks*: <<http://www.cshblogs.org/cshprotocols/>> [TA=16] [BR=??].

Craig A. CUNNINGHAM, Sherman Dorn, Dan W. Butin, Raji, A.G. Rud, Barbara Stengel, Teacherken (aka Kenneth Bernstein), Richard (aka Richard Van Heertum), Philip (probably also known as Philip Kovacs), Jane, Nancy Flanagan, Kathryn M. Benson, Nick Burbules, & Aaron Schutz (“A multiblog about the ways that educational foundations can inform educational policy and practice! The blog is written by a group of people who are interested in the state of education today, and who bring to this interest a set of perspectives and tools developed in the disciplines known as the 'foundations' of education: philosophy, history, curriculum theory, sociology, economics, and psychology”) - *Education Policy Blog*: <<http://educationpolicyblog.blogspot.com/>> [TA=27] [BR=??].

\*John CURRY (“I’m an Assistant Professor of Educational Technology at Oklahoma State University in Stillwater, Oklahoma.” – *EffectiveDesign*, Random Musings of an Instructional Designer: <<http://effectivedesign.org/blog/>> [TA=??] [BR=??].

Linda DARLING-HAMMOND, Judith Browne-Dianis, Carl Glickman, John Goodlad, Gloria Ladson-Billings, Deborah Meier, Larry Myatt, Pedro Antonio Noguera, Wendy D. Puriefoy, Sharon P. Robinson, Nancy Sizer, Theodore Sizer, Angela Valenzuela, George H. Wood (see their mini-bios in the right-hand column of “Covenanters” <<http://www.forumforeducation.org/about-us/conveners>>); “Strong Schools for a Strong Democracy - The Forum for Education and Democracy is committed to the public, democratic role of public education - the preparation of engaged and thoughtful democratic citizens. We work to promote a public education system worthy of a democracy, one characterized by strong public schools, equity of educational resources, and supported by an involved citizenry.”) - *The Forum for Education and Democracy*: <<http://www.forumforeducation.org/>> [TA=??] [BR=??].

Anne DAVIS (Information Systems Training Specialist, Georgia State University) - *EduBlog Insights*, Comments, reflections and occasional brainstorm: <<http://anne.teachesme.com>> [TA=50] [BR=??].

Lorcan DEMPSEY (“Vice President and Chief Strategist at OCLC (Online Computer Library Center <<http://www.oclc.org/us/en/global/default.htm>>) is a librarian who has worked for library and educational organizations in Ireland, England and the US. . . . He is currently a member of the NISO (National Information Standards Organization <<http://www.niso.org/standards>> Board and an Honorary Research Fellow at the University of WalesAberystwyth.”) - *Lorcan Dempsey’s weblog*, on libraries, services and networks: <<http://orweblog.oclc.org/archives/001826.html>> [TA=124] [BR=??].

\*Bernie DODGE (“Professor of Educational Technology at San Diego State University. Creator of the WebQuest <<http://www.webquest.org/index.php>> model. Teaches courses about technology integration, simulation and game design, and new technologies like blogs, wikis, podcasting, geotools, and Scratch”) - *One Trick Pony*: <<http://webquest.org/bdodge/>> [TA=12] [BR=??].

Two Blogs - Patricia DONAGHY ["I teach ICT to a wide range of students at Inchicore College of Further Education in Dublin, Ireland. . . . I strongly support the use of quality open source and free software in education" (ICT = Information and Communication Technologies); creator of the *International Edubloggers Directory* <<http://edubloggerdir.blogspot.com/>> [TA=78]) -

\*(a) *Using ICT in Further Education* - Free Resources for teachers & students (Open Source, Freeware, Creative Commons): <<http://pdonaghy.edublogs.org/>> [TA=??] [BR=??].

\*(b) *Free Resources for Education*: <<http://pdonaghy.blogspot.com/>> [TA=5] [BR=??].

Sherman DORN (editor of "Education Policy Analysis Archives" <<http://epaa.asu.edu/>> and list manager of AERA-L <<http://listserv.aera.net/archives/aera-l.html>>) – *Sherman Dorn*, Work to understand how schools have been social institutions: <<http://www.shermandorn.com/>> [TA=45] [BR=??].

\*Stephen DOWNES ("I work for the National Research Council, Institute for Information Technology, in Moncton, New Brunswick, Canada. I specialize in online learning, content syndication, and new media.") – *Half an Hour*: A place to write, half an hour, every day, just for me: <<http://halfanhour.blogspot.com/>> [TA=174] [BR=??].

Paul DUIGNAN ("a psychologist, social science and organizational specialist who works in the areas of outcomes, performance management, evaluation and assessing research and evidence as the basis for decision making." – *outcomes blog.org*, Dr. Paul Duignan on real world strategy, outcomes, evaluation, and monitoring: <<http://www.outcomesblog.org/>> [TA=??] [BR=??].

John DUPUIS (" . . . Head of the Steacie Science & Engineering Library, York University, Toronto" - *Confessions of a Science Librarian*, links and pointers to information of interest to academic science librarians: <<http://jdupuis.blogspot.com>> [TA=51] [BR=??].

ENGINEERING Pathway ("portal to high-quality teaching and learning resources in engineering, applied science and math, computer science/information technology, and engineering technology and is designed for use by K-12 and university educators and students") – *Engineering Pathway*, turning ideas into reality- learn, connect, create: <<http://www.k-grayengineeringeducation.com/blog/>> [TA=??] [BR=??].

\*David EUBANKS (Coker College's Director of Planning, Assessment, and Information) - *Higher Ed: assessing the elephant*: <<http://highered.blogspot.com/>> [TA=??] [BR=??]. [NOTE: In the previous "Thirty-two Education Blogs" the present David Eubanks of "assessing the elephant" was misidentified as the David Eubanks who's Interim Director of the Center for Teaching Excellence at the Univ. of Maryland. I thank the latter for bring this error to my attention.]

James EVANS (" . . . Assistant Professor of Sociology at the University of Chicago, a member of the Committee on the Conceptual and Historical Studies of Science, and a fellow at the Computation Institute <<http://home.uchicago.edu/~jevans/>>. His work explores how social and technical institutions shape knowledge—science, scholarship, law, news, religion—and how these understandings reshape the social and technical world.") - *Britannica Blog*: <<http://www.britannica.com/blogs/author/jevans>> [TA=??] [BR=??].

Loren S. EVERS (“. . . a Mechanical Engineer by trade. I have over twelve years of experience as a manufacturing engineer training people on production methods and systems. My engineering career has allowed me to have the roles of both Engineer and Educator.”) - *The Teaching Box*, An Engineer’s Thoughts on Education and Technology:  
<<http://www.theteachingbox.com/>> [TA=??] [BR=??].

Amy FAGAN, Chester E. Finn, Jr., Christina Hentges, Eric Osberg, Stafford Palmieri, Mike Petrilli, Amber Winkler “the Fordham Institute’s  
<<http://www.edexcellence.net/template/index.cfm>> Gadfly is blogging. . . . we want to replicate the interactivity of our office water cooler, to show what goes on at Fordham ‘behind the scenes,’ so to speak, well before the next study, the weekly *Education Gadfly*, the podcast, or the op-ed ever goes primetime”) – *Flypaper*, Ideas that stick from Fordham’s Education Gadfly team:  
<<http://www.edexcellence.net/flypaper/index.php/author/afagan>> [TA=97] [BR=??].

\*John FAIG (“. . . Ex-Wall Street Analyst turned math teacher and technology coordinator at King Low Heywood Thomas School in Stamford, Connecticut (USA). . . . a major proponent of web2.0 and collaboration in the classroom.”) – *John Faig’s Blog*, My personal blog for Technology Integration in schools: <<http://johnfaig.blogspot.com/>> [TA=??] [BR=??].

Joel FEINSTEIN (Homepage <<http://www.maths.nott.ac.uk/personal/jff>> : “My interests are in Functional Analysis, especially commutative, semisimple Banach algebras. In particular I work on regularity conditions, rational and polynomial approximation, and the classification of the endomorphisms, homomorphisms and derivations of certain classes of Banach algebras.”) – *Explaining mathematics*, how to explain mathematical concepts in a way that students can understand: <<http://explainingmaths.wordpress.com/>>.

John FENSTERWALD (“editorial writer for the San Jose Mercury News who has written extensively about education policy and public schools in California”) - *Educated Guess*, John Fensterwald’s take on the struggle to reform California schools:  
<<http://blogs.mercurynews.com/edreform/about/>> [TA=8] [BR=??].

David FETTERMAN (“Director of Evaluation in the School of Medicine at Stanford University”) – *Empowerment Evaluation*, a place for exchanges and discussions about empowerment evaluation practice, theory, and current debates in the literature:  
<<http://evaluation.blogspot.com/>> [TA=1] [BR=??].

\*Andreas FORMICONI (“. . . a computer science professor at the Medical School of the University of Florence. He is teaching computer literacy in several courses of the Medical School and of the Faculty of Education. With a background in physics, formerly a researcher in the field of medical images reconstruction, he is obsessed by the poor results of conventional education”) - *Insegnare Apprendere Mutare* (Teaching Learning Changing):  
<[http://infomedfi.pbwiki.com/post\\_translation\\_assignment\\_7](http://infomedfi.pbwiki.com/post_translation_assignment_7)> [TA=16] [BR=??].

Dolores FIDISHUN (Head Librarian - Penn State Great Valley School of Graduate Professional Studies Library) - *Dolores' List of CFPs* (Call For Papers) "This blog shares calls for papers and presentations in the disciplines of Library Science, Information Science, Instructional Design and Technology, Education, including Adult Education, and Women's and Gender Studies. Other calls may be listed that relate in some way to the above disciplines. It is also a place to find advice about writing, publishing and presenting. To request that your call for papers or presentation be added, send it to <dx19@psu.edu> :  
<[http://www.personal.psu.edu/dx19/blogs/dolores\\_list\\_of\\_cfps/](http://www.personal.psu.edu/dx19/blogs/dolores_list_of_cfps/)> [TA=3] [BR=??].

Stanley FISH ("... the Davidson-Kahn Distinguished University Professor and a professor of law at Florida International University, in Miami, and dean emeritus of the College of Liberal Arts and Sciences at the University of Illinois at Chicago. He has also taught at the UC-Berkeley, Johns Hopkins, and Duke. He is the author of 10 books ... [including the oft-cited *Is there a text in this class?*]. ... His new book on higher education, *Save the World On Your Own Time*, ... [see at <<http://tinyurl.com/at85bl>>. ... has just been published.) - *Think Again*:  
<<http://fish.blogs.nytimes.com/>> [TA=??] [BR=??].

Richard GAUNT ("has been a professional communicator for over 35 years, working for major international companies as a PR consultant.") and Glenn O'Neil ("has led evaluation, research and communication projects for international organisations and companies.") - *intelligent measurement*: <<http://intelligentmeasurement.wordpress.com/>> [TA=18] [BR=??].

\*Bill GENEREUX ("I'm an Assistant Professor of Computer Systems Technology at Kansas State University at Salina. I have been working with computers for more than twenty years. I have been teaching in higher education since 2001.") - *TechIntersect*, Exploring the intersection of technology and the arts: <<http://billgx.edublogs.org/>> [TA=9] [BR=??].

Steve GILBERT (Founder of the TLT-SWG (Teaching, Learning, Technology- S.W. Gilbert Group <<http://www.tltgroup.org/>>) and Steve Ehrmann (director of the Flashlight Program <<http://www.tltgroup.org/flashlightP.htm>> on assessment and evaluation) - extending their *TLT-SWG* group into the 21st Century: <<http://tlt-swg.blogspot.com/>> [TA=4] [BR=??].

Suzanne GILDER ("I'm a 26 year old female experimental condensed matter physicist working in quantum device physics, specifically superconductors and Josephson Junctions. I'm currently working as a research fellow at the University of Birmingham, UK.") - *Physicsandcake*, A UK based experimental condensed matter physicist with a penchant for quantum computing, tea, and cake: <<http://physicsandcake.wordpress.com/>> [TA=4] [BR=??].

Michael Paul GOLDENBERG (mathematics educator) - *Rational Mathematics Education*, "an island of rationality in the insanity of the math wars": <<http://rationalmathed.blogspot.com/>> [TA=14] [BR=8.3].

Sara GOLDRICK-RAB (Assistant Professor of Educational Policy Studies and Sociology at the Univ. of Wisconsin - Madison <<http://www.education.wisc.edu/eps/faculty/rab.asp>>) & Liam Goldrick (Policy Director at the New Teacher Center) - *The Education Optimists*, through our twin perspectives as a professor of education and a director of education policy, we seek to draw attention to the power of society, schools, colleges and educators to empower individuals, further learning, and reduce inequities ... and have a little fun along the way:  
<<http://eduoptimists.blogspot.com/>> [TA=16] [BR=??].

GOOGLE. *Official Google Blog*, insights from Googlers into our products, technology, and Google culture: <<http://googleblog.blogspot.com/>> [TA=9,184] [BR=9.8].

William H. (Bill) GRAVES (“...a member of the Board of Governors of Antioch University and a professor emeritus at the University of North Carolina at Chapel Hill (UNC) where, after earning a mathematics Ph.D. from Indiana University, he served as dean for general education, interim vice chancellor for academic affairs, senior information technology officer, and founder and director of the Institute for Academic Technology (a UNC/IBM alliance.”) - *Measurable Performance Improvement*, about the rising policy expectations for nonprofit higher education's performance and the IT-enabled strategies for measurably improving and accounting for performance: <[http://institutionalperformance.typepad.com/institutional\\_performance/](http://institutionalperformance.typepad.com/institutional_performance/)> [TA=1] [BR=?].

Jay P. GREENE (<<http://www.uark.edu/ua/der/People/greene.php>>, “endowed chair and head of the Department of Education Reform at the University of Arkansas and a senior fellow at the Manhattan Institute <<http://www.manhattan-institute.org>>. Greene conducts research and writes about education policy, including topics such as school choice, high school graduation rates, accountability, and special education”) - *Jay P. Greene's Blog*, with help from some friends: <<http://jaypgreene.com/>> [TA=98 in Feb09, but ?? in March09] [BR=?].

\*Lisa Neal GUALTIERI (editor of *eLearn magazine* <<http://www.elearnmag.org/index.cfm>> - *The eLearn Blog*: <<http://blog.acm.org/elearn/>> [TA=?] [BR=?]. [Listed in Donaghy's *International Directory of Edubloggers* at <<http://edubloggerdir.blogspot.com/>> as “Lisa Neal.”]

Mark GUZDIAL (focuses “on using lessons from learning sciences and educational technology for teaching about computing,” - *computer science education*: <<http://www.amazon.com/gp/blog/id/A3W4CUXPE1WFNF>> [TA=?] [BR=?].

John HAGEL (has joined with “Deloitte Touche USA LLP to found and serve as co-chairman of a major new Silicon Valley based research center. This research center has a broad charter to build on my long-term work at the intersection of business strategy and information technology,” see <<http://www.johnhagel.com/index.shtml>>) - *Edge Perspectives with John Hagel*: <<http://edgeperspectives.typepad.com/>> [TA=?] [BR=?].

\*Richard HAKE (Homepage <<http://www.physics.indiana.edu/~hake/>>, Emeritus Professor of Physics, Indiana University) - *Hake'sEdStuff*, Commentary on Education Reform: <<http://HakesEdStuff.blogspot.com/>> [TA=6] [BR=?].

Bill HARRIS (“Founded facilitated systems in 1999 to help people by helping the organization in which they spend to much of their time. He uses a number of approaches to help them make sense of the puzzles and problems organizations face.” - *Making Sense With Facilitated Systems* <<http://www.facilitatedsystems.com/weblog/>> [TA=6] [BR=?].

David HARRIS (editor, based in Palo Alto, CA, former head of media relations for the American Physical Society) – *Cathemeral Thinking* – Occasional essays about the interstices between science, design, art, communication, and journalism: <<http://cathemeralthinking.blogspot.com/>> [TA=?] [BR=?].

\*Bill HARSHBARGER (“Since joining the Peace Corps in 1969, I have been involved in international education, communication and administration. I have worked in the U.S., Japan, Dominican Republic, India and Oman. I am currently Director of the English Language Program and Professor in the Division of Languages at International Christian University (ICU) in Japan.”) - *Director or Indirector?* This blog explores matters relating to the administration of the English Language Program at International Christian University in Tokyo, Japan: <<http://www.indirector.blogspot.com/>> [TA=4] [BR=??].

Kieran HEALY (sociologist at Duke University, “interests are in economic sociology, the sociology of culture, the sociology of organizations, and social theory”) - *Kieran Healy* <<http://www.kieranhealy.org/blog>> [TA=28] [BR=??].

James HRYNYSHYN (“... a freelance science journalist based in western North Carolina, where he tries to put degrees in marine biology and journalism to good use.”) – Living on an *Island of Doubt* in a climate of change: <<http://scienceblogs.com/islandofdoubt/>> [TA=78] [BR=??].

David J. HOFF (“has been reporting on the biggest issues in K-12 education for more than 10 years for Education Week. He primarily reports now on the reauthorization of the No Child Left Behind Act”) - *NCLB: Act II*: <<http://blogs.edweek.org/edweek/NCLB-ActII/>> [TA=31] [BR=??].

Two Blogs: Doug HOLTON (Dept. of Instructional Technology & Learning Sciences, Utah State University) -

(a) *EdTechDev*, developing educational technology: <<http://edtechdev.blogspot.com/>> [TA=7] [BR=??].

(b) *Educational Research Journals*, table of contents for various educational and psychological journals: <<http://edresearchjournals.blogspot.com/>> [TA=1] [BR=??].

Daniel HOLZ, JoAnne Hewett, John Conway, Julianne Dalcanton, Mark Trodden, Risa Wechsler, Sean Carroll (“people who, coincidentally or not, all happen to be physicists and astrophysicists”) - Cosmic Variance, “science, to be sure, but also arts, politics, culture, technology, academia, and miscellaneous trivia”: <<http://blogs.discovermagazine.com/cosmicvariance/>> [TA=187] [BR=??].

Bill HOOKER (postdoc at Queensland Institute of Medical Research) – *Open Reading Frame*: <<http://www.sennoma.net/>> [TA=??] [BR=??].

Jim HORN (educator in Cambridge, Massachusetts, “explores issues in public education policy and advocates a commitment to and re-examination of the democratic purposes of schools [the urgency of the message] is due to the current reform efforts that are based on a radical reinvention of education, now spearheaded by a psychometric blitzkrieg of metastasizing testing aimed at dismantling a public education system that took almost 200 years to build.”) - *Schools Matter*: <<http://schoolsmatter.blogspot.com/>> [TA=75] [BR=??].

Sabine HOSSENFELDER (“I am a theoretical physicist. . . . most of the time I think. Sometimes, I scribble funny looking things with a pencil on a notebook”) and Stefan Scherer (“I started my life as a physicist in condensed matter physics, with my masters thesis about the Kosterlitz-Thouless transition on the torus. Since then, I have been working in scientific publishing, and in parallel, did research for my Ph.D., switching field to heavy ion physics”) – *BackReAction*, events on the world lines of two theoretical physicists, from the horizon to timelike infinity. A scientifically minded blog with varying amounts of entertainment, distractions, and every day trivialities: <<http://backreaction.blogspot.com/>> [TA=136] [BR=7.8].

Steve HSU (“Professor of physics at the University of Oregon; homepage at <<http://duende.uoregon.edu/~hsu/>>”) - *Information Processing*: <<http://infoproc.blogspot.com/>> [TA=60] [BR=??].

John HUNTER (“ . . . , I try to provide useful information on: Economic impact of science and engineering . . . . . Cool science and engineering research, facts, gadgets, etc.. . . Primary education (k-12) in science, math and engineering . . . . Higher education. . . .”) – *Curious Cat*, Science and Engineering Blog: <<http://engineering.curiouscatblog.net/>> [TA=55] [BR=??].

\*Rozhan M. IDRUS (“I hold a PhD in Physics and kind of retooled to open and distance learning for about two decades ago. I am now a Professor of Open and Distance Learning, the first of such appointment in a public institution of higher learning in Malaysia. . . . I have recently been appointed as the Chief Editor of The International Journal of Excellence in e-Learning, centred in Dubai, UAE.”) - eLearning .....? *I've had E-Nough!!*: <<http://enoughellearning.blogspot.com/>> [TA=??] [BR=??].

*Intute* - the best Web resources for education and research <<http://www.intute.ac.uk/>> [TA=248] [BR=??].

*Intute* Blog <<http://www.intute.ac.uk/blog/>> [TA=24] [BR=??].

*Intute* – Science, Engineering, & Technology Blog, “covers the physical sciences, engineering, computing, geography, mathematics and environmental science. The database currently contains 34,336 records” <<http://www.intute.ac.uk/sciences/>> [TA=11] [BR=??].

*Intute* – Arts and Humanities Blog, “selected and evaluated by a network of subject specialists. There are over 21,000 Web resources listed here that are freely available by keywords searching and browsing.: <<http://www.intute.ac.uk/artsandhumanities/>> [TA=19] [BR=??].

*Intute*: Social Sciences (the subject group of Intute that provides the very best Web resources for education and research for the social sciences, including law, business, hospitality, sport and tourism) - *Intute: Social Sciences Blog*: <<http://www.intute.ac.uk/socialsciences/blog/>> [TA=24] [BR=??].

*Intute* – Health and Life Sciences Blog: <<http://www.intute.ac.uk/healthandlifesciences/blog/>> [TA=??] [BR=??].

Albert IP (IT Administrator) - *Random Walk in Learning* <<http://elearningrandomwalk.blogspot.com>> [TA=11] [BR=??].

ISKO UK (International Society for Knowledge Organization) - *ISKO UK*, A blog space of the British chapter of ISKO: <<http://iskouk.blogspot.com/>> [TA=??] [BR=??].

Joan JACOBS (“Once a Knight Ridder columnist, now a freelance writer and author of a book about a charter school that prepares Hispanic students for college: *Our School: The Inspiring Story of Two Teachers, One Big Idea and the Charter School That Beat the Odds* <<http://tinyurl.com/5c2gqa>>) – *Free-linking and thinking on education by Joan Jacobs*: <<http://joannejacobs.com/>> [TA=??] [BR=??]. (In the right-hand column is list of over 30 EdBlogs.)

Jennifer JENNINGS (“a final year doctoral student in Sociology at Columbia University”) - *Eduwonkette*, “effects of accountability systems on race, gender, and socioeconomic inequality, teacher and school effects on cognitive and non-cognitive outcomes, the effect of non-cognitive skills on academic achievement and attainment, school choice, and gender gaps in educational outcomes”: <<http://blogs.edweek.org/edweek/eduwonkette>> [TA=153] [BR=??].

Clifford V. JOHNSON (“a professor at the Department of Physics and Astronomy, at the University of Southern California. My home page is at <<http://physics.usc.edu/%7Ejohnson1/>> .”) - *Asymptotia*: <<http://asymptotia.com/>> [TA=84] [BR=??].

Gil KALAI (“a mathematician working mainly in the field of combinatorics. Within combinatorics, I work mainly on geometric combinatorics and the study of convex polytopes and related objects, and on the analysis of Boolean functions and related matters. I am a professor at the Institute of Mathematics at the Hebrew University of Jerusalem and also have a long-term visiting position at the departments of Computer Science and Mathematics at Yale. . .”) – *Combinatorics and More*: <<http://gilkalai.wordpress.com> > [TA=24] [BR=??].

\*Karl KAPP (“. . . a professor of Instructional Technology at Bloomsburg University in Bloomsburg, PA. In addition, he is a consultant, speaker and expert on the convergence of learning, technology and business operations.”) - *Kapp Notes*, discusses issues concerning learning, e-learning and the transferring knowledge from retiring baby boomers to incoming gamers. The goal is to share information and knowledge to create a better understanding of learning design: <<http://www.karlkapp.blogspot.com/>> [TA=58] [BR=??].

Kevin KELLY (“I am still writing my next book which is about what technology wants. I'm posting my thoughts in-progress on [this] semi-blog. . . I remain the Senior Maverick for *Wired* <<http://www.wired.com/wired/>>, a magazine I helped co-found a decade ago.”) – *The Technium*, a book in progress: <<http://www.kk.org/thetechnium/>> [TA=938] [BR=??].

Kevin KELLY (“. . . is currently editor and publisher of the Cool Tools website <<http://www.kk.org/cooltools/>>, which gets 1 million visitors per month.. . . He co-founded the ongoing Hackers' Conference, and was involved with the launch of the WELL, a pioneering online service started in 1985. He authored the best-selling *New Rules for the New Economy* <<http://tinyurl.com/734wsu>> and the classic book on decentralized emergent systems, *Out of Control*” <<http://tinyurl.com/86tnzk>> – *Britannica Blog*: <<http://www.britannica.com/blogs/author/kkelly>> [TA=??] [BR=??].



\*Delaney KIRK (“... has 26 years of teaching experience including 18 years as a tenured full professor at Drake University before moving to the University of South Florida in Sarasota in 2007. She . . . . . was the featured expert for the Chronicle of Higher Education’s online chat on classroom management on 15 September 2004. Her book, *Taking Back the Classroom: Tips for the College Professor on Becoming a More Effective Teacher* <<http://tinyurl.com/9edx2q>>”) was released by Tiberius Publications in October 2005” - *Ask-Dr-Kirk*, Offers Tips on Taking Back the Classroom and Becoming a More Effective Teacher: <<http://www.delaneykirk.com/>> [TA=24] [BR=??].

Michael W. KIRST [“Professor Emeritus of Education and Business Administration at Stanford University since 1969. . . . held several positions with the federal government, including Staff Director of the U.S. Senate Subcommittee on Manpower, Employment and Poverty. He was a former president of the California State Board of Education.” In a recent blog entry Kirst wrote (paraphrasing): “The best new book on the historical evolution of America’s decline in college success relative to some other nations is *The Race between Education and Technology* [Golden & Katz (2008).” For references and comments on that book see under *REFERENCES* where I also reference Kirst’s book *From High School to College* [Kirst & Venezia (2004)], – *Dr. Michael W. Kirst*: <<http://collegepuzzle.stanford.edu/>> [TA=??] [BR=??].

Andreas KLUTH (“has been writing for The Economist since 1997. In 2003 he became technology correspondent, based in San Francisco. . . . . He has also been a lecturer at UC Berkeley’s Graduate School of Journalism. . . . is currently writing his first book, a journey through the triumphs and disasters of our modern lives, told through the story of Hannibal the Carthaginian and his Roman enemies Fabius and Scipio.”) – *The Hannibal Blog*, about a book, thoughts deep and shallow about success and failure in life through the eyes of Hannibal, the Carthaginian: <<http://andreaskluth.org/>> [TA=14] [BR=??].

Peggy KOLM - *Women in Science*, past, present, and future: <<http://sciencewomen.blogspot.com/>> [TA=84] [BR=??].

Philip KOVACS (University of Alabama in Huntsville, Department of Education) - *Educator Round Table* “to Improve education-related legislation by amplifying the informed perspectives of professional educators; local, state, and national board associations; university policy and education departments; local PTA’s, and other organizations committed too quality public schools: <<http://www.educatorroundtable.org/>> [TA=??] [BR=??].

Mellisa LAFSKY (see <[http://en.wikipedia.org/wiki/Melissa\\_Lafsky](http://en.wikipedia.org/wiki/Melissa_Lafsky)>) & Rachel Cernansky (“a writer and environmentalist; received a Master’s Degree in journalism from Columbia University in May and spent the summer in Rwanda writing about AIDS treatment programs.) – *Discoblog*: <<http://blogs.discovermagazine.com/discoblog/>> [TA=207] [BR=9.8].

Daniel LEMIRE (“I am a professor at the Université du Québec à Montréal (UQAM) where I teach computer science. . . . [also] an adjunct professor at the University of New Brunswick, a researcher at LICEF (Cognitive Computing) - *Daniel Lemire’s blog*: <<http://www.daniel-lemire.com/blog/>> [TA=47] [BR=??].

John LOMBARDI (President and Professor of History, Louisiana State University System) - *Reality Check*: <[http://www.insidehighered.com/views/blogs/reality\\_check](http://www.insidehighered.com/views/blogs/reality_check)> [TA=??] [BR=??].

Elizabeth LOONEY (Digital Content Analyst) and Mark R. Nelson (Digital Content Strategist) – *CITE, Course materials, Innovation, and Technology in Education*: <<http://thecite.blogspot.com/2008/11/new-digital-education-blog.html>> [TA=??] [BR=??].

Lissa LORD (Reference Librarian at the University of Kansas, Edwards Campus, Regents Center Library in Overland Park, Kansas) - *Dissertation Research*, “We Are About Research, Resources, Reference, Online Expertise, Writing and Skill to Support Our Students in the Fulfillment of Their Educational Goals”: <<http://dissertationresearch.blogspot.com/>> [TA=3] [BR=??].

Dan MARKEL (“teaches at Florida State University College of Law, which is located in Sweet Sassy Tallahassee, aka Funky T-town. He writes mostly in the area of criminal law and the philosophy of punishment.”) Ethan J. Leib (“in San Francisco, where he teaches at Hastings. His specialty is the theory and practice of deliberative democracy. His book, “Deliberative Democracy In America” <<http://tinyurl.com/5py2t>>, is out in paperback.” Other contributors all teach law: Paul Horwitz (University of Alabama), Matt Bodie (St. Louis University), Steve Vladeck (American University), Rick Garnett (Notre Dame), Orly Lobel (University of San Diego), Rick Hills (New York University), Howard Wasserman (Florida International University) – *PrawfsBlawg*, about a variety of topics related to law and life, which is operated by PrawfsBlawg LLC, a limited liability corporation based in Florida: <<http://prawfsblawg.blogs.com/prawfsblawg/>> [TA=191] [BR=8.5].

Sandra MATHISON (Professor, Faculty of Education University of British Columbia) – *e-valuation*, constructing a good life through the exploration of value and valuing: <<http://blogs.ubc.ca/evaluation/>> [TA=??] [BR=??].

Ewan McINTOSH (“...the National Adviser on Learning and Technology Futures for Learning and Teaching Scotland, the education agency responsible for curriculum development, and a member of several advisory boards. . . consults for organisations including the BBC, British Council, General Teaching Council of Scotland, RM and Scottish Enterprise, advising on how social media can be harnessed for to improve learning in the organisation, leadership and communication.”) – Ewan McIntosh’s *edublogs.com*, social participative media, education and the future: <<http://edu.blogs.com/edublogs/>> [TA=147] [BR=??].

Scott McLEEMEE (“essayist, critic, and digital \*feuilletonist\* <<http://en.wikipedia.org/wiki/Feuilleton>>; helped start the online news journal *Inside Higher Ed* <<http://www.insidehighered.com/>>, where he serves as Essayist at Large, writing a weekly column called Intellectual Affairs <<http://www.insidehighered.com/views/mclemee>>”) - *Quick Study*- on books, ideas & trash-culture ephemera: <<http://www.artsjournal.com/quickstudy/>> [TA=70] [BR=??].

Scott McLEOD [<<http://www.scottmcleod.net/bio>>, “coordinator of the Educational Administration program at Iowa State University and director of the UCEA Center for the Advanced Study of Technology Leadership in Education (CASTLE)”] – *dangerously irrelevant*: <<http://www.dangerouslyirrelevant.org/>> [TA=292] [BR=??].

Deborah MEIER & Diane Ravitch (“have found themselves at odds on policy over the years, but they share a passion for improving schools. Bridging Differences will offer their insights on what matters most in education”) - *Bridging Differences*:

<<http://blogs.edweek.org/edweek/Bridging-Differences/>> [TA=66] [BR=9.5].

John MERROW (“founded 'Learning Matters' in 1995 after an extensive career as a teacher and broadcaster. You can see [his] programs and segments on “The NewsHour with Jim Lehrer,” Frontline, and in [his] own documentaries”) - *Education Advice for President-Elect Obama*:

<[http://www.merrow.org/ed\\_advice/?page\\_id=6](http://www.merrow.org/ed_advice/?page_id=6)> [TA=??] [BR=??].

Reidar MOSVOLD (Associate Professor in Mathematics Education at University of Stavanger, Norway) - *Mathematics Education Research Blog*, a researcher's attempt to follow his field:

<<http://mathedresearch.blogspot.com/>> [TA=10] [BR=??].

Luboš MOTL ( <[http://en.wikipedia.org/wiki/Lubos\\_motl](http://en.wikipedia.org/wiki/Lubos_motl)> : “a Czech theoretical physicist who worked on string theory and conceptual problems of quantum gravity until 2006. Since 2007, he left academia. He currently lives in Plzeň, Czech Republic, and keeps a blog commenting on global warming, politics and physics.”) – *the reference frame*, the most important events in our and your superstringy Universe as seen from a conservative physicist's viewpoint:

<<http://motls.blogspot.com/>> [TA=311] [BR=7.8]

P.Z. MYERS (“... a biologist and associate professor at the University of Minnesota, Morris where he conducts research in development and evolutionary developmental biology.”) –

*Pharyngula*, Evolution, development, and random biological ejaculations from a godless liberal:

<<http://scienceblogs.com/pharyngula/>> [TA= 2,493] [BR=9.1].

NAF. New America Foundation <<http://www.newamerica.net/>> (“ a nonprofit, nonpartisan public policy institute that invests in new thinkers and new ideas to address the next generation of challenges facing the United States. . . Launched in 1999, the foundation was guided through a period of rapid growth by founding president Ted Halstead

<[http://www.newamerica.net/people/ted\\_halstead](http://www.newamerica.net/people/ted_halstead)>. The institute is now led by President and CEO Steve Coll <[http://www.newamerica.net/people/steve\\_coll](http://www.newamerica.net/people/steve_coll)> and an outstanding Board of Directors <<http://www.newamerica.net/about/board>>, chaired by Eric Schmidt

<[http://www.newamerica.net/people/eric\\_schmidt](http://www.newamerica.net/people/eric_schmidt)>. New America is headquartered in Washington D.C. and also has a significant presence in California, the nation's largest laboratory of democracy) – see the list of Policy Blogs at <<http://www.newamerica.net/blog/>>, including the *Higher Ed Watch* “analysis, reporting, and commenting on the world of higher education, with a focus on college access, affordability, and quality:

<[http://www.newamerica.net/blog/higher\\_ed\\_watch](http://www.newamerica.net/blog/higher_ed_watch)> [TA=2] [BR=??].

\*Lisa NIELSEN (“professional development manager for educational technology for the New York City Department of Education”) – *The Innovative Educator*, sharing ideas about educating innovatively: <<http://theinnovativeeducator.blogspot.com/>> [TA=??] [BR=??].

Michael NIELSEN (physicist, writer, and co-author of *Quantum Computation and Quantum Information* <<http://michaelnielsen.org/qcqi/>>) - *Social software & Future of Science*: <<http://michaelnielsen.org/blog/>> [TA=143] [BR=??]. See Nielsen (2008; 2009a,b,c,d) in *REFERENCES* below and the recent posts:

- (a) “Lectures on the Google Technology Stack: Syllabus and Background Reading” <[http://michaelnielsen.org/blog/?page\\_id=503](http://michaelnielsen.org/blog/?page_id=503)>,
- (b) “The PageRank distribution for the web” <<http://michaelnielsen.org/blog/?p=516>>,
- (c) “Using MapReduce to compute PageRank” <<http://michaelnielsen.org/blog/?p=534>>.

Matthew NISBET (“professor in the School of Communication at American University where his research focuses on the intersections between science, media, and politics.” – *Framing Science*, Strategists<---->Journalists<---->Publics: <<http://scienceblogs.com/framing-science/>> [TA=137] [BR=??].

Erin O'CONNOR (taught English at the University of Pennsylvania, currently working as a writer, editor, and consultant specializing in freedom-oriented and education-based nonprofits) - *Critical Mass*, a blog dedicated to commentary on the state of American academe: <<http://www.erinoconnor.org/>> [TA=18] [BR=7.7].

\*Michael J. OFFERMAN (Vice Chairman, Capella University) - *The Other 85 Percent*, Working adults and the new world of higher education: <<http://www.theother85percent.com/>> [TA=9] [BR=??].

Susan OHANIAN (Winner of the 2003 George Orwell award for Distinguished Contribution to Honesty and Clarity in Public Language, articulate critic of the “Standardistas”) - *Susan Ohanian.org*: <<http://susanohanian.org/>> [TA=??] [BR=??].

Robert J. O'HARA (“a naturalist and evolutionary biologist with professional interests in systematics, biodiversity, and the history and theory of the historical sciences . . . ; also an advocate for the creation of small, decentralized, faculty-led residential colleges within larger universities as a means to improve higher education; established and maintains The Collegiate Way: Residential Colleges and the Renewal of University Life <<http://collegiateway.org>>, the leading international resource on the residential college movement) - *Higher Education News from the Collegiate Way*, Residential Colleges and the Renewal of Campus Life: <<http://www.collegiateway.org/news>> [TA=10] [BR=7.0].

Anthony O'HEAR [“. . . the Garfield Weston Professor of Philosophy and Head of the Department of Education at the University of Buckingham in England and editor of the journal *Philosophy*. His many books include *Plato's Children* (2005), *Philosophy in the New Century* (2001), *After Progress* (1999), *Beyond Evolution: Human Nature and the Limits of Evolutionary Explanation* (1997), *Introduction to the Philosophy of Science* (1989), *The Element of Fire: Science, Art and the Human World* (1988), and *Karl Popper* (1980). His most recent book is *The Great Books: A Journey through 2,500 Years of the West's Classic Literature* (2009)] – *Britannica Blog*: <<http://www.britannica.com/blogs/author/aohear>> [TA=??] [BR=??].

Chad ORZEL (“Assistant Professor in the Department of Physics and Astronomy at Union College in Schenectady, NY) - *Uncertain Principles*, physics, politics, and pop culture, with side trips into various aspects of life in academia: <<http://scienceblogs.com/principles/>> [TA=213] [BR=8.7].

Tobias J. OSBORNE (Dept. of Mathematics, Royal Holloway, University of London) – *Tobias J. Osborne's research notes* (An open science weblog focussed on quantum information theory, condensed matter physics, and mathematical physics: <<http://tjoresearchnotes.wordpress.com/>> [TA=??] [BR=??].

Jennifer OUELLETTE with regular contributors Allyson Beatrice, Calla Cofield, Lee Kottner, Diandra Leslie-Pelecky, & M.G. Lord - *Cocktail Party Physics*, Physics With a Twist, serving up science and culture with a splash of wit: <<http://twistedphysics.typepad.com/>> [TA=??] [BR= 8.3].

Jennifer OUELLETTE (author of *Black Bodies and Quantum Cats: Tales from the Annals of Physics* <<http://tinyurl.com/5uu26z>> and *The Physics of the Buffyverse* <<http://tinyurl.com/6knaez>>, holds a black belt in jujitsu) - *Twisted Physics* - Unraveling our strange universe: <[http://blogs.discovery.com/twisted\\_physics/](http://blogs.discovery.com/twisted_physics/)> [TA=67] [BR=??].

Ted PANITZ [<<http://tpanitz.jimdo.com/about-ted/>>, Professor of Mathematics and Engineering at Cape Cod Community College, W. Barnstable, MA) – *Ted's Teaching and Learning Site*, “. . . a discussion blog that revolves around the nature of teaching and learning. My main focus will be higher education but I would welcome comments from K-12 professionals (teachers, administrators, staff) since we are so inter connected and face many of the same problems and challenges”]: <[tpanitz.jimdo.com/](http://tpanitz.jimdo.com/)> [TA=??] [BR=??].

Bob PARK [“. . . is professor of physics and former chair of the Department of Physics at the University of Maryland. . . . in 1983 he was recruited . . . to open a Washington Office of the American Physical Society. Bob initiated a weekly report of happenings in Washington that were important to science, and with the development of the internet, the weekly report evolved into the news/editorial column *What's New*. . . . In 2003 he returned to the University full time. . . he continues to write the occasionally controversial *What's New*, which has developed a following that extends beyond physics. He is the author of *Voodoo Science: The Road from Foolishness to Fraud* (<<http://tinyurl.com/d7kx6g>>, Oxford, 2000) and *Superstition: Belief in the Age of Science* (<<http://tinyurl.com/cg7apo>>, Princeton, 2008)"] - *What's New*: <<http://bobpark.physics.umd.edu/>> [TA=??] [BR=??].

Arjendu K. PATTANAYAK (“Associate Professor in the Physics and Astronomy Department at Carleton College in Northfield, Minnesota”) and guest poster Melissa Eblen-Zayas (“Assistant Professor in the Physics and Astronomy Department at Carleton College”) - *Confused at a higher level* – The learning and teaching journal of a liberal arts college physicist: <<http://arjendu.wordpress.com/>> [TA=10] [BR=??].

Alice PAWLEY (assistant professor of engineering education <<https://engineering.purdue.edu/ENE>> at Purdue University who blogs at the intersection of women's studies and engineering), and “ScienceWoman” (assistant professor in “-ology” who blogs about the intersection of science and real life”) - *Sciencewomen*, a scientist and an engineer \*being\* the change we want to see: <<http://scienceblogs.com/sciencewoman/>> [TA=157] [BR=7.9].

PHYSICS FORUMS (part of the *Scientific American* Partner Network “hosts discussions ranging from mainstream science to cutting edge. Its main emphasis is on physics, yet it also includes forums on a wide array of other topics in science and mathematics. Physics Forums provides students with academic, career and homework help from peers and professional scientists. Inline LaTeX capabilities make it easy to discuss mathematical topics clearly. Its membership includes the entire spectrum of academia, as well as non-academics who are interested in science at all levels. Physics Forums is moderated by a volunteer staff of professional scientists and engineers who strive to maintain the highest standard of integrity and quality of scientific discussion.”) - *Physics Forums Blogs*: <<http://www.physicsforums.com/blog.php>> [TA=5][BR=7.3].

PHYSICS TODAY (*Physics Today* <<http://www.physicstoday.org/>>, is “the flagship publication of The American Institute of Physics, is the most influential and closely followed physics magazine in the world, informing readers about science and its place in the world with authoritative features, full news coverage and analysis, and fresh perspectives on technological advances and ground-breaking research” – *Physics Today.org Newspicks*, selected by the staff of *Physics Today.org Newspicks*: <<http://blogs.physicstoday.org/newspicks/>> [TA=?][BR=7.3].

PHYSICS TODAY (*Physics Today* <<http://www.physicstoday.org/>>, see above/> )  
*Physics Today.org We Hear That*, community news: <<http://blogs.physicstoday.org/wh/wh/>> [TA=?][BR=?].

PHYSICS WORLD. (Listed as a physics blog by *Blogger*, but it’s actually the online version of the excellent British journal *PhysicsWorld*) - *Physicsworld.com*, latest content from [physicsworld.com](http://physicsworld.com/cws/home): <<http://physicsworld.com/cws/home>> [TA=31][BR=9.2].

Phil PLAIT (“... an astronomer, lecturer, and author. After ten years working on Hubble Space Telescope and six more working on astronomy education, he struck out on his own as a writer) - *Bad Astronomy*: <<http://blogs.discovermagazine.com/badastronomy/>> [TA=31] [BR=?].

Dmitry PODOLSKY [“I am a professional theoretical physicist currently working at the Helsinki Institute of Physics, the University of Helsinki, Finland. My main interests are related to (but not limited to) general relativity and cosmology, turbulence, quantum field theory and string theory, dynamical chaos - everything related to physics and mathematics of systems far from equilibrium.”] - *NEQNET*: Non-equilibrium Phenomena, Cosmology, turbulence, markets, non-equilibrium QFT and much more. No nonsense, just science: <<http://www.nonequilibrium.net/>> [TA=17] [BR=?].

Richard POYNDER (freelance journalist <<http://www.richardpoynder.co.uk/>>, “writes about information technology, telecommunications, and intellectual property. In particular, he specialises in online services; electronic information systems; the Internet; Open Access; e-Science and e-Research; cyberinfrastructure; digital rights management; Creative Commons; Open Source Software; Free Software; copyright; patents, and patent information.”) – *Open & Shut?*: <<http://poynder.blogspot.com/>> [TA=?] [BR=?].

Female Science PROFESSOR (“a full professor in a physical sciences field at a large research university. . . I have the greatest job in the world, but this will not stop me from noting some of the more puzzling and stressful aspects of my career as a Female Science Professor”) – *FemaleScienceProfessor*, Women professors in the physical sciences: a few. Women professors in the physical sciences at research universities: even fewer. Women full professors in physical sciences at research universities, especially mine: infinitesimal. But we exist:  
<<http://science-professor.blogspot.com/index.html>> [TA=??] [BR=??] (Note the extensive roll of blogs with female authors in the right-hand column.)

Anand RAJARAMAN is (“a co-founder of Kosmix <<http://www.kosmix.com/>>, an internet startup focused on organizing the wisdom of the web. He is also a Consulting Assistant professor at the Computer Science Department at Stanford University.”) – *Datawocky*, On Teasing Patterns from Data, with Applications to Search, Social Media, and Advertising:  
<<http://anand.typepad.com/datawocky/>> [TA=65] [BR=??].

REALCLIMATE (“RealClimate is a commentary site on climate science by working climate scientists <<http://www.realclimate.org/index.php?cat=10>> for the interested public and journalists. We aim to provide a quick response to developing stories and provide the context sometimes missing in mainstream commentary. The discussion here is restricted to scientific topics and will not get involved in any political or economic implications of the science. All posts are signed by the author(s), except 'group' posts which are collective efforts from the whole team. This is a moderated forum”) – *RealClimate*, Climate science from climate scientists:  
<<http://www.realclimate.org/>> [TA=766] [BR=9.3].

Howard RHEINGOLD (“... was among the first wave of creative thinkers who saw, in computers and the Internet, a way to form powerful new communities, and he is credited with inventing the term "virtual community." . . . His 2002 book *Smart Mobs* presaged Web 2.0 in predicting collaborative ventures, and it was the outgrowth of decades spent studying and living life online. . . The Cooperation Commons <<http://www.cooperationcommons.com/>> is the site of his ongoing investigation of cooperation and collective action) – *Britannica Blog*:  
<<http://www.britannica.com/blogs/author/hrheingold>> [TA=??] [BR=??].

Rick REIS (manager of the Tomorrow's Professor Mailing List  
<<http://ctl.stanford.edu/Tomprof/index.shtml>> ) – *Tomorrow's Professor Blog*, a partnership between MIT and Stanford to create a forum for comments and discussion about articles from the Tomorrow's Professor Mailing List and about general issues concerning higher education:  
<<http://amps-tools.mit.edu/tomprofblog/>> [TA=??] [BR=??].

Will RICHARDSON (“I’m a national advisory board member for the George Lucas Education Foundation, I write a quarterly column called ‘Web 2.0’ for *District Administration* magazine <<http://www.districtadministration.com/>>, and I’m an adjunct instructor at Seton Hall University in the Executive Ed.D. program.”): *Weblogg-ed*, learning with read/write web:  
<<http://weblogg-ed.com/>> [TA=549] [BR=8.5].

Roy ROMER (“chair of Strong American Schools <<http://www.strongamericanschools.org/>>. I come to this effort after serving as Governor of Colorado for 12 years and most recently as Superintendent of the Los Angeles Unified School District”) – *Roy’s Blog on Schools*:  
<<http://roysblog.strongamericanschools.org/>> [TA=??] [BR=??].

Johnny ROOK (“lived and worked in Spain, Russia, and the United States. A linguist and historian by training, he has taught in several universities and colleges, worked launching rockets in the aerospace industry and as an interpreter in the United States Federal Courts.”) Johnny Rook’s *Climaticide Chronicles*, social and political commentary with a special emphasis on global warming and climate change: <<http://climaticidechronicles.org/>> [TA=28] [BR=??]. [Note: Johnny Rook died on 2 March 2009. A moving tribute was written by Meteor Blades, a frontpager at Daily Kos <<http://www.dailykos.com/>>, and is re-posted at <<http://climaticidechronicles.org/>> with his permission.]

Jason ROSENHOUSE (“received his PhD in mathematics from Dartmouth College in 2000. He subsequently spent three years as a post-doc at Kansas State University. Observing the machinations of the Kansas Board of Education led to his unhealthy obsession with issues related to evolution and creationism. Currently he is an Associate Professor of Mathematics at James Madison University.”) – *Evolutionblog*, Commentary on the Endless Dispute Between Evolution and Creationism: <<http://scienceblogs.com/evolutionblog/>> [TA=145] [BR=??].

Wolff-Michael ROTH (Lansdowne Professor of Applied Cognitive Science at the University of Victoria, British Columbia ) and Kenneth Tobin (“research focuses on the teaching and learning of science in urban high schools and is set in the Bronx of New York City) *Cultural Studies in Science Education*: <<http://blogs.springer.com/csse/>> [TA=??] [BR=??].

Andrew ROTHERHAM (co-founder and co-director of Education Sector <<http://www.educationsector.org/>>, occasional identified guest bloggers also contribute) - *Eduwonk*, Education News, Analysis, & Commentary: <<http://www.eduwonk.com/>> [TA=153] [BR=9.2].

Robert RUNTE (Faculty of Education, University of Lethbridge, Canada) - *I'm Not Boring You, Am I*, on popular culture, education, and life: <<http://runte.blogspot.com/>> [TA=1] [BR=??].

Richard RUSCZYK [“founded AoPS (The Art of Problem Solving <<http://www.artofproblemsolving.com/>>) incorporated in 2003 to create interactive educational opportunities for avid math students. He is one of the co-authors of the *Art of Problem Solving* textbooks <<http://tinyurl.com/9k4hd9>>, one of the co-creators of the Mandelbrot Competition <<http://www.mandelbrot.org/>>, and the Director of the USA Mathematical Talent Search <<http://www.usamts.org/>>. . . . He was a participant in National Mathcounts, a three-time participant in the Math Olympiad Summer Program, and a USA Mathematical Olympiad winner (1989). He graduated from Princeton University in 1993.” ] – *Britannica Blog*: <<http://www.britannica.com/blogs/author/rrusczyk>> [TA=??] [BR=??].

Alexander RUSSO (journalist and former Senate education staffer) – *This Week in Education*, “gives you the inside scoop on all the latest education news and politics” : <<http://www.thisweekineducation.com/>> [TA=133] [BR=??].



Angelina RUSSO (“... researches the connections between museum communication processes, multimedia design and digital content creation”); Lynda Kelly (“undertaking a Doctorate at the University of Technology, Sydney, studying museum visitors and their learning”); and Seb Chan (Manager, Web Services at Powerhouse Museum, Sydney, Australia) - *Social Media and Cultural Communication: Research, strategy and ideas for digital cultural participation*: <<http://nlablog.wordpress.com/>> [TA=8] [BR=8.2].

Larry SANGER (“best known as co-founder and the original organizer of *Wikipedia* [See “The Hive: Can thousands of Wikipedians be wrong?” (Poe, 2006) in *REFERENCES* below]. He is currently Editor-in-Chief of *Citizendium* <[http://en.citizendium.org/wiki/Welcome\\_to\\_Citizendium](http://en.citizendium.org/wiki/Welcome_to_Citizendium)>, a wiki encyclopedia project that combines public participation with gentle expert guidance, and requires real names of all contributors. The Citizendium project added over 7,000 articles and over 6 million words in a little over a year. Sanger has frequently spoken and written about collaborative content and related subjects. He has also taught philosophy, specializing in epistemology, at Ohio State University.”) - *Britannica Blog*: <<http://www.britannica.com/blogs/author/langer>> [TA=??] [BR=??].

Dan SCHAFER (Professor of Statistics, Oregon State University) - *Statistical Literacy for Efficient Citizenship*: <<http://oregonstate.edu/~schaferd/blog/?cat=2>> [TA=??] [BR=??].

Two Blogs: Roger SCHANK (Retired Professor, Part-time Consultant, Full time Education Revolutionary) -

(a) *Education Outrage* <<http://educationoutrage.blogspot.com/2008/11/i-had-dream.html>> [TA=??] [BR=??], and

(b) *Knowledge Management Revisited* <<http://ulysses-systems.blogspot.com/>> [TA=??] [BR=??].

For earlier post by Schank on “The Pulse” from “*District Administration*,” see under Ron CANUEL above.

\*Louis SCHMIER, USA, College & University (“...received AB at Adelphi College, Ph.D. at University of North Carolina. Currently Professor of History at State University in Valdosta, GA.”) – *Random Thoughts of Louis Schmier*: <<http://therandomthoughts.edublogs.org/>> [TA=4] [BR=??]. (Schmier is also a prolific contributor to the discussion lists POD, STLHE-L, and TIPS.)

Mark H. SHAPIRO (physicist and Emeritus Professor, California State University at Fullerton) - *The Irascible Professor*, Irreverent Commentary on the State of Education in America Today: <<http://www.irascibleprofessor.com/>> [TA=??] [BR=??].

\*Nancy SHAROFF (“K-4 Technology Facilitator, adjunct graduate professor, develop and present workshops at local, state, national, and virtual levels.”) *Just In Time Tech*, Life in Perpetual Beta: <<http://just-in-time-tech.blogspot.com/>> [TA=??] [BR=??].

Clay SHIRKY (“teaches at NYU's Interactive Telecommunications Program and writes and consults widely about the interlocking effects of our social and technological networks on one another. He is the author of *Here Comes Everybody*, about the changes created by new social tools. His writings about the Internet can be found at <<http://www.shirky.com>>) - *Britannica Blog*: <<http://www.britannica.com/blogs/author/cshirky>> [TA=??] [BR=??].

Two Blogs: Adam SIEGEL (“a founding board member of The Energy Consensus (a non-profit focused on enhancing the policy dialogue related to energy issues)

(a) *Get Energy Smart NOW!!!* ”dedicated to the search for more intelligent approaches to critical issues in American and global society, principally in terms of energy:

<<http://getenergysmartnow.com/>> [TA=130] [BR=??].

(b) *Energize America*, focused on developing energy concepts for potential legislative action using the blogosphere as a developmental platform: <<http://www.ea2020.org/drupal/>>

[TA=??] [BR=??].

George SIEMENS (Associate Director, Research and Development with the Learning Technologies Centre <[http://www.umanitoba.ca/learning\\_technologies/](http://www.umanitoba.ca/learning_technologies/)> at University of Manitoba; author of the online book “Knowing Knowledge” <<http://tinyurl.com/266wpX>>) - *elearnspace* - learning, networks, knowledge, technology, community: <<http://www.elearnspace.org/blog/>> [TA=250] [BR=??].

\*Ram Krishna SINGH (“I am a university professor, teaching English language skills to students of earth and mineral sciences. I have authored over 150 articles, 165 book reviews and 34 books, including Twelve collections of poems. . .”) - *India Saijiki*, Collection of Season Words (kigo) for Haiku from the Indian Subcontinent. This is an educational site for reference purposes of haiku poets worldwide :

<<http://indiasaijikiworldhaiku.blogspot.com/2006/07/r-k-singh.html>> [TA=??] [BR=??].

Mano SINGHAM (theoretical physicist and Director of Case's University Center for Innovation in Teaching and Education) – *Mano Singham's* Web Journal, Thoughts on science, history and philosophy of science, religion, politics, the media, education, learning, books, and films: <<http://blog.case.edu/singham/>> [TA=18 in Feb09, ?? in March09] [BR=??].

Ken SMITH (English Department at Indiana University South Bend ) - *Weblogs in Higher Education*, publishes on blogs, wikis, podcasts, teaching, and related topics: <<http://www.mchron.net/site/edublog.php>> [TA=17 in Feb09, ?? in March09] [BR=??].

Marshall SMITH, Catherine Casserlym, and Phoenix Wang (“aspires to be one node of many in the cause to advance Open Educational Resources worldwide) – *OERderves*, Musings on open educational resources by Mike, Cathy, Phoenix, and Vic: <<http://www.oerderves.org>> [TA=??] [BR=??].

\*Ira David SOCOL (according to <<http://tinyurl.com/6p2blm>> : “a Special Education Technology Scholar at Michigan State University in East Lansing, Michigan, USA. . . . His research is focused on the use of technologies in ways that make classrooms fully inclusive at all age levels, with an emphasis on the use of free and ubiquitous devices and software whenever possible, because these are the solutions most likely to serve student needs throughout their lifespan.”) – *SpeEdChange*, The future of education for all different students in democratic societies: <<http://speedchange.blogspot.com>> [TA=48] [BR=8.4].

Margaret SOLTAN (English Department at George Washington University) - *University Diaries*, a professor of English describes American life with the aim to change things: <[http://www.insidehighered.com/views/blogs/university\\_diaries](http://www.insidehighered.com/views/blogs/university_diaries)> [TA=81] [BR=8.7].

Matt SPRINGER (paraphrasing: “graduate student of physics at Texas A&M, also an occasional writer and tinkerer, too curious for his own good”) - *Built on Facts*: <<http://scienceblogs.com/builtontofacts/>> [TA=102] [BR=?].

Gerry STAHL (Associate Professor, College of Information Science & Technology, Drexel University) - *CSCL Community*, Latest News About Research On Computer-Supported Collaborative Learning (CSCL): <<http://cscl-community.blogspot.com/>> [TA=1] [BR=?].

\*Neil STEPHENSON (“a grade 6 and 7 teacher at the Calgary Science School. Neil is the program coordinator of the 1:1 laptop program at CSS . . . . ., in 2006 he was selected as an Apple Distinguished Educator . . . has recently contributed to a publication on technology for the Critical Thinking Consortium.”) - *Thinking In Mind*, using technology to enhance inquiry-based education: <<http://thinkinginmind.blogspot.com/>> [TA=3] [BR=?].

Ian STEWART (“ . . . a science writer, science fiction writer, and a professor of mathematics at the University of Warwick in England. He is the author of many books, including, most recently, *Letters to a Young Mathematician (Art of Mentoring)* <<http://tinyurl.com/d9vjwc>> and *Why Beauty is Truth: The Story of Symmetry* <<http://tinyurl.com/bv4lxh>>. He also wrote Britannica's entries on number symbolism and analysis.”) – *Britannica Blog*: <<http://www.britannica.com/blogs/author/istewart>> [TA=?] [BR=?].

Peter SUBER (At <<http://www.earlham.edu/~peters/hometoc.htm>> : “Senior Researcher at SPARC <<http://www.arl.org/sparc/>>, Visiting Fellow at the Information Society Project <<http://www.law.yale.edu/intellecuallife/informationproject.htm>> of Yale Law School, Research Professor of Philosophy <<http://www.earlham.edu/~phil/index.htm>> at Earlham College, Open Access Project Director at Public Knowledge <<http://www.publicknowledge.org/>>, and author the SPARC Open Access Newsletter <<http://www.earlham.edu/~peters/fos/newsletter/archive.htm>>”) – *Open Access News*; News from the open access movement (“putting peer-reviewed scientific and scholarly literature on the internet. Making it available free of charge and free of most copyright and licensing restrictions. Removing the barriers to serious research.”): <<http://www.earlham.edu/~peters/fos/fosblog.html>> [TA=80] [BR=?].

Tom SWANSON (“a physicist, working at the US Naval Observatory, doing atomic-physics things related to timekeeping”) - *Swans on Tea* “Physics, tech and humor. Because science and learning are cool, and life's too short not to laugh”: <<http://blogs.scienceforums.net/swansont/>> [TA=30] [BR=??].

TECHNORATI Blog, online at <<http://technorati.com/weblog/>> [TA=175] [BR=??].

Aurelie THIELE ( . . .an academic expert on quantitative risk and uncertainty management. She has a PhD in Electrical Engineering and Computer Science from MIT and holds a chaired Assistant Professorship in Industrial and Systems Engineering at Lehigh University in Bethlehem, Pennsylvania. Her work on robust decision-making, with applications in finance and retail, is currently funded in part by the National Science Foundation. In 2007 she received an IBM Faculty award in Services Science, Management and Engineering”) - *Thoughts on business, engineering and higher education*, Aurelie Thiele on current affairs : <[http://engineered.typepad.com/thoughts\\_on\\_business\\_engi/](http://engineered.typepad.com/thoughts_on_business_engi/)> [TA=7] [BR=??].

Mark THOMA (Department of Economics, University of Oregon) – *Economist's View*: <<http://economistsview.typepad.com/>> [TA=??] [BR=??].

David THORNBURG (“named by Technology and Learning magazine as one of the top ten most influential people in the field of educational technology in the past twenty years”) – *Thornberg Center*, technology and education: <<http://thornburgcenter.blogspot.com/>> [TA=16 in Feb09, ?? in March09] [BR=??].

\*Cheri TOLEDO (I am an Education Technology professor in College of Education at Illinois State University. I teach undergraduate pre-service teachers, master's students, and doctoral students.”) - *Cycling Through Ed Tech*: < <http://drctedd.worldpress.com/> > [TA=6] [BR=??].

\*Eric TREMBLAY [Senior Instructional Designer – 2002 to present (Royal Military College of Canada, Kingston, Ontario). Adjunct Professor – Health Sciences –2001 to present (St. Lawrence College, Kingston, Ontario)] - *E-Learning Acupuncture*, Eric's ramblings, experience and random thoughts about e-learning, distance education, and educational technology: <<http://erictremblay.blogspot.com/>> [TA=11] [BR=??].

Andrew TROTTER (“assistant editor ‘Education Week’ and a writer for ‘Digital Directions,’ has covered educational technology issues for more than 20 years” & Katie Ash ( “a writer and Web producer for 'Digital Directions' and a co-author of Education Week's 'Motivation Matters' blog.”) - *Digital Education, Tech Topics and Trends in K-12*: <<http://blogs.edweek.org/edweek/DigitalEducation/>> [TA=??] [BR=??].

UFT (sponsored by the United Federation of Teachers <<http://www.aft.org/news/index.htm> >) – *EdWize*, “a place where members, public education advocates and others can express opinions in an effort to establish an agora of informed commentary on public education and labor issues: <<http://edwize.org/>> [TA=??] [BR=8.2].

2 Blogs: Kirby URNER (<<http://www.grunch.net/4dsolutions/kirby.html>>, curriculum writer for 4D solutions <<http://www.4dsolutions.net/ocn/index.html>>) –

(a) *Grain of Sand*, Kirby Plays World Game: <<http://worldgame.blogspot.com/>> [TA=4] [BR=7.3].

(b) *Coffee Shops Network*, Philosophy Talk: <<http://coffeeshopsnet.blogspot.com/>> [TA=??] [BR=??].

Jan VISSER (a physicist now developing the Learning Development Institute (LDI), “a networked learning community devoted to excellence in the transdisciplinary research of learning and the development of its conditions” <<http://www.learndev.org>>) - *Meaning of Learning Blog*, here "I communicate and put up for discussion some of my ideas regarding the need to create new meanings of human learning: <<http://jvisser-ldi.blogspot.com/>> [TA=??] [BR=??].

Gordon WATTS (<<http://d0.phys.washington.edu/~gwatts/>>, Associate Professor of physics at the University of Washington) - *Life as a Physicist*, Particle physicist. In the wild: <<http://gordonwatts.wordpress.com/>> [TA=25] [BR=7.3]

\*Britt WATWOOD (Virginia Commonwealth University's (VCU's) Center for Teaching Excellence) - *Learning in a Flat World*: <<http://bwatwood.edublogs.org/>> [TA=26] [BR=??].

Michael WESCH (“... a cultural anthropologist at Kansas State University exploring the impacts of new media on human interaction. . . . After two years studying the impacts of writing on a remote indigenous culture in the rainforest of Papua New Guinea, he has turned his attention to the effects of social media and digital technology on global society.”) – *Britannica Blog*: <<http://www.britannica.com/blogs/author/mwesch>> [TA=??] [BR=??].

Donald WHITFIELD (“... Director of Higher Education Programs at the Great Books Foundation and a graduate of St. John’s College. He has been on the editorial team of numerous Great Books Foundation projects, particularly its series of science anthologies, which includes *What’s the Matter?* and *Readings in Physics*.”) – *Britannica Blog*: <<http://www.britannica.com/blogs/author/dwhitfield>> [TA=??] [BR=??].

John WHITFIELD (“London-based freelance science writer, [writing] mostly about evolution, ecology and conservation.”) - *Bloggging the Origin*, Charles Darwin’s *On the Origin of Species*, chapter-by-chapter <<http://scienceblogs.com/blogggingtheorigin/>> [TA=??] [BR=??].

David WILEY (Department of Instructional Psychology and Technology, Brigham Young University) - *Iterating toward openness*: <<http://opencontent.org/blog/>> [TA=81] [BR=7.0].

Wynn WILLIAMSON (“studied comparative literature at New York University. Since 2004, he has been writing about (and using) free educational materials”) - *The Stingy Scholar*, How to learn for free on the web: <<http://stingyscholar.blogspot.com/>> [TA=??] [BR=??].

Daniel T. WILLINGHAM [<http://www.danielwillingham.com/>], “associate professor of cognitive psychology and neuroscience at the University of Virginia and author of “Cognition: The Thinking Animal” <http://tinyurl.com/6oo3qk> >. His research focuses on the role of consciousness in learning”) – *Britannica Blog*: <http://www.britannica.com/blogs/author/dwillingham> [TA=??] [BR=??].

Dave WINER (“... pioneered the development of weblogs, syndication (RSS), podcasting, outlining, and web content management software; former contributing editor at Wired Magazine, research fellow at Harvard Law School, entrepreneur, and investor in web media companies.) – *Scripting News*: <http://scripting.com/> [TA=962] [BR=8.9].

Michael WITTMANN (Associate Professor of Physics, Univ. of Maine, physics education researcher) - *PERTicles*, small notes on articles of relevance to Physics Education Research from a vast array of journals: <http://perticles.blogspot.com/> [TA=??] [BR=??].

Peter WOIT (Ph.D. in theoretical physics, lecturer in mathematics at Columbia, author of *Not Even Wrong: The Failure of String Theory and the Search for Unity in Physical Law* <http://www.amazon.com/gp/product/0465092756>) - *Not Even Wrong*, Musings on math and physics. <http://www.math.columbia.edu/~woit/wordpress/> [TA=145] [BR=7.2]

Shirley WU (“currently a graduate student in biomedical informatics”) - *One Big Lab*, One small world = One Big Lab. Exploring the potential behind open science, open access, and open exchange of more than just ideas: <http://shirleywho.wordpress.com/> [TA=36 in Feb09, ?? in March09] [BR=??].

XANTOX (unknown) - *Strange Paths*, Physics, computation, philosophy: <http://strangepaths.com/en/> [TA=20] [BR=7.0].

Z. ZAPPER (Research Physicist based in Chicago) - physics and physicists *Zapperz's physics blog*, on the world of physics and physicists - this perspective comes from someone who is a practicing physicist: <http://physicsandphysicists.blogspot.com/> [TA=??] [BR=??].

Mary Ann ZEHR ("an assistant editor at Education Week. She has written about the schooling of English-language learners for more than eight years. . . [she] will tackle difficult policy questions, explore learning innovations, and share stories about different cultural groups on her beat") - *Learning the Language*: <http://blogs.edweek.org/edweek/learning-the-language/> [TA=29] [BR=9.5].

Carl ZIMMER (“... writes about science regularly for the *New York Times* and magazines such as *Discover*, where he is a contributing editor and columnist.”) - *Discover Magazine Blogs/The Loom*: <http://blogs.discovermagazine.com/loom/> [TA=443] [BR=8.9].

Bora ZIVKOVIC (“... writes on "A Blog Around The Clock" which is a fusion of his three old blogs: Science And Politics (a mix of science, politics, personal, blogging-about-blogging and miscellaneous stuff), Circadiana (chronobiology and medicine of sleep), and The Magic School Bus (academia and science education) - *A Blog Around The Clock*: <http://scienceblogs.com/clock/> [TA=453] [BR=7.8].

## Appendix A. Two Social Networking Spheres

### 1. Academic Discussion List\* Sphere [ADLsphere - pronounced “addle-sphere”

(no pun intended ; - )]

#### a. *Some Strengths of the ADLsphere*

(1) Dan MacIsaac (2000) [this APA style formatting means that the full reference can be found in the *REFERENCES* list below] in “Communities of on-line physics educators,” discusses the nature of academic discussion lists in physics (similar comments apply to similar lists for other disciplines):

“It’s a physics educator’s dream—a readily available group of like-minded people with a variety of backgrounds and expertise who want to discuss physics and physics pedagogy with their peers. For the teacher who is feeling overscheduled, isolated, or lonely this ‘coffee klatch’ opportunity is a boost that lasts all day and on into the night. We’re talking about the virtual world of electronic mailing lists that are dedicated to the teaching and learning of physics. This electronic community is bound together through shared information and experience, an on-line culture that comprises high-school, college, and university instructors, researchers, hobbyists, students, retired teachers, and amateurs.”

(2) Amitai and Oren Etzioni (1997) in “Communities: Virtual vs. Real” wrote (paraphrasing):

“Virtual on-line communities complement and reinforce ‘real’ off-line communities and have several advantages over the latter, e.g.:

- (a) easy communication over national borders and time zones;
- (b) inclusion of homebound (aged, ill, or handicapped) people;
- (c) accommodation of more individuals than off-line meeting rooms;
- (d) strong memories;
- (e) high safety;
- (f) allowance for exploration of new relationships and identities – as documented by MIT’s Sherry Turkle (1997), and
- (g) indifference to physical appearance and off-line identity.”

(3) Discussion lists running on the popular LISTSERV <<http://www.lsoft.com/>> software feature excellent archives and powerful search engines that allow searches by keywords, author, subject title, date, or any combination of those. I know of no such search engines in the Blogosphere.

(4) In “Over Sixty Academic Discussion Lists. . .” [Hake (2007)], I wrote:

“. . . . Academic Discussion Lists provide an effective but seldom used mechanism for tunneling through interdisciplinary barriers, caused in part by the traditional departmental structure of universities. This underutilized potential for education research and development is represented schematically . . . [on the next page]. . . ”

Similar figures would apply to other types of R & D. The partially open window between Astronomy- and Physics-education research and development in the top figure appears to be a fortunate carryover from the traditional close links between those two disciplines in non-educational basic research.

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\* A subset of what Wikipedia <[http://en.wikipedia.org/wiki/Discussion\\_list](http://en.wikipedia.org/wiki/Discussion_list)> calls “Electronic Mailing Lists.”



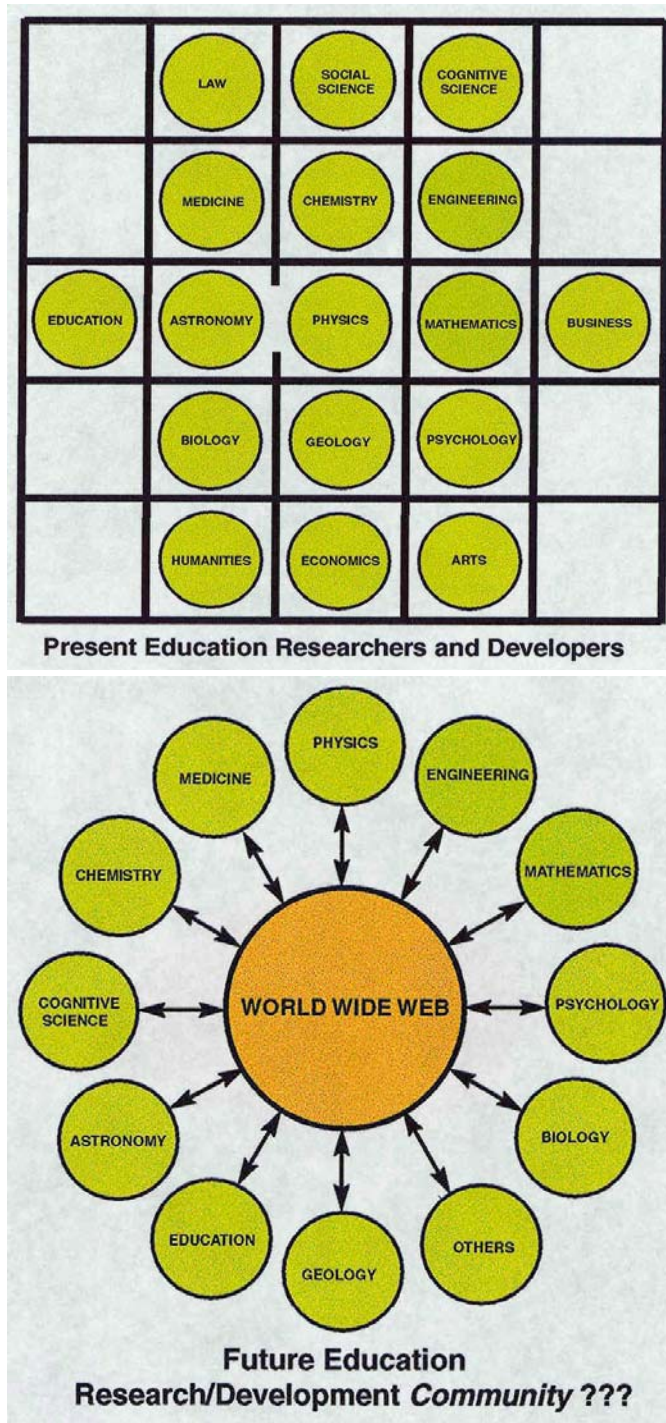


Fig. 1. Academic Discussion Lists, represented by bidirectional black arrows in the lower figure, allow subscribers in one discipline to communicate not only with each other but also with the WWW and thence with subscribers in other disciplines, thus surmounting the interdisciplinary boundaries shown in the top figure. [From “What Can We Learn from Biologists” [Hake (1999).] Compare this figure with the web-linked map of science from the clickstream data of Bollen et al. (2009) shown in the *REFERENCES* list below.

“Change requires ongoing interaction among communities of people and institutions that will reinforce and drive reform. .... educators need to form ‘invisible colleges’ resembling the national and international research communities.” *From Analysis to Action* [NSF (1996)]



b. *Some Weaknesses of the ADLsphere*

(1) Little Collaborative Development of Ideas

In the ADDENDUM to “Over Sixty Academic Discussion Lists. . .” [Hake (2007)], I wrote (slightly edited):

“In my opinion, many Academic Discussion Lists fail [paraphrasing Roschelle and Pea (1999)] ‘to move beyond forums for exchanging insular tidbits and opinions, to structures which rapidly capture knowledge-value and foster rapid accumulation and growth of the community's capability . . . providing tools to allow contributors to share partially completed resources, and enable others to improve upon them.’ ”

(2) Some List Owners:

(a) Utilize antediluvian software that does not provide useful archives and/or search engines.

(b) Regard cross-posting as sinful rather than synergistic, evidently wishing their lists to remain inbred and isolated [see, e.g.: “Cross-Posting - Synergistic or Sinful?” [Hake (2005a)]].

(c) Do not recognize the “fair use” provision of U.S. copyright law as provided for in Section 107 of the US Copyright Law, Title 17, according to which copyrighted material (including discussion-list posts) can be distributed, if it’s done so without profit, to those who have expressed a prior interest in receiving the included information for research and educational purposes. For more information see at <http://www.law.cornell.edu/uscode/17/107.shtml>.

(d) Close the archives of their lists to non-subscribers, thus impeding the flow of information from their lists to the web and hence to the outer world – see the lower part of Fig.1. Such blockage is sometimes justified on grounds that it prevents harvesting of email addresses by SPAMers, but for lists running on LISTSERV software, SPAM’ers can be prevented from harvesting email addresses by the simple strategy of requiring log-in by list subscribers before addresses are made visible.

(3) Some Subscribers:

(a) ignore common-sense posting suggestions [Hake (2005b)] that would facilitate efficient communication;

(b) are unfamiliar with the technical and social aspects of ADL’s as addressed by Dan MacIsaac (2000) in his valuable article "Communities of on-line physics educators." A cursory Google search failed to uncover counterparts of MacIsaac’s article for other disciplines;

(c) fail to utilize academic references or to even notice such references in posts (except to inveigh against them as "busywork" [Eckel (2003)]);

(d) do not take advantage of hot linking - a prime but drastically underused capability of the internet;

(e) appear reticent to engage in discussions of educational research, development, or assessment – the outstanding example being most of AERA’s <http://www.aera.net/> over 26,000 members, even despite the excellent AERA ADL’s set up by Gene Glass for each AERA division – see e.g., “Why Aren’t AERA Discussion Lists More Active?” [Hake (2005c)].

(f) fail to take responsibility for their postings by hiding behind pseudonyms.

(4) Most Subscribers:

fail to search the archives before posting - therefore the same material is often discussed over and over de novo with little increase in understanding from year to year.

## 2. Blog Sphere (Blogosphere)

### a. *Some Strengths of the Blogosphere*

#### (1) Very Wide Usage - at "State of the Blogosphere/2008"

<<http://technorati.com/blogging/state-of-the-blogosphere/>>, *Technorati* writes (my *italics*):

There have been a number of studies aimed at understanding the size of the Blogosphere, yielding widely disparate estimates of both the number of blogs and blog readership. All studies agree, however, that blogs are a global phenomenon that has hit the mainstream.

The numbers vary but agree that blogs are here to stay:

##### (a) comScore MediaMetrix (August 2008)

Blogs: 77.7 million unique visitors in the US

Facebook: 41.0 million, MySpace 75.1 million

Total internet audience 188.9 million

##### (b) eMarketer (May 2008)

94.1 million US blog readers in 2007 (50% of Internet users)

22.6 million US bloggers in 2007 (12%)

##### (c) Universal McCann (March 2008)

*184 million World Wide have started a blog, 26.4 million in US*

*346 million World Wide read blogs, 60.3 million in US*

*77% of active Internet users read blogs*

#### (2) Many Knowledgeable Bloggers

That there are many knowledgeable bloggers can be seen by scanning blog authors' names in the present compilation.

### b. *Some Weaknesses of the Blogosphere*

#### (1) Difficulty in finding out what we need, due to, e.g.:

(a) the vastness of the blogosphere,

(b) incompleteness of blog directories - as discussed in Appendix C6,

(c) relatively weak search engines - as far as I'm aware current blog search engines allow only keywords searches.

Compare the ADLsphere's LISTSERV engines (allowing searches within LISTSERV discussion lists by keywords, author, subject title, date, or any combination of those) with the keywords search engines of, e.g.:

*International Directory of Edubloggers (IDE)*

<<http://edubloggerdir.blogspot.com/2008/01/search.html>>,

*Technorati* <<http://technorati.com/search?advanced>>,

*Blooged* <<http://www.blogged.com/>>,

*Google Blog Search* <<http://blogsearch.google.com/>>.

(2) Commercialization

Nicholas Carr (2008b), in “Who killed the blogosphere?” wrote:

Almost all of the popular blogs today are commercial ventures with teams of writers, aggressive ad-sales operations, bloated sites, and strategies of self-linking. Some are good, some are boring, but to argue that they're part of a “blogosphere” that is distinguishable from the “mainstream media’ seems more and more like an act of nostalgia, if not self-delusion.

Carr quotes the *Economist* (2008) in support of his thesis. In response to Carr’s post, Andreas Kluth (2008) admitted that he was the author of the anonymous (why?!) *Economist* (2008) article, wherein he stated:

Bloggging has entered the mainstream, which - as with every new medium in history - looks to its pioneers suspiciously like death.

- (3) Pseudonyms: some bloggers fail to take responsibility for the content of their blogs by hiding behind pseudonyms.
- (4) Insularity of many blogs – some are personal diaries of limited general interest.

In “The Future of Science: Building a Better Collective Memory,” Michael Nielsen (2008) wrote (my *italics*):

As indicated in Appendix A, above, the ADLsphere and Blogosphere have both strengths and weaknesses. In my opinion, the strengths outweigh the weaknesses, and these two spheres may be harbingers of Nielsen's vision of "a collective short-term working memory, a conversational commons for the rapid collaborative development of ideas." Thus I've deemed it worthwhile to use the feedback from my earlier posts "Thirty-two Education Blogs" [Hake (2008a)], and "Over Sixty Education Blogs" [Hake (2008b)] plus internet searches to compile this expanded and corrected list of "Over Two-Hundred Education & Science Blogs."

(a) few people have time to examine 32 blogs. . . . [let alone the over: 400 Education Blogs (EdBlogs) listed by Stephen Downes (2008a), over 600 EdBlogs listed by Donaghy (2009) in her *International Directory of Edubloggers* (IDE), 8000 EdBlogs listed by *Blogged* (2009), or 30,000 EdBlogs estimated to exist by Michael Petrilli (2009). . . . .

(c) semantic web developments may help – see ISKO UK in the present list of blogs, and Miller (2008) in the *REFERENCES* below.

- (1) more powerful search engines,
- (2) easily searchable Blog directories that are much more extensive than those presently available.

## Appendix C. Directories

### 1. *International Directory of Edubloggers (IDE)*

<http://edubloggerdir.blogspot.com/>

I recently discovered Patricia Donaghy's (2009) *International Directory of Edubloggers (IDE)*. Established in January 2008, it features a search engine and currently contains links to over 600 blogs, giving for each blog its theme and the author's name and background. A listing by alphabetical order is at

<http://edubloggerdir.blogspot.com/2008/01/members.html>.

Donaghy states at the top of the right-hand column at

<http://edubloggerdir.blogspot.com/> :

This site is open to all edubloggers from around the world. To join the directory, simply select the Add Tab (at the top of the page) and follow the instructions . . . . The purpose . . . is to develop an up to date directory of edubloggers from around the world and provide an easy way to find out what other edubloggers are blogging about.

According to information at <http://edubloggerdir.blogspot.com/2008/01/about.html>, as accessed on 15 March 2009, there were 620 edubloggers registered at *IDE*. A listing by alphabetical order is at <http://edubloggerdir.blogspot.com/2008/01/members.html>.

### 2. *Technorati* <http://technorati.com/>

At <http://technorati.com/blogs/directory/> there are headings "Claim your blog" and "Begin Claim." At the former it is stated:

Claiming your blog establishes that you are its owner, and allows you to use Technorati services to increase your blog's visibility.

Unfortunately, *Technorati* does not list blogs under "Education" but does list some under "Technology: Computers, Consumer Electronics, Gadgets, Internet, Science, and Web 2.0" at <http://technorati.com/blogs/directory/technology>. In each category the blogs are sorted in order of a parameter called *Technorati Authority*. At "State of the Blogosphere/2008" <http://technorati.com/blogging/state-of-the-blogosphere/> it is explained that *Technorati Authority* (TA) is the number of blogs linking to the website in the last six months. The higher the number, the more 'Authority' the blog has." For example – on 26 February 2009:

a. the top Science Blog was *Geekdad - Wired Blogs* <http://blog.wired.com/geekdad> with a TA of 3,426. *Geekdad* is "a blog about parenting in the digital age, and raising our kids in our own geeky image. The writers are all geeks and dads who have fun sharing their experiences."

b. The top Web 2.0 Blog was *TechCrunch* <http://www.techcrunch.com/> (see the present list of blogs) with a TA of 16,283. What's Web 2.0? According to *Wikipedia* [http://en.wikipedia.org/wiki/Web\\_2.0](http://en.wikipedia.org/wiki/Web_2.0) :

"The term 'Web 2.0' describes the changing trends in the use of World Wide Web technology and web design that aim to enhance creativity, communications, secure information sharing, collaboration and functionality of the web. Web 2.0 concepts have led to the development and evolution of web culture communities and hosted services, such as social-networking sites, video sharing sites, wikis, blogs, and folksonomies."

For comparison, *Technorati*'s list <http://technorati.com/pop/> of the top 100 blogs in order of TA is led by *Breaking News and Opinion on The Huffington Post* <http://www.huffingtonpost.com/> with a TA of 29,972 on 26 February 2009.

Of course, it goes without saying that there's no *necessary* connection between a blog's TA rating and its *quality*.

On 26 February 2009 I used *Technorati's* Advanced Search

<<http://technorati.com/search?advanced>> to search *in all blogs* (not posts *within* blogs) for:

1. "Education"..... 28,842
2. "Science"..... 26,032
3. "Physics"..... 2,484

NOTE : These searches seem to require a "work around": first do a "keyword" search for the word "education in all blogs at <<http://technorati.com/search?advanced>> to obtain on 26 Feb 2009 1,193,491 hits. Then switch the left top button in "Try Filtering your results" from "Search Posts" to "Search Blogs" to obtain 28,842 hits.

The *Technorati Authority* (TA) of all the blogs listed in this compilation was found on 1-7 March 2009 by searching for their *italicized titles* in "All Blogs" as above. The TA's so derived are shown as "[TA=N]" directly after the URL for each blog, where, again, N is the number of blogs linking to the website in the last six months. The notation "[TA=?]" means that the TA was not found at <<http://technorati.com/search?advanced>>. The TA's for the over 200 blogs of presently listed range from 1 to 29,972 for the *Huffington Post*.

NOTE: The *Technorati* search engine is somewhat eccentric - sometimes: (a) a search for a blog titled "X" by its author yields nothing, but subsequent searches for "X" find something; (b) searches of "X" in Feb 09 found relatively large TA's, but later searches for "X" in March 09 found no TA listed.

### 3. *Blogged* <<http://www.blogged.com/>>

At <<http://www.blogged.com/about.php>> it is stated that (my *italics*; my inserts at ". . . .[insert]. . . ."):

The blogs in our database are reviewed, rated . . . .[how?]. . . ., and categorized by editors . . . . [their names are not revealed :- ( ]. . . ., so you won't experience the frustration of filtering through blogs that are spam, outdated, or irrelevant. You'll be able to find quality blogs that you would be unlikely to have found through a traditional blog search. We also offer time-based searching, bookmarking, sharing, and feedback functions. *Anyone can review and rate a blog and help it rise in the rankings.* . . . .[To submit a blog go to <<http://www.blogged.com/directory/>> and click on "submit a blog" in the right-hand column.]

Blogged's rating scale is:

- 10..... superb
- 9.0-9.9..... excellent
- 8.0-8.9..... great
- 7.0-7.9..... very good
- 6.0-6.9..... good
- 5.0-5.9..... average
- 4.0-4.9..... below average

NOTE: Since *anyone* can review and rate a blog and since the identity and qualifications of the editors are unknown, it would seem that *Blogged's Ratings (BR) must be considered with some caution.*

At *Blogged's* "Education Blog Directory" <<http://www.blogged.com/directory/education>>, as of 26 February 2009, there were links to education blogs on:

Financial Aid.....	38
Higher Education.....	870
Humanities.....	1,051
International Teaching.....	51
K-12 Education.....	1,191
Languages.....	502
Libraries.....	103
Math.....	131
Museums.....	18
Online Education.....	164
Personal Development....	1,494
Reference.....	431
Science.....	1,545
Special Education.....	45
Teaching .....	<u>385</u>
TOTAL.....	8019

The Higher Education Blogs are listed in order of *Blogged's* Rating (BR) at <<http://www.blogged.com/directory/education/higher-education>>. As of 26 February 2009 BR's range from 9.7 (excellent) for the *Chronicle of Higher Education* <<http://www.blogged.com/blogs/the-chronicle-of-higher.html>> to 4.5 (below average) for *Tapestry* <<http://rainbowtapestry.blogspot.com/>>.

At *Blogged's* "Science Education Blog Directory", as of 26 February 2009, <<http://www.blogged.com/directory/education/science>> there were links to science education blogs on:

Alternative Sciences.....	136
Animals.....	241
Astronomy.....	125
Biotechnology.....	27
Chemistry & Biology.....	233
Engineering.....	79
Geography.....	32
Geology.....	16
Inventors.....	23
Meteorology.....	87
Physics.....	114
Space.....	<u>126</u>
TOTAL.....	1239

(the total may be less than 1,545 given in the preceding table because of the omission of categories with small numbers of blogs)

The Science Education Blogs are listed in order of *Blogged's* Rating (BR) at <<http://www.blogged.com/directory/education/science>>. BR's range from 9.8 (excellent) for *Discoblog* <<http://blogs.discovermagazine.com/discoblog/>> to 4.5 (below average) for *Forensics Science - Computer Forensics Software* <<http://computer-forensic-science.blogspot.com/>>.

NOTE: The *Blogged* search engine is somewhat eccentric, sometimes the first search for a blog titled "X" by its author finds nothing, but subsequent searches for a slight variant of "X" find the blog.

#### 4. *ScienceBlogs* <<http://scienceblogs.com/>>

At <<http://scienceblogs.com/channel/about.php>> it is stated:

Launched in January 2006, *ScienceBlogs* is a portal to this global dialogue, a digital science salon featuring the leading bloggers from a wide array of scientific disciplines. Today, *ScienceBlogs* is the largest online community dedicated to science. . . . . We have selected our 60+ bloggers based on their originality, insight, talent, and dedication and how we think they would contribute to the discussion at *ScienceBlogs*. Our role, as we see it, is to create and continue to improve this forum for discussion, and to ensure that the rich dialogue that takes place at *ScienceBlogs* resonates outside the blogosphere. . . . *ScienceBlogs* was created by Seed Media Group <<http://seedmediagroup.com/>> . . . [founded by Adam Bly <<http://seedmediagroup.com/about/team/adam-bly>> in 2005]. . .

A “Blog Index” in the left column at At <<http://scienceblogs.com/channel/about.php>> lists 77 *ScienceBlogs* (as if 15 March 2009), evidently selected by the Seed Media Group. Only these eleven are among the approximately 220 blogs listed in the present compilation (indicating that excellent science blogs have been omitted from both lists):

1. Dave Bacon’s *The Quantum Pontiff* <<http://scienceblogs.com/pontiff/>>,
2. Mark Chu-Carroll’s *Good Math, Bad Math* <<http://scienceblogs.com/goodmath/>>,
3. James Hrynyshyn’s *Island of Doubt* <<http://scienceblogs.com/islandofdoubt/>>,
4. P.Z. Myers’s *Pharyngula* <<http://scienceblogs.com/pharyngula/>>,
5. Matthew Nesbit’s *Framing Science* <<http://scienceblogs.com/framing-science/>>,
6. Chad Orzel’s *Uncertain Principles* <<http://scienceblogs.com/principles/>>,
7. Alice Pawley & ScienceWoman’s” *Sciencewomen*  
<<http://scienceblogs.com/sciencewoman/>>,
8. Jason Rosenhouse’s *Evolutionblog* <<http://scienceblogs.com/evolutionblog/>>,
9. Matt Springer’s *Built on Facts*: <<http://scienceblogs.com/builtonfacts/>>,
10. John Whitfield’s *Blogging the Origin* <<http://scienceblogs.com/builtonfacts/>>, and
11. Bora Zivkovic’s *Blog Around the Clock* <<http://scienceblogs.com/clock/>>.

#### 5. Other Blog Lists

In addition to the above four directories [*IDE* (Donaghy, 2009), *Technorati* (2009), *Blogged* (2009), and *ScienceBlogs* (2009)], among other blog lists are:

1. the present list of over 200 Education and Science Blogs;
2. those in AEA (2009), BlogFlux (2009), *Brittanica* Blogs (2009), Chasteen (2008), *Discover Magazine* (2009), Downes (2008a), *Education Week* Blogs (2009), Glenn (2003), Mathews (2008), OEDB (2006), Pawley & “ScienceWoman” (2009), Petrilli (2009), Rice (2006), & Yahoo (2009b,c);
3. the “Blog Rolls” in many of the blogs presently listed, provided by bloggers to indicate their favorite blogs.



## 6. More Inclusive Blog Directories With More Powerful Search Engines Are Needed

The search engines of *International Directory of Edubloggers (IDE)* (Donaghy, 2009); *Technorati* (2009); *Blogged* (2009); and *ScienceBlogs* (2009), can do keywords searches ONLY for blogs and for information in posts within blogs, for blogs that have been registered on their servers, and (probably also) for *Technorati* and *Blogged*, relatively popular blogs. Of the approximately 220 blogs listed in this compilation only:

- a. 34 (15%) appear in IDE,
- b. 11 (5%) appear in the *ScienceBlogs* Directory.
- c. 136 (62%) have been given a TA rating by *Technorati*,
- d. 38 (17%) have been given a BR rating by *Blogged*,

In my opinion, Blog Directories would be of more assistance if they:

- (1) were more inclusive – as would occur *if more bloggers would take a few minutes to register their blogs at IDE, Technorati, and Blogged*;
- (2) featured more powerful search engines such as those provided by LISTSERV (see Appendix A1b “Some Strengths of the ADLsphere”).

## 7. Other Social Networking Sites <[http://en.wikipedia.org/wiki/Social\\_networking](http://en.wikipedia.org/wiki/Social_networking)>

### a. *Facebook* <<http://www.facebook.com/home.php>>

According to <<http://en.wikipedia.org/wiki/Facebook>> : “. . . a free-access social networking website that is operated and privately owned by *Facebook*, Inc. Users can join networks organized by city, workplace, school, and region to connect and interact with other people. People can also add friends and send them messages, and update their personal profiles to notify friends about themselves. . . . currently has more than 175 million active users worldwide.”

### b. *MySpace* <<http://www.myspace.com/>>

According to <<http://en.wikipedia.org/wiki/MySpace>> : “. . . a social networking website with an interactive, user-submitted network of friends, personal profiles, blogs, groups, photos, music, and videos for teenagers and adults internationally. . . . the site counted approximately 106 million accounts on September 8, 2006”

### c. *Twitter* <<http://twitter.com/home>>

According to <<http://en.wikipedia.org/wiki/Twitter>> : “. . . a social networking and micro-blogging service that allows its users to send and read other users' updates (known as “tweets”), which are text-based posts of up to 140 characters in length. Updates are displayed on the user's profile page and delivered to other users who have signed up to receive them. Senders can restrict delivery to those in their circle of friends (delivery to everyone being the default). . . . In November 2008, Jeremiah Owyang of Forrester Research estimated that Twitter had 4-5 million users. A February 2009 Compete.com blog entry ranks *Twitter* as the third largest social network (behind *Facebook* and *MySpace*), and puts the number of users at roughly 6 million and the number of monthly visitors at 55 million.”

### d. *LinkedIn* <<http://www.linkedin.com/>>

According to <[http://en.wikipedia.org/wiki/Linked\\_in](http://en.wikipedia.org/wiki/Linked_in)> : “a business-oriented social networking site founded in December 2002 and launched in May 2003[2] mainly used for professional networking. As of February 2009, it had more than 35 million registered users,[3] spanning 170 industries.”

### e. *FriendFeed* <<http://friendfeed.com/>>

According to <<http://en.wikipedia.org/wiki/FriendFeed>> : “a feed aggregator that consolidates the updates from social media and social networking websites, social bookmarking websites, blogs and micro-blogging updates, as well as any other type of RSS/ Atom feed. Users can use this stream of information to create customized feeds to share (and comment) with friends.” For an example, see “FriendFeed Science 2.0 Room: for people interested in Science 2.0 and Open Science, especially the use of online tools to do science in new ways” at <<http://friendfeed.com/rooms/science-2-0>>.

**REFERENCES** [Over 100 general references on open access, internet usage, and two prominent social networking spheres: the Academic Discussion List Sphere (ADLsphere) and the Blog Sphere (Blogosphere.)

Tiny URL's courtesy <<http://tinyurl.com/create.php>>. All URL's were accessed on 16-20 March 2009. Reference formatting takes advantage of the best features recommended by the:

- (a) American Institute of Physics (AIP),
- (b) American Psychological Association (APA), and
- (c) Council of Science Editors (CSE).

This *optimum* formatting is not often employed, but should be.

AEA. 2009. American Evaluation Association "Blogs," online at <<http://www.eval.org/Resources/Blogs.asp>> : "Evaluators are blogging! Some focus on evaluation, some do not. Look for the. . . [AEA icon]. . . to identify AEA member blogs. If you are a blogger, drop a line to <[aea@eval.org](mailto:aea@eval.org)> to have your blog considered for adding to this page.

AERA-SIG-COR. 2009. American Educational Research Association, Special Interest Group on Communication of Research <<http://aera-cr.ed.asu.edu/>> and its listing of FREE scholarly peer-reviewed electronic journals in education at <<http://aera-cr.asu.edu/ejournals/>> :

To the best of our ability to discern, we have included only links to electronic journals that are scholarly, peer-reviewed, full text and accessible without cost. We have excluded professional magazines that are largely not refereed, and commercial journals that may only allow access to a very limited number of articles as an enticement to buy. By restricting membership in this way on the list that follows, we hope to do what little we can to promote free access world wide to scholarship in education."

Alexa. 2008. The Web Information Company; online at <<http://www.alexa.com/>>. See especially the top 500 sites on web at <[http://www.alexa.com/site/ds/top\\_sites](http://www.alexa.com/site/ds/top_sites)>.

Atkins, D.E., J.S. Brown, and A.L. Hammond. 2007. "A Review of the Open Educational Resources (OER) Movement: Achievements, Challenges, and New Opportunities," February 2007, report for the William And Flora Hewlett Foundation; online as a 1.8 MB pdf at <<http://tinyurl.com/24ltry>>.

Banks, M.A. 2007. *Blogging Heroes: Interviews with 30 of the World's Top Bloggers*. Wiley. Amazon.com information at <<http://tinyurl.com/6yrzcr>>. Note the "Look Inside" feature. I can recognize no educators or scientists among the blog "heroes" listed on the "Contents" pages, although there could be some that are not familiar to me.

Berkun, S. 2007. *The Myths of Innovation*, O'Reilly Media. Amazon.com information at <<http://www.amazon.com/Myths-Innovation-Scott-Berkun/dp/0596527055>>. Note the “Look Inside” feature. Chapter 4 (freely downloadable at <<http://tinyurl.com/2x9hv7>>) deals with the myth “People love new ideas.” Therein Berkun wrote:

Every great idea in history has the fat red stamp of rejection on its face. It's hard to see today because once ideas gain acceptance, we gloss over the hard paths they took to get there. If you scratch any innovation's surface, you'll find the scars: they've been roughed up and thrashed around by both the masses and leading minds - before they made it into your life. Paul C. Lauterbur, cowinner of the . . . [2003 Nobel Prize in Physiology or Medicine <[http://nobelprize.org/nobel\\_prizes/medicine/laureates/2003/press.html](http://nobelprize.org/nobel_prizes/medicine/laureates/2003/press.html)> for discoveries concerning “magnetic resonance imaging,” whose seminal 1973 paper on magnetic resonance imaging was originally rejected by *Nature*, is quoted by Davis (2007) as stating:

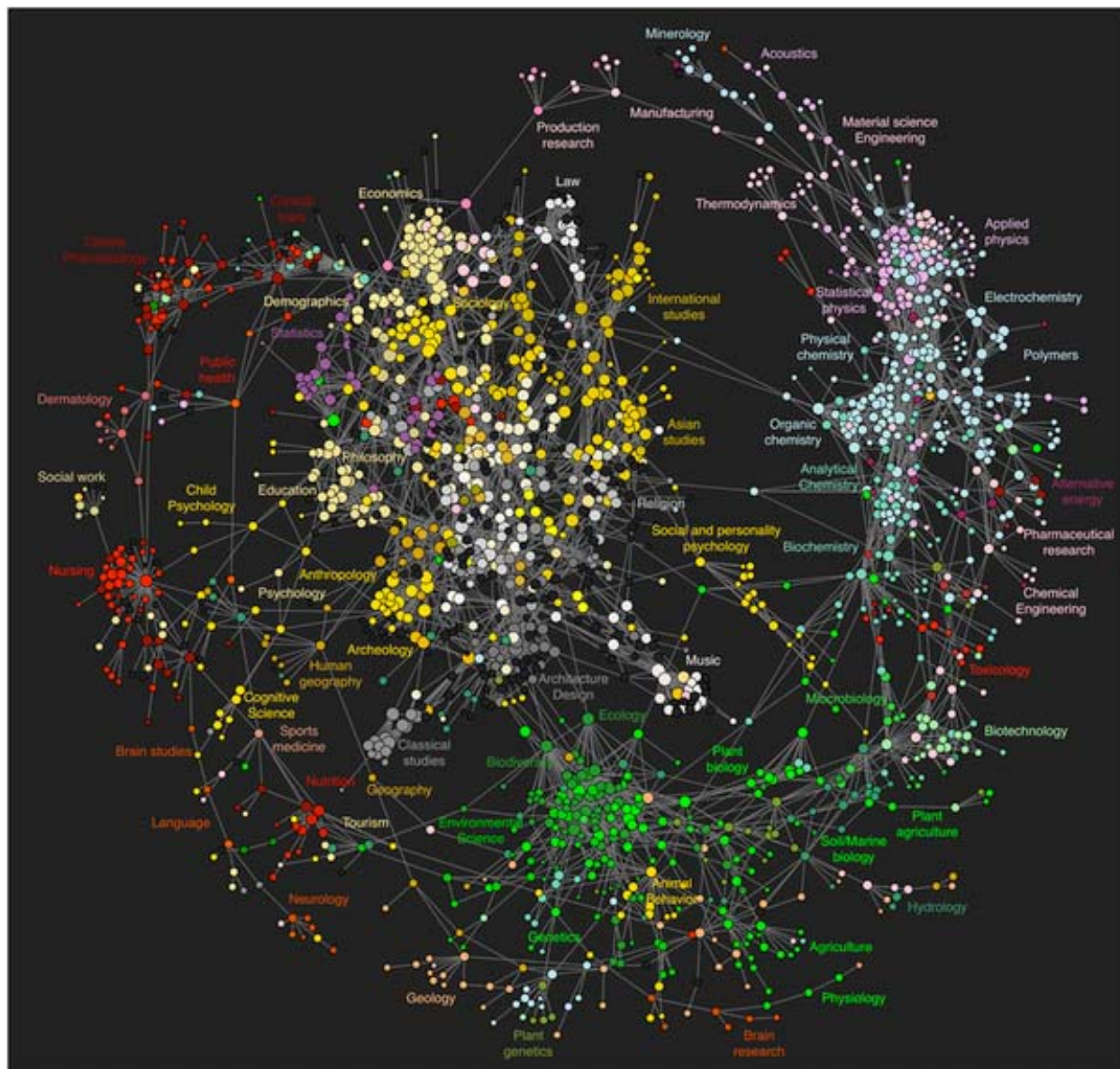
“You can write the entire history of science in the last 50 years in terms of papers rejected by *Science* or *Nature*. Big ideas in all fields endure dismissals, mockeries, and persecutions (for them and their creators). . . .”

BlogFlux. 2009. Online at <<http://www.blogflux.com/>>. “Blogflux is designed to be a central destination for the blogosphere, providing you everything you need to get your blog up and running. . . . Currently [16 March 2009] featuring 143, 505 blogs in our directory. Browse at <<http://dir.blogflux.com/Blogflux>>.”

*Blogged*. 2009. Blogged – find better blogs; online at <<http://www.blogged.com/>>.

Bollen, J., H. Van de Sompel, A. Hagberg, L. Bettencourt, R. Chute, M.A. Rodriguez, & L. Balakireva. 2009. “Clickstream Data Yields High-Resolution Maps of Science,” *PLoS ONE* 4(3); online at <<http://www.plosone.org/article/info:doi/10.1371/journal.pone.0004803>>:

“Intricate maps of science have been created from citation data to visualize the structure of scientific activity. However, *most scientific publications are now accessed online*. Scholarly web portals record detailed log data at a scale that exceeds the number of all existing citations combined. Such log data is recorded immediately upon publication and keeps track of the sequences of user requests (clickstreams) that are issued by a variety of users across many different domains. Given these advantages of log datasets over citation data, we investigate whether they can produce high-resolution, more current maps of science. . . . Maps of science resulting from large-scale clickstream data provide a detailed, contemporary view of scientific activity and correct the underrepresentation of the social sciences and humanities that is commonly found in citation data.”



MAP OF SCIENCE DERIVED FROM CLICKSTREAM DATA – Bollen et al. (2009). Circles represent individual journals. The lines that connect journals are the edges of the clickstream model in  $M'$  (see the article for an explanation). Colors correspond to the AAT classification of the journal. Labels have been assigned to local clusters of journals that correspond to particular scientific disciplines. See also Boustead (2009).

*Book Smarts*. 2009. Free online at <<http://www.book-smarts.net/>>; editors Kenneth Saltman, Patricia Hinchey, Pepi Leistyna, and Christopher Robbins:

... offers brief but informed discussion of books on critical issues in education. Many writers from a variety of fields—notably business and politics—are writing books that promote ideas for educational reform. Given that the future and well-being of hundreds of thousands of children are affected by reform initiatives, *Book Smarts* intends to help readers cut through the clutter and sort out sound proposals from a contemporary proliferation of unsubstantiated claims about educational policy and reform.

Boustead, G. 2009. "A new picture of science - and possibly future innovation - comes into focus with the mapping of scientists' online research behavior, *SeedMagazine*, 21 March; online at <[http://seedmagazine.com/content/article/knowledge\\_in\\_real-time/](http://seedmagazine.com/content/article/knowledge_in_real-time/)>:

"Picture this: the whole of human knowledge as a figurative mind that can selectively focus on certain areas. It's a profound notion, and visualizing such a construct is an enormous undertaking. But with last week's release of a new "map of science," a team of researchers led by Johan Bollen . . . [Bollen et al. (2009)]. . . is attempting to do just that - with a high-resolution visualization of how scientific literature is accessed based on users' downloading and browsing behavior, known as clickstream data. This usage data was collected, aggregated, and normalized across a wide variety of journal publishers and institutions. The result is a network map with color-coded nodes (clusters of research articles from different fields) and interconnected lines (shaped by users' clickstreams), demonstrating the connections among a comprehensive sample space of scholarly research."

*Britannica Blogs*. 2009. Online at <<http://www.britannica.com/blogs/>>. The names and short bios of those who blog at this site are at <<http://www.britannica.com/blogs/authors>>].

Among the over 160 Britannica bloggers are: Dan Butin, James Evans, Kevin Kelly, Anthony O'Hear, Richard Rusczyk, Larry Sanger, Clay Shirky, Ian Stewart, Michael Wesch, Donald Whitfield, & Daniel Willingham, all of whose blogs are listed in the present compilation. My *Technorati* and *Blogged* searches for these Britannica blogs failed to uncover any of these valuable blogs.

Brockman, J. 1995. *The Third Culture: Beyond the Scientific Revolution*. Simon & Shuster; excerpts online at <<http://www.edge.org/documents/ThirdCulture/d-Contents.html>>. Amazon.com information at <<http://tinyurl.com/8fbnym>>. Note the "Look Inside" feature.

Brockman, J., R. Weinberger & K. Taylor. 2009. *Edge* ("The mandate of Edge Foundation is to promote inquiry into and discussion of intellectual, philosophical, artistic, and literary issues, as well as to work for the intellectual and social achievement of society. . . . The work and ideas of the intellectuals featured at this site give meaning to the term 'third culture': physicists, evolutionary biologists, philosophers, biologists, computer scientists, psychologists, social, behavioral, and anthropological scientists, and science journalists.") Online at <<http://www.edge.org/>>.

[See especially the *The Edge Annual Question* — 2009: "WHAT WILL CHANGE EVERYTHING? What game-changing scientific ideas and developments do you expect to live to see?, " online at <[http://www.edge.org/q2009/q09\\_index.html](http://www.edge.org/q2009/q09_index.html)>. Among the over 150 responders are: John Barrow, Nick Bostrom, Mihaly Csikszentmihalyi, Richard Dawkins, Daniel Dennett, Freeman Dyson, Kenneth Ford, Howard Gardner, David Gelertner, Alison Gopnik, Haim Harari, Gerald Holton, Eric Kandel, Kevin Kelly, Lawrence Krauss, P.Z. Myers, Steven Pinker, Howard Rheingold, Roger Schank, Gino Segrè, Terrence Sejnowski, Michel Shermer, Lee Smolin, Paul Steinhardt, Nassim Taleb, Frank Tipler, Sherry Turkle, Craig Venter, & Frank Wilczek.

Brooks, D. 2008. "The Biggest Issue," *New York Times*, 29 July; online at <<http://www.nytimes.com/2008/07/29/opinion/29brooks.html?ref=opinion>>.

Because this piece may soon be available only to subscribers, I have copied an annotated and referenced version into the OPEN AERA-L archives at <<http://tinyurl.com/5ofthx>>. Such copying in accord with "fair use" of copyrighted material as provided for in Section 107 of the US Copyright Law. For more information go to <<http://www.law.cornell.edu/uscode/17/107.shtml>>. In Hake (2009) I argue that "The Threat to Life on Planet Earth Is a More Important Issue Than David Brooks' Skills Slowdown."



Brown, J.S. & R.P. Adler. 2008. "Minds on Fire: Open Education, the Long Tail, and Learning 2.0," *Educause*, January/February 2008; online at <http://net.educause.edu/ir/library/pdf/ERM0811.pdf> (1.2 MB).

Burbules, N.C. 2006. "Digital Libraries as Virtual Spaces" in Kapitzke & Bruce (2006).

Carr, N. 2004. *Does IT Matter? Information Technology and the Corrosion of Competitive Advantage*. Harvard Business School Press. Amazon.com information at <http://www.amazon.com/exec/obidos/ASIN/1591394449/amazingbooks0b0> - note the "Look Inside" feature.

Carr, N. 2008a. "Is Google Making Us Stupid? What the Internet is doing to our brains," *Atlantic Monthly*, July/August, online at <http://www.theatlantic.com/doc/200807/google>. See responses by Edge (2008) and John Hagel (2009). See also Carr's blog "Rough Type" in the present blog list.

Carr, N. 2008b. "Who killed the blogosphere?", online at [http://www.rougtype.com/archives/2008/11/who\\_killed\\_the.php](http://www.rougtype.com/archives/2008/11/who_killed_the.php) along with many responses, some from dedicated bloggers claiming that the blogosphere is alive. See, especially the response from Hossenfelder (2008)].

Carr, N. 2008c. *The Big Switch: Rewiring the World, from Edison to Google*. W.W. Norton. Information by Carr at <http://www.nicholasgarr.com/bigswitch/>. Amazon.com information at <http://tinyurl.com/5w2v3e> - note the "Look Inside" feature.

Chasteen, S. 2008. "Physics Blogs," online at <http://sciencegeekgirl.files.wordpress.com/2008/11/physics-blogs.pdf> (64 kB).

*Citizendium*. 2009. At [http://en.citizendium.org/wiki/Welcome\\_to\\_Citizendium](http://en.citizendium.org/wiki/Welcome_to_Citizendium) it is stated:  
A new wiki encyclopedia project—and more! We aim at reliability and quality, not just quantity.  
We welcome collaboration [http://en.citizendium.org/wiki/CZ:Group\\_Editing](http://en.citizendium.org/wiki/CZ:Group_Editing) with everyone who has knowledge, broad or narrow, about any of the world's innumerable subjects.  
We write under our real names—and are both collegial and congenial.  
We now have 9,100+ articles [http://en.citizendium.org/wiki/Category:CZ\\_Live](http://en.citizendium.org/wiki/Category:CZ_Live) and are gathering speed.  
*Eduzendium* <http://en.citizendium.org/wiki/CZ:Eduzendium> participants write for academic credit.  
See what *Nature* . . . [Giles (2006)]. . . wrote about us.

Cline, A.R. 2006. "Rhetorica: Professors Who Blog"; online at [http://rhetorica.net/professors\\_who\\_blog.htm](http://rhetorica.net/professors_who_blog.htm).

[Not maintained after 2006 - the blogosphere could use an update, as might be attempted by searching for "professor" in Donaghy's (2008) directory – the source of some of the asterisked items in the present blog list.

Daniel, J.S. 1996. *Mega-Universities and Knowledge Media: Technology Strategies for Higher Education*. Routledge. Amazon.com information at <<http://tinyurl.com/d5c9un>>. Note the “look Inside” feature. Sir John wrote:

More than one-third of the world’s population is under 20. There are over 30 million people today qualified to enter a university who have no place to go. During the next decade, this 30 million will grow to 100 million. To meet this staggering demand, a major university needs to be created each week.

Davis, K. 2007. "Public Libraries Open Their Doors," *BIO-IT World*, February; online at <<http://www.bio-itworld.com/archive/111403/plos/>>:

Unable to persuade traditional scientific publishers to release their monopoly on scientific and medical literature archives, the Public Library of Science (PLOS) has taken matters into its own hands. Last month, the organization debuted *PLoS Biology*, a journal that provides free, unlimited access to “exciting” peer-review research, allowing authors to retain copyright but levying a fee for publication.

*Discover Magazine*. 2009. (List of Blogs, General and Physics) - Cosmic Variance: <<http://blogs.discovermagazine.com/cosmicvariance/links/>>.

Donaghy, P. 2009. *International Edubloggers Directory*, online at <<http://edubloggerdir.blogspot.com/>>

Downes, S. 2008a. LIST OF OVER 400 BLOGS! monitored by Stephen Downes, online at <<http://www.downes.ca/edurss/feeds.htm>> with daily findings reported in *OLDaily* <<http://www.downes.ca/news/OLDaily.htm>>. I thank Stephen <<http://www.downes.ca/>> for his IFETS post of 2 Dec 2008 that alerted me to his work.

Downes, S. 2008b. “Seven Habits of Highly Connected People,” *eLearn Magazine*, 18 April 2008, online at <<http://www.elearnmag.org/subpage.cfm?section=opinion&article=97-1>>.

Downes, S. 2008c. “Ten Web 2.0 Things You Can Do in Ten Minutes to Be a More Successful E-learning Professional,” *eLearn Magazine*, 25 March 2008; online at <<http://www.elearnmag.org/subpage.cfm?section=articles&article=60-1>>.

Duda, G. & K. Garrett. 2008. “Blogging in the physics classroom: A research-based approach to shaping students' attitudes toward physics,” *Am. J. Phys.* **76**(11): 1054-1065; online to subscribers at <<http://scitation.aip.org/dbt/dbt.jsp?KEY=AJPIAS&Volume=76&Issue=11>>.

*Economist*. 2008. “Blogging - Oh, grow up,” 6 November; online at <[http://www.economist.com/business/displaystory.cfm?story\\_id=12566826](http://www.economist.com/business/displaystory.cfm?story_id=12566826)> with over 25 reader comments.

Among the many responses to Carr (2008b), is one by Economist correspondent Andreas Kluth (2008) who admitted to the authorship of this anonymous (why??) *Economist* (2008) article, and stated that he has posted some overmatter from his interviews on his blog (see the present blog list at <<http://andreaskluth.org/2008/11/06/the-death-of-blogging/>>).

Eckel, E. 2003. “Re: The bad effects of physics first.” PhysLrnR post of 23 Nov 2003 08:06:45-0500; online at <<http://tinyurl.com/2dtoac>>.

Edge. 2008. Comments on “Is Google Making Us Stupid” [Carr (2008)] by W. Daniel Hillis, Kevin Kelly, Larry Sanger, George Dyson, Jaron Lanier, Douglas Rushkoff, W. Daniel Hillis, & David Brin; online at <[http://www.edge.org/discourse/carr\\_google.html](http://www.edge.org/discourse/carr_google.html)>.

Education Week Blogs. 2009. Online at <<http://www.edweek.org/ew/section/blogs/index.html>> (Primarily concerns K-12 education.) I thank Bob Schaeffer, Education Director of *FairTest* <<http://www.fairtest.org/>>, for alerting me to this resource.

Encyclopedia Britannica Blog. 2009. “Is Britannica Going Wiki?” online at <<http://www.britannica.com/blogs/2009/03/is-britannica-going-wiki/>>.

Etzioni, A. & O. Etzioni. 1997. “Communities: Virtual vs. Real,” editorial, *Science* **277**: 29 and (as befits the theme) online at <<http://www.gwu.edu/~ccps/etzioni/E30.html>>.

Eubanks, D. 2009. “Higher Education News Online,” online at <<http://www.zzascape.com/higherednews.html>>.

RSS feed from nine sources (as of 09 Feb 2009): *Campus Technology*, *Chronicle of Higher Education* (tech), *Chronicle of Higher Education* (general), *CollegeWebEditor*, *Educause*, *InsideHigherEd*, *New York Times*, *University Business*, & *Wired Magazine*. See also Eubanks’ blog listed above.

Fitzgerald, B. 2006. “Structuring Open Access to Knowledge” in Kapitzke & Bruce (2006).

Gans, J.S. & G.B. Shepherd. 1994. “How Are the Mighty Fallen: Rejected Classic Articles by Leading Economists,” *The Journal of Economic Perspectives* **8**(1): 165-179; online as a 1.6 MB pdf at <<http://tinyurl.com/8xewj7>>. The first paragraph reads:

Do elite economists suffer publication setbacks? Are the economists who produce the important articles content with the refereeing process? We asked over 140 leading economists, including all living winners of the Nobel Prize and John Bates Clark Medal, to describe instances in which journals rejected their papers. We hit a nerve. More than 60 percent responded, many with several blistering pages. Paul Krugman expressed the tone of many letters: “Thanks for the opportunity to let off a bit of steam.

Gardner, S. & S. Birley. 2008. *Blogging For Dummies*, 2nd edition. For Dummies publishing. Amazon.com information at <<http://tinyurl.com/56rm5q>>. Note the “Look Inside” feature.

Giles, J. 2006. “Wikipedia rival calls in the experts: Encyclopaedia aims to recognize status of academic editors,” *Nature* **443**: 493 (4 October); online to subscribers at <<http://tinyurl.com/7efm86>>; at that site it is stated that:

The current incarnation of Wikipedia is both phenomenally successful and, in the eyes of some critics, fundamentally flawed. The online encyclopaedia now includes more than a million entries in English alone.

Glass, G.V. 1999. “Not For Sale: Scholarly Communications in Modern Society,” summary of remarks at Session 6.31 “A Dialog About Electronic Forms of Scholarly Communication” of the American Educational Research Association Annual Meeting; 19 April; online at <<http://glass.ed.asu.edu/gene/papers/epub.html>>.



Glenn, D. 2003. "Scholars Who Blog: The soapbox of the digital age draws a crowd of academics," *Chronicle of Higher Education*, 6 June; online at <<http://chronicle.com/free/v49/i39/39a01401.htm>>.

Golden, C. & L.F. Katz. 2008. *The Race between Education and Technology*, Harvard University Press; publisher's information at <<http://www.hup.harvard.edu/catalog/GOLRAC.html>> :

"The book argues that technological change, education, and inequality have been involved in a kind of race. During the first eight decades of the twentieth century, the increase of educated workers was higher than the demand for them. This had the effect of boosting income for most people and lowering inequality. However, the reverse has been true since about 1980. This educational slowdown was accompanied by rising inequality. The authors discuss the complex reasons for this, and what might be done to ameliorate it." Amazon.com information is at <<http://tinyurl.com/5773s8>>. This book is cited by NYT columnist David Brooks (2008) in support of his claim that the "skills slowdown" is "The Biggest Issue" facing the Nation. In Hake (2009) I argue that "The Threat to Life on Planet Earth Is a More Important Issue Than David Brooks' Skills Slowdown."

GOOGLE. 2008. Searches:

"A few Google searches, some quick clicks on hyperlinks, and I've got the telltale fact or pithy quote I was after. . ." [Nicholas Carr (2008a) - Carr's blog is listed in the present compilation].

All thanks to physicist-turned-computer scientist Tim Berners-Lee

<[http://en.wikipedia.org/wiki/Sir\\_Tim\\_Berners-Lee](http://en.wikipedia.org/wiki/Sir_Tim_Berners-Lee)> and

<<http://www.w3.org/People/Berners-Lee>>].

(a) Google <<http://www.google.com/>> :

On 7 March 06:55:00-0800, the following hit numbers were obtained for searches for:

[ <i>Scholarpedia</i> <i>Citizendium</i> <i>Wikipedia</i> ] (without the "[...])	.....5,440
<i>Scholarpedia</i> .....	57,300
<i>Citizendium</i> .....	281,000
" <i>Encyclopedia Britannica</i> ".....	4,570,000
<i>Wikipedia</i> .....	286,000,000

cf: Google Trends at "(i)" below,

(b) Google News <<http://news.google.com/>>,

(c) Google Images <<http://images.google.com/>>,

(d) Google Scholar <<http://scholar.google.com/>>,

(e) Google Books <<http://books.google.com/>>,

(g) GOOGLE BLOG SEARCH <<http://blogsearch.google.com/>>

Blogsearch hits on: 16 Jan 2009      26 Feb 2009

Science..... 85,017,508 ..... 51,578,168

Education..... 82,916,794.....48,552,918

Engineering..... 17,665,814 ..... 13,863,712

Physics..... 8,729,910 ..... 7,082,854

Biology..... 7,497,795..... 6,036,170

Chemistry..... 7,281,777..... 5,619,426

Geography.....2,211,903

Mathematics..... 3,040,180.....1,527,711

Geology..... 358,182.....390,748

Geoscience.....36,271

[Are the huge decreases for Science, Education, & Mathematics between 16 Jan and 26 Feb *real* or due to *technical problems* with the search engine?]

(h) Google Groups <<http://groups.google.com/>>, &

- (i) Google Trends <<http://google.com/trends>> (gives relative Google search frequencies):  
For example a comparison of the Google search frequencies for “all regions” and “all years” indicates that Google search frequencies for:

- a. *Citizendium* exceed those for *Scholarpedia*, by a factor greater than 100 in Austria, Switzerland, Belgium, Australia, France and the Netherlands: by about 5 in Canada, Italy, and Spain; and by about 2.5 in the UK;
- b. *Wikipedia* exceed those for *Citizendium* by a factor greater than 100 for the countries specified in “a”;
- c. *Wikipedia* exceed those for *Scholarpedia* by a factor greater than 100 for the countries specified in “a”;
- d. *Wikipedia* exceed those for *Enclopedia Britannica* by a factor greater than 100 for the countries specified in “a”.

In all the above, the factors were read from the bar graphs in the lower part of the page.

Hake, R.R. 1999. “What Can We Learn from the Biologists About Research, Development, and Change in Undergraduate Education?” *AAPT Announcer* **29**(4): 99 (1999); online at <<http://www.physics.indiana.edu/~hake/WhatLearn-013100g.pdf>> (204K).

Hake, R.R. 2005a. “Cross-Posting - Synergistic or Sinful?” Post of 1 Nov 2005 08:37:12-0800 to ITFORUM and AERA-L; online at <<http://tinyurl.com/2m59v4>>.

Hake, R.R. 2005b. “Fourteen Posting Suggestions,” online at <<http://listserv.nd.edu/cgi-bin/wa?A2=ind0507&L=pod&P=R12861&I=-3>>. Post of 23 Jul 2005 11:38:29-0400 to AERA-C, AERA-G, AERA-GSL, AERA-H, AERA-I, AERA-J, AERA-K, AERA-L, ASSESS, EvalTalk, Math-Learn, PhysLrnR, POD, STLHE-L, TeachingEdPsych, and TIPS.

Hake, R.R. 2005c. “Why Aren't AERA Discussion Lists More Active?” online at <<http://tinyurl.com/2s3b9k>>. Post of 11 Jun 2005 11:44:58-0700 to AERA-C, AERA-D, AERA-G, AERA-GSL, AERA-H, AERA-I, AERA-J, AERA-K, AERA-TchEdPsych, and PhysLrnR.

Hake, R.R. 2007. “Over Sixty Academic Discussion Lists: List Addresses and URL's for Archives & Search Engines,” online as ref. 49 at <<http://www.physics.indiana.edu/~hake>>. See the ADDENDUM for a critique of discussion lists.

Hake, R.R. 2008a. “Thirty-two Education Blogs,” AERA-L post of 7 Nov 2008 16:38:18-080; online on the OPEN! AERA-L archives at <<http://tinyurl.com/6leyj6>>;

abstract only to AERA-A, AERA-B, AERA-C, AERA-D, AERA-GS, AERA-H, AERA-J, AERA-K, AERA-L, AP-Physics, ARN-L, ASSESS, Biopi-L, Chemed-L, DrEd, EdResMeth, EvalTalk, IFETS, Math-Learn, Math-Teach, Net-Gold, Physhare, Phys-L, PhysLrnR, POD, PsychTeacher (rejected), RUME, STLHE-L, TeachEdPsych, TIPS, & WBTOLL-L. For a guide to discussion lists see Hake (2007). For a defense of cross-posting see Hake (2005a).

Hake, R.R. 2008b. "Over Sixty Education Blogs," AERA-L post of 27 Nov 2008 13:41:47-0800; online on the OPEN! AERA-L archives at <<http://tinyurl.com/6c8ttj>>; abstract only to AERA-A, AERA-B, AERA-C, AERA-D, AERA-GS, AERA-H, AERA-J, AERA-K, AERA-L, AP-Physics, ARN-L, ASSESS, Biolab (rejected), Biopi-L, Chemed-L, DrEd, EdResMeth, EdStat (rejected), EvalTalk, IFETS, ITFORUM(rejected), Math-Learn, Math-Teach, Net-Gold, Physhare, Phys-L, PhysLrnR, POD, PsychTeacher (rejected), RUME, STLHE-L, TeachEdPsych, TIPS, & WBTOLL-L. For a guide to discussion lists see Hake (2007). For a defense of cross-posting see Hake (2005a).

Hake, R.R. 2009. "The Threat to Life on Planet Earth Is a More Important Issue Than David Brooks' Skills Slowdown," post of 4 Aug 2008 to AERA-D and other discussion lists; online on the OPEN! AERA-D archives at <<http://tinyurl.com/afg744>>. The abstract is also at <<http://hakesedstuff.blogspot.com/2009/01/threat-to-life-on-planet-earth-is-more.html>> with a provision for comments.

Harari, H. "At Last: Technology Will Change Education," in response to the *Edge* [Brockman et al. (2009)] Annual Question - 2009: "What Will Change Everything?" Harari wrote:

Today's world, its economy, industry, environment, agriculture, energy, health, food, military power, communications, you name it, are all driven by knowledge. The only way to fight poverty, hunger, diseases, natural catastrophes, terrorism, war, and all other evil, is the creation and dissemination of knowledge, i.e. research and education.

Of the six billion people on our planet, at least four billions are not participating in the knowledge revolution. Hundreds of millions are born to illiterate mothers, never drink clean water, have no medical care and never use a phone.

The "buzz words" of distant learning, individualized learning, and all other technology-driven changes in education, remain largely on paper, far from becoming a daily reality in the majority of the world's schools. The hope that affluent areas will provide remote access good education to others has not materialized. The ideas of bringing all of science, art, music and culture to every corner of the world and the creation of schools designed differently, based on individual and group learning, team work, simulations and special aids to special needs—all of these technology enabled goals remain largely unfulfilled.

Hossenfelder, Sabine (Bee). 2008a. "When Capitalism Fails," online at the *BackReaction* blog in the present compilation at <<http://backreaction.blogspot.com/2008/12/when-capitalism-fails.html>> : Bee writes:

I will now finally tell you why financing Open Access through author-pay is a bad idea, why science journalism is more Fiction than Fact, and will answer The Question Of All Questions: Who killed the blogosphere?. . . [The last is in response to Carr (2008b)]. . .

Hossenfelder, Sabine (Bee). 2008b. "We are Einstein" Online at the *BackReaction* blog in the present compilation at <<http://backreaction.blogspot.com/2008/12/we-are-einstein.html#links>> : Bee writes:

A lot has been said and written in the last years about the promise of online connectivity and open access, about the potential of borderless communication, the power of crowdsourcing (sic), Wikinomics, and the wisdom of the masses. What does that mean for science? I have been wondering, will this impact the way we do research? Will we see the rise of "Wikiscience" and changes to the scientific method as Kevin Kelly (2008b) predicts?. . . . while I can not give you a definite answer, I want to share some thoughts with you.

Huffington, A. & Editors of the *Huffington Post*. 2008. *The Huffington Post Complete Guide to Blogging*, Simon & Schuster. Amazon.com information at <<http://tinyurl.com/5bross>>. Note the “Look Inside” feature.

*Intute*: Social Science (UK). 2008. Web resources for education and research for the social sciences, including law, business, hospitality, sport and tourism, online at <<http://www.intute.ac.uk/socialsciences/>>.

*Intute* – the best Web resources for education and research, “a free online service providing you with a database of hand selected Web resources for education and research.”: <<http://www.intute.ac.uk/>> [TA=248].

ISTE. 2009. International Society for Technology in Education <<http://www.iste.org/>>. An ISTE Forum is at <<http://iste-members.ning.com/>>. For information see <<http://en.wikipedia.org/wiki/ISTE>>.

Kapitzke, C. & B.C. Bruce, eds. 2006. *Libr@ries Changing Information Space and Practice*, Routledge. Publisher's information at <<http://tinyurl.com/5gku4g>> :

“This volume is the first to examine the social, cultural, and political implications of the shift from the traditional forms and functions of print-based libraries to the delivery of online information in educational contexts. Libr@ries are conceptualized as physical places, virtual spaces, communities of literate practice, and discourses of information work.” A Google preview is online at <<http://tinyurl.com/5jzdy3>>.

Kelly, K. 2008a. Becoming Screen Literate. *New York Times Magazine*, 21 November, online at <<http://tinyurl.com/6htfyf>>. “Kevin Kelly is senior maverick at Wired and the author of 'Out of Control' and a coming book on what technology wants.”

Kelly, K. 2008b. “Speculations on the Future of Science,” online at <[http://www.edge.org/3rd\\_culture/kelly06/kelly06\\_index.html](http://www.edge.org/3rd_culture/kelly06/kelly06_index.html)>. [See above for Kelly’s blog *The Technium*.]

Kirst, M.W. & A. Venezia, eds. 2006. *From High School to College: Improving Opportunities for Success in Postsecondary Education*. Jossey Bass. Amazon.com information at <<http://tinyurl.com/bbk5bz>>.

Kluth, A. 2008. “The ‘death’ of blogging,” online at <<http://andreaskluth.org/2008/11/06/the-death-of-blogging/>>; contain interviews by Kluth after his *Economist* (2008) article was published.

Kornbluh, M.L., M. Shell-Weiss, & P. Turnbull. 2006. "Alternatives to Pay-for-View: The Case for Open Access to Historical Research and Scholarship" in Kapitzke & Bruce (2006).

Mathews, J. 2008. “Favorite Education Blogs of 2008,” *Washington Post*, April 7; online at <<http://tinyurl.com/5d89pv>>.

MacIsaac, D.L. 2000. "Communities of on-line physics educators," *Phys. Teach.* **38**(4): 210-213; online at <<http://physiczed.buffalostate.edu/PHYS-L/TPTApr00art.pdf>> (196 kB).

Discusses technical and social aspects of discussion lists and gives reference information on four major physics education lists: Phys-L, Physhare-L, PhysLrnR, and TAP-L.

Miller, A. 2008. "100 Useful Tips and Tools to Research the Deep Web," online at <<http://tinyurl.com/5wqyng>>. See especially "Semantic Search Tools and Databases." I thank POD's Meggin McIntosh for this reference. I've not located any background material on Alisa Miller.

MIT News. 2009. "MIT faculty open access to their scholarly articles," 20 March; online at <<http://web.mit.edu/newsoffice/2009/open-access-0320.htm>> :

"In a move aimed at broadening access to MIT's research and scholarship, faculty at the Massachusetts Institute of Technology have voted to make their scholarly articles available to the public for free and open access on the Web. . . . 'The vote is a signal to the world that we speak in a unified voice; that what we value is the free flow of ideas,' said Bish Sinyal, chair of the MIT Faculty and the Ford International Professor of Urban Development and Planning."

Nielsen, M. 2008. "The Future of Science: Building a Better Collective Memory" *APS News*, 17(10). The full version appears on Nielson's blog at <<http://michaelnielsen.org/blog/?p=448>>. Note the responses and counter responses following Nielsen's article.

Nielsen, M. 2009a. "Three Myths About Scientific Peer Review," 08 Jan 2009; online at <<http://michaelnielsen.org/blog/?p=531>> :

1. Scientists have always used peer review
2. Peer review is reliable
3. Peer review is the way we determine what's right and wrong in science

NOTE: Peer Review (pro and con) is a hot topic as judged, e.g., by the 11.6 million hits for a Google <<http://www.google.com/>> search for "peer review" (with the quotes) on 11 January 2009), rising to 37.2 million on 27 February 2009, and 37.3 million on 16 March 2009.

See also "The Myths of Innovation" [Berkun (2007)].

Nielsen, M. 2009b. "How Are the Mighty Fallen," online at <<http://michaelnielsen.org/blog/?p=533>>, 09 Jan 2009; Nielsen wrote:

The paper. . . .[Gans & Shepherd (1994)]. . . . is extremely readable (and entertaining), if you have any interest in peer review. Among other tidbits: an extraordinary list of rejected papers, many of them among the classics of economics; the estimate from Krugman that 60% of his papers are rejected on first try; the remarkable story of George Akerlof's Nobel Prize-Winning paper "The Market for Lemons", rejected by three separate journals before being published; the two rejections of the famous Black-Scholes options pricing paper, also Nobel Prize-winning; Krugman's comment that "I am having a terrible time with my current work on economic geography: referees tell me that it's obvious, it's wrong, and anyway they said it years ago." There's much more.

Addendum: Joshua. . . .[Gans]. . . . also pointed me to a retrospective on the article. . . .[The introduction by Gans to *Rejected: Leading Economists Ponder the Publication Process* (Shepherd, 1995), online at <<http://www.mbs.edu/home/jgans/papers/Introduction.pdf>> (28 kB)]. . . . , which makes for interesting followup reading.

Nielsen, M. 2009c. "The role of open licensing in open science," 21 January; online at <<http://michaelnielsen.org/blog/?p=540>>. Nielsen wrote:  
. . . .The advocates of open culture have developed a set of *open content licenses*, essentially a legal framework, based on copyright law, which strongly encourages and in some cases forces the open sharing of information. This open licensing strategy has been very successful in strengthening the creative commons, and so moving open culture forward.. . . . I'm a proponent of open licenses for science - but the focus on open licenses sometimes bothers me. It seems to me that while open licenses are important for open science, they are by no means as critical as they are to open culture; open access is just the *beginning* of open science, not the end. This post discusses to what extent open licenses can be expected to play a role in open scientific culture.

Nielsen, M. 2009d. "The Logic of Collective Action," 29 January; online at <<http://michaelnielsen.org/blog/?p=547>>. Nielsen wrote:  
It is a curious fact that one of the seminal works on open culture and open science was published in 1965 (2nd edition 1971), several decades before the modern open culture and open science movements began in earnest. Mancur Olson's <[http://en.wikipedia.org/wiki/Mancur\\_Olson](http://en.wikipedia.org/wiki/Mancur_Olson)> book "The Logic of Collective Action" . . . .[Olsen (1971)]. . . . is a classic of economics and political science, a classic that contains much of interest for people interested in open science.

OEDB. 2006. Top 100 Education Blogs, Online Education Data Base  
<<http://oedb.org/library/features/top-100-education-blogs>>.

Olsen, M. 1971. *The Logic of Collective Action: Public Goods and the Theory of Groups*. Harvard University Press, 2nd ed. Publisher's information at <<http://www.hup.harvard.edu/catalog/OLSLOX.html>>. Google information at <[http://books.google.ca/books?id=jzTeOLtf7\\_wC](http://books.google.ca/books?id=jzTeOLtf7_wC)>. A Google book preview is online at <<http://tinyurl.com/co48a8>>.

Pawley, A. & "ScienceWoman." 2009. Blogs by women in STEM (Science, Technology, Engineering, and Mathematics); online at <<http://scienceblogs.com/sciencewoman/blogrolls.php>>.

Pea, R. 1999. "New Media Communications Forums for Improving Education Research and Practice," in E. C. Lagemann and L.S. Shulman, eds., *Issues In Education Research* (Jossey-Bass, 1999); online as a 3.2 MB pdf at <<http://tinyurl.com/5nmdcg>>. For other publications and colloquia see <<http://www.stanford.edu/~roypea/HTML1%20Folder/articles.html>>.

Pincas, A. 2008. Re: "Re: Thirty-two Education Blogs/semantic web," WBTOLL-L post of 8 Nov 2008 08:08:58+0000; online at <<http://tinyurl.com/9w6d4w>>.

Petrilli, M.J. 2009. "Linky Love, Snark Attacks, and Fierce Debates about Teacher Quality? "A peek inside the education blogosphere," *Education Next* 9(1), Winter; online at <<http://www.hoover.org/publications/ednext/34687864.html>>. Petrilli wrote:

Blogs represent the "long end of the tail" of the media; a new form of mass communication this is not. And at the far end of that long tail sits the education blogosphere, a niche within a niche, with as many as 30,000 blogs. . . . [Petrilli does not indicate how he derived his estimate of 30,000 EdBlogs but it's possible that he used *Technorati's* Advanced Search

<<http://technorati.com/search?advanced>> to search *in all blogs* (not posts *within* blogs) for:

"Education." As indicated in Appendix C2, that search netted 28,842 hits on 26 February 2009.]. . . . According to the information at <<http://www.hoover.org/bios/petrilli.html>>: Petrilli oversees the Hoover foundation's blog *The Education Gadfly* (see the present blog listing under Amy FAGAN); is co-author of *No Child Left Behind: A Primer*

<[http://www.aei.org/books/bookID.851/book\\_detail.asp](http://www.aei.org/books/bookID.851/book_detail.asp)>; and was formerly at the U.S. Department of Education, where he served as associate assistant deputy secretary in the Office of Innovation and Improvement.

*PLoS ONE*? 2009. "An interactive open-access journal for the communication of all peer-reviewed scientific and medical research; online at <<http://www.plosone.org/home.action>>. Articles in physics are at <<http://tinyurl.com/cktr99>>. For commentary on the debut of *PLoS Biology*, see Davis (2007).

Poe, M. 2006. "The Hive: Can thousands of Wikipedians be wrong? How an attempt to build an online encyclopedia touched off history's biggest experiment in collaborative knowledge," *Atlantic Monthly*, September, online at <<http://www.theatlantic.com/doc/200609/wikipedia>>. See also <[http://en.wikipedia.org/wiki/Marshall\\_Poe](http://en.wikipedia.org/wiki/Marshall_Poe)>

Price, R. 2008. "Academia.edu: 'tree' of academics launches," AERA-K post of 10 Nov 2008 12:08:38-0800; online at <<http://tinyurl.com/6qr3e7>>. According one of its originators, philosopher Richard Price (2008), the. . . [ Academic Tree <<http://www.academia.edu/>>]. . . does two things:

1. shows researchers around the world in a "tree" format, displaying which institution/department they are affiliated with;
2. enables researchers and academics to keep track of the latest developments in their field – the latest people, papers, and talks.

Price optimistically adds [my *italics*]:

We're hoping that Academia.edu will eventually list *every academic in the world* -- Faculty members, Post-Docs, and Graduate Students. People can add their departments, and themselves, to the tree by clicking on the arrows. The site is getting some traction. Over 14,000 academics have joined Academia.edu in the last two months.

Public Knowledge Project. 2009. Online at <<http://pkp.sfu.ca/node/1410>> :

The Public Knowledge Project is a research and development initiative directed toward improving the scholarly and public quality of academic research through the development of innovative online publishing and knowledge-sharing environments. Begun in 1998 by Professor John Willinsky in the Faculty of Education at UBC, PKP has developed Open Journal Systems <<http://pkp.sfu.ca/?q=ojs>> and Open Conference Systems <<http://pkp.sfu.ca/?q=ocs>>, free software for the management, publishing, and indexing of journals and conferences, as well as Open Archives Harvester <<http://pkp.sfu.ca/?q=harvester>> and Lemon8-XML <<http://pkp.sfu.ca/lemon8>> to facilitate the indexing of research and scholarship. This open source software is being used around the world to increase access to knowledge and improve its scholarly management, while considerably reducing publishing costs. See Software & Services <[http://pkp.sfu.ca/software\\_and\\_services](http://pkp.sfu.ca/software_and_services)> for demos, downloads, and information about these systems. Located at the University of British Columbia, Simon Fraser University, and Stanford University, PKP also sustains an active research program on the impact of increased access to knowledge, with the resulting publications <<http://pkp.sfu.ca/biblio>>, dating back to 1998, available from this site.

Raymond, E.S. 2001. *The Cathedral & the Bazaar: Musings on Linux and Open Source by an Accidental Revolutionary*. O'Reilly, Revised & Expanded ed. edition. Amazon.com information at <<http://tinyurl.com/c4z6cz>>. Note the "Look Inside" feature. See also <[http://en.wikipedia.org/wiki/Cathedral\\_and\\_the\\_Bazaar](http://en.wikipedia.org/wiki/Cathedral_and_the_Bazaar)>.

Rheingold, H. 2000. *The Virtual Community: Homesteading on the Electronic Frontier*. MIT Press. Amazon.com information at <<http://tinyurl.com/97lo3g>>. Note the "Look Inside" feature.

Rice, J. 2006. "Serious Bloggers," *Inside Higher Ed*, 20 February; online at <<http://www.insidehighered.com/views/2006/02/20/rice>>.

Roschelle, J & R. Pea. 1999. "Trajectories from Today's WWW to a Powerful Educational Infrastructure," *Educational Researcher* 8(5): 22-25, 43; online as a 28 kB pdf at <<http://ctl.sri.com/publications/displayPublication.jsp?ID=120>>; see also Pea (1999).

*Scholarpedia*. 2009. Online at <<http://www.scholarpedia.org/>> :

A peer-reviewed open-access encyclopedia written by scholars from all around the world <<http://www.scholarpedia.org/article/Scholarpedia:Authors>>.

Scholarpedia feels and looks like *Wikipedia* -- the free encyclopedia that anyone can edit. Indeed, both are powered by the same program -- MediaWiki. Both allow visitors to review and modify articles simply by clicking on the *edit this article* link. However, Scholarpedia differs from Wikipedia in some very important ways: Each article:

- a. is written by an expert (elected by the public or invited by *Scholarpedia* editors),
- b. is anonymously peer reviewed to ensure accurate and reliable information.
- c. has a "curator" -- typically its author -- who is responsible for its content. Any modification of the article needs to be approved by the curator before it appears in the final, *approved* version.

Science Blogs. 2009. Online at <<http://scienceblogs.com/>>. Lists 77 outstanding science blogs (as of 16 March 2009) in the "Choose a blog" menu at the top of the page.

Shepherd, G.B. 1995. *Rejected: Leading Economists Ponder the Publication Process*, Horton. The introduction by J.S. Gans is online at <<http://www.mbs.edu/home/jgans/papers/Introduction.pdf>> (28 kB).



Shirky, C. 2008. *Here Comes Everybody: The Power of Organizing Without Organizations*. Penguin Press. Amazon.com information at <<http://tinyurl.com/6olcee>>. Note the “Look Inside” feature. See also at <[http://en.wikipedia.org/wiki/Clay\\_Shirky](http://en.wikipedia.org/wiki/Clay_Shirky)>. Publishers Weekly states:  
Blogs, wikis and other Web 2.0 accoutrements are revolutionizing the social order, a development that's cause for more excitement than alarm, argues interactive telecommunications professor Shirky. He contextualizes the digital networking age with philosophical, sociological, economic and statistical theories and points to its major successes and failures.

Smith, M.S. & C.M. Casserly. 2006. “The Promise of Open Educational Resources,” *Change* 38(5): 8–17; online as a 364 kB pdf at <<http://tinyurl.com/aa62l3>>.

Suber, P. 2008. "Open Access Overview: Focusing on open access to peer-reviewed research articles and their preprints," online at <<http://www.earlham.edu/~peters/fos/overview.htm>>.

Tapscott, D. & Williams, A.D. 2008. *Wikinomics: How Mass Collaboration Changes Everything*. Portfolio publishing. Amazon.com information at <<http://tinyurl.com/9uemod>>. Note the “Look Inside” feature.

*Technorati* Blog Directory. 2009. Online at <<http://technorati.com/blogs/directory/>>.

Turkle, S. 1997. *Life on the Screen: Identity in the Age of the Internet*. Simon & Shuster. Amazon.com information at <<http://tinyurl.com/984l8u>>. Note the “Look Inside” feature. For more on Turkle's work see her web page at <<http://web.mit.edu/sturkle/www/>>.

UC-Berkeley. 2009. University of California at Berkeley, “Understanding Science, how science really works; online at <<http://undsci.berkeley.edu/about.php>> :

“... ‘Understanding Science’ gives users an inside look at the general principles, methods, and motivations that underlie all of science. This project has at its heart a re-engagement with science that begins with teacher preparation and ends with broader public understanding. Its immediate goals are to (1) improve teacher understanding of the nature of the scientific enterprise, (2) provide resources and strategies that encourage and enable K-16 teachers to reinforce the nature of science throughout their science teaching, and (3) provide a clear and informative reference for students and the general public that accurately portrays the scientific endeavor. The ‘Understanding Science’ site was produced by the UC Museum of Paleontology of the University of California at Berkeley, in collaboration with a diverse group of scientists and teachers, and was funded by the National Science Foundation. Understanding Science was informed and initially inspired by our work on the ‘Understanding Evolution’ project <<http://evolution.berkeley.edu/>>, which highlighted the fact that many misconceptions regarding evolution spring from misunderstandings of the nature of science.

[I thank Arjendu Pattanayak for this reference – see his blog in the present blog listing.

Waldrop, M.M. 2008a. “Science 2.0: Great New Tool, or Great Risk? Wikis, blogs and other collaborative web technologies could usher in a new era of science. Or not.” *Scientific American*, 9 January; online at <<http://tinyurl.com/2tx5cj>>.

Waldrop, M.M. 2008b. “Science 2.0 -- Is Open Access Science the Future? Is posting raw results online, for all to see, a great tool or a great risk? *Scientific American*, April; online at <<http://www.sciam.com/article.cfm?id=science-2-point-0>>.

*Wikipedia*. 2009. Online at <<http://www.wikipedia.org/>> in 10 different languages.

The English version at <[http://en.wikipedia.org/wiki/Main\\_Page](http://en.wikipedia.org/wiki/Main_Page)> states: “Welcome to Wikipedia, the free encyclopedia that anyone can edit; 2,769,514 articles in English.”

Wiki Research Bibliography. 2009. Bibliography of scientific publications and sources about wikis in general and Wikipedia in particular; online at <[http://meta.wikimedia.org/wiki/Wiki\\_Research\\_Bibliography](http://meta.wikimedia.org/wiki/Wiki_Research_Bibliography)>.

Wikiversity. 2009. Online at <[http://en.wikiversity.org/wiki/Wikiversity:Main\\_Page](http://en.wikiversity.org/wiki/Wikiversity:Main_Page)>.

“Wikiversity is a Wikimedia Foundation

<[http://en.wikiversity.org/wiki/Wikiversity:Sister\\_projects](http://en.wikiversity.org/wiki/Wikiversity:Sister_projects)> project devoted to learning resources, learning projects, and research for use in all levels, types, and styles of education from pre-school to university, including professional training and informal learning. We invite teachers, students, and researchers to join us in creating open educational resources and collaborative learning communities.”

Willinsky, J. 2009. *The Access Principle: The case for open access to research and scholarship*. MIT Press; publisher’s information at

<<http://mitpress.mit.edu/catalog/item/default.asp?ttype=2&tid=11727>> :

Questions about access to scholarship go back farther than recent debates over subscription prices, rights, and electronic archives suggest. The great libraries of the past—from the fabled collection at Alexandria to the early public libraries of nineteenth-century America—stood as arguments for increasing access. In *The Access Principle*, John Willinsky describes the latest chapter in this ongoing story—online open access publishing by scholarly journals—and makes a case for open access as a public good. . . .

Yahoo. 2009a. Directory of Education Blogs; online at <<http://dir.yahoo.com/Education/>>.

Yahoo. 2009b. Directory of Science Blogs; online at <<http://dir.yahoo.com/Science/>>.

Yahoo. 2009c. Directory of Physics Blogs; online at <<http://dir.yahoo.com/Science/Physics/>>.