

e-Learning in the Biosciences: Where are we now?

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Web 2.0 ?



Web 2.0:

"A perceived second-generation of Web-based services such as social networking sites, wikis, communication tools, and folksonomies that emphasize online collaboration and sharing among users"

Web 2.0 sites

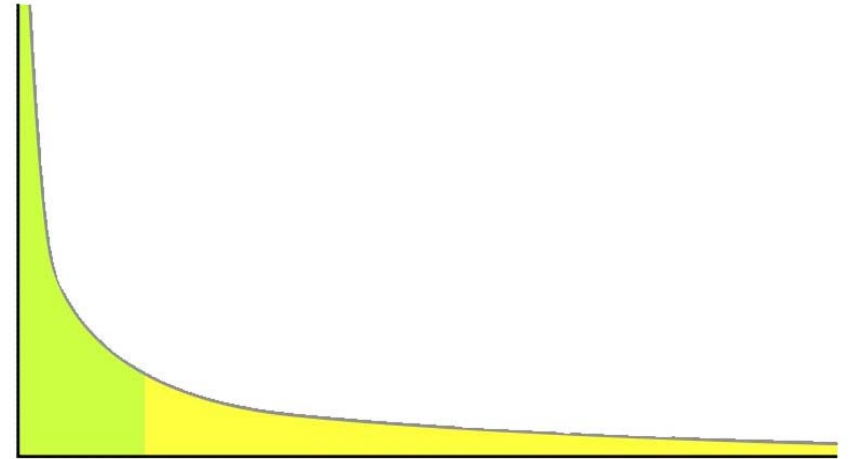
Blogging / Podcasting at:

- microbiologybytes.wordpress.com
- scienceoftheinvisible.blogspot.com
- frogroom-podcast.blogspot.com



MARKUS.ANGERMEIER @ APERTO.DE

The Long Tail



- **Low-frequency or low-amplitude population which comprises the majority.**

Chris Anderson, Wired, Oct. 2004

en.wikipedia.org/wiki/Long_tail

Online writing styles: My writing career

Academic papers (formal)

Books (conversational)

Web Pages (design)

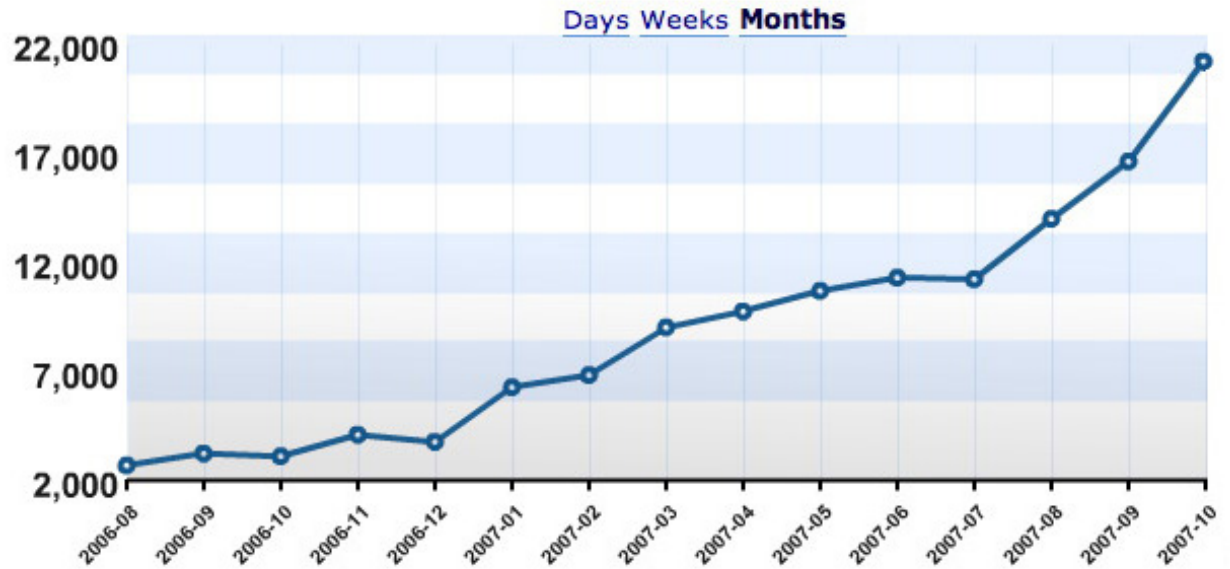
Blogs (bite size)

The image shows a screenshot of a web page. The top part is a scientific paper from 'letters to nature' (Nature 318, 571 - 574 (12 December 1985); doi:10.1038/318571a0). The title is 'Identification of the gene responsible for human T-cell leukaemia virus transcriptional regulation'. The authors are ALAN J. CANN, JOSEPH D. ROSENBLATT, WILLIAM WACHSMAN, NEIL P. SHAH & IRVIN S. Y. CHEN. The paper discusses the identification of the χ gene in HTLV-I and HTLV-II. Below the text is a colorful micrograph showing cellular structures in orange and green. At the bottom of the micrograph is a black box with the name 'ALAN J. CANN' in white capital letters. To the right of the micrograph is a sidebar with a yellow background containing a list of links and a small text snippet: 'Getting dirty boosts happiness Lung cancer patients treated with Mycobacterium vaccae bacteria normally found in the soil have ane...'. Below the sidebar is a link labeled 'Infectious Diseases'.

A Blogger's Voice

Total Views: 139,623
 Posts: 325
 Comments: 459
 Tags: 33

[Akismet](#) 62,408 spam comments



Syndication:

REUTERS
 LATEST NEWS ■ BUSH INSISTS HE'LL "SPRINT TO THE FINISH LINE"
 You are Home » News » Science » Article
 Quotes, News, Pictures & Video
 RSS Feeds Login

HOME
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 INVESTING
 NEWS
 U.S.
 Politics
 International
 Technology
 Entertainment
 Sports
 Lifestyle
 Oddy Enough
 Environment
 Health
 Science
 Special Coverage
 Video
 Pictures
 You Witness
 Blogs
 Affiliate Network

Slime Molds powered by Blogger
 POSTED: Sunday, October 14, 2007
 FROM BLOG: [MicrobiologyBytes](#) - The latest news about microbiology in a form that everyone can understand.

The following blog post is from an independent writer and is not connected with Reuters News. The opinions and views expressed herein are those of the author and are not endorsed by Reuters.com.

Slime molds are eukaryotic microbes with complex life cycles. Individual free living amoeba-like cells develop into plasmodia which can grow to many centimeters in size. The plasmodium grows in an amorphous fashion with much cytoplasmic streaming and can even travel. If its food supply (bacteria) declines, the plasmodium migrates to the surface of the substrate and transforms into rigid fruiting bodies. These look superficially like fungi or moulds but are not actually related. The fruiting bodies release spores which hatch into amoeba to begin the life cycle again. This video shows the motility of the plasmodium (or slug) stage:

Discover a larger life with BlackBerry.

SCIENCE NEWS

- For early humans, a beach party and clam bake
- Experimental malaria vaccine works in babies
- Researchers find gene linked with male infertility
- Discovery cleared for launch next week
- Two reports show "superbug" bacteria spread | Video
- More Science News...

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HOME | U.S. | WORLD | POLITICS | BUSINESS | HEALTH | SCIENCE | TECH | ENTERTAINMENT | VIDEO | OPINION | MYNEWS | SPORTS | WEATHER
 RADIO | MOBILE | FOX & Friends | Studio B | Your World | Big Story | Special Report | FOX Report | O'Keefe Factor | Hannity & Colmes | On the Record | FNC Mag | FOX Fan

HEALTH
 FOXNEWS.COM HOME > HEALTH
Health Risk Behaviors on MySpace
 Blog Name: [MicrobiologyBytes](#)
 Saturday, October 13, 2007

mySPACE.com
 It's not very often I can write a post which is suitable for both [MicrobiologyBytes](#) and [Science of the Invisible](#), but this topic is. MySpace is a popular social networking site where users create individual profiles. A group from the University of Washington examined publicly available MySpace profiles of 16- and 17-year-olds and determined the prevalence of personal risk behavior descriptions and identifiable information. They looked at 142 publicly available MySpace profiles (so not a particularly big study) from the class of 2008 MySpace group. 47% contained indications of risk behavior information: 21% described sexual activity, 23% alcohol use, 9% cigarette use, and 6% drug use.

So are these results surprising? Not to me. Considering this is a small sample of a self-selecting group who have public MySpace profiles, I'm slightly surprised that the percentages of risk behavior are not higher. Of course this is flawed in lots of ways, but perhaps the most interesting sentence in the paper is:

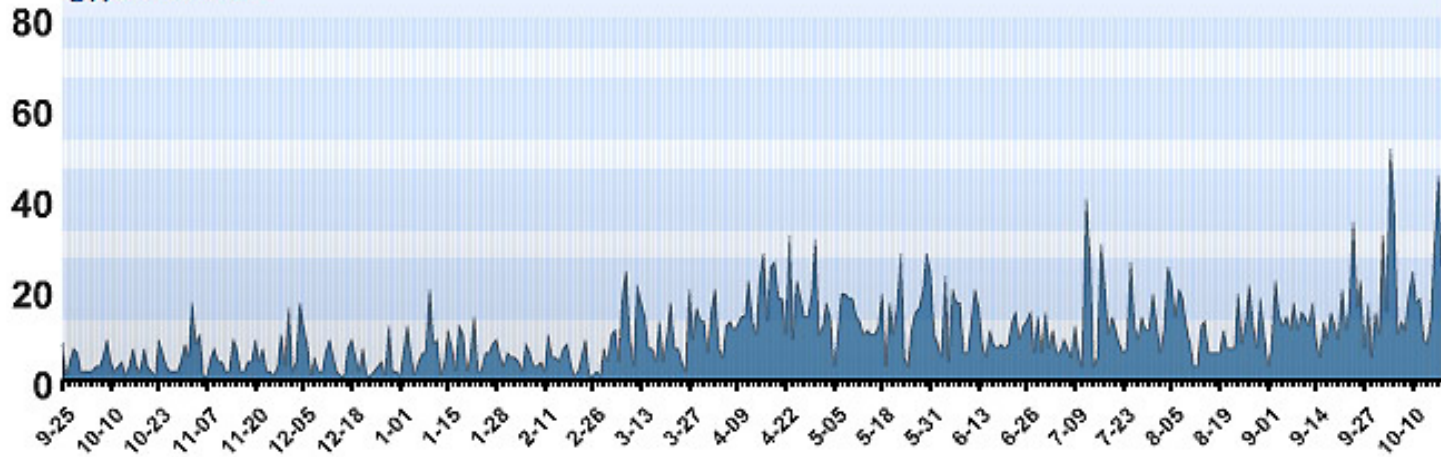
FOX NEWS VIDEO
 TOP VIDEO
 Cancer Prevention P87 Could the key to preventing breast cancer be found in a pill?
 HEALTH
 Mom of teen killed by staph speaks out
 Medicine cabinet could be making you fat
 Superbug kills Virginia student
 Do common cleaners pose health risk?

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Reusable Learning Objects

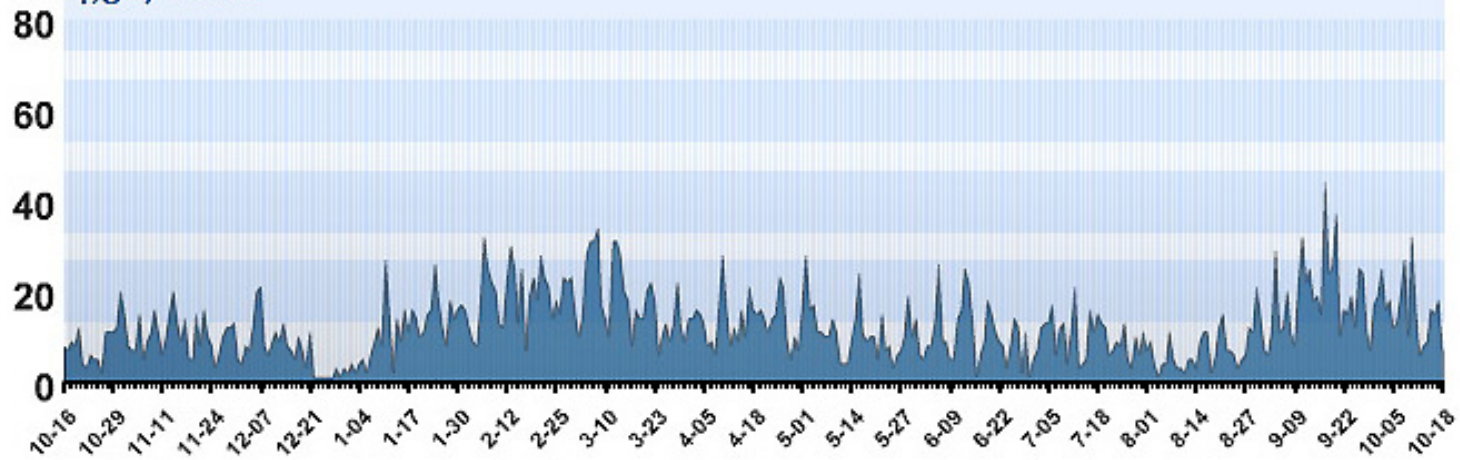
Quorum Sensing in Bacteria: We Two Are One

3,782 total

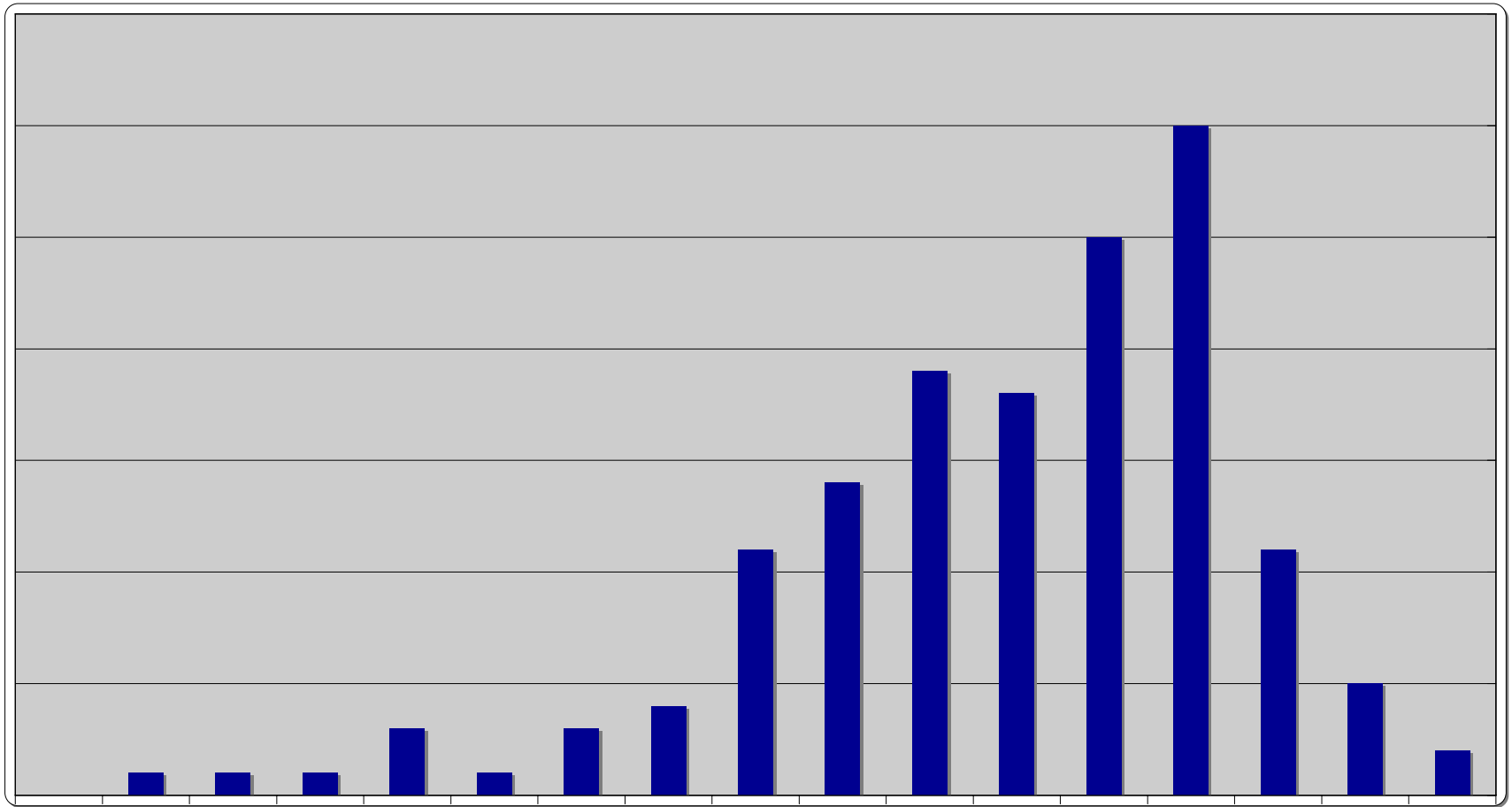


The Gram Stain

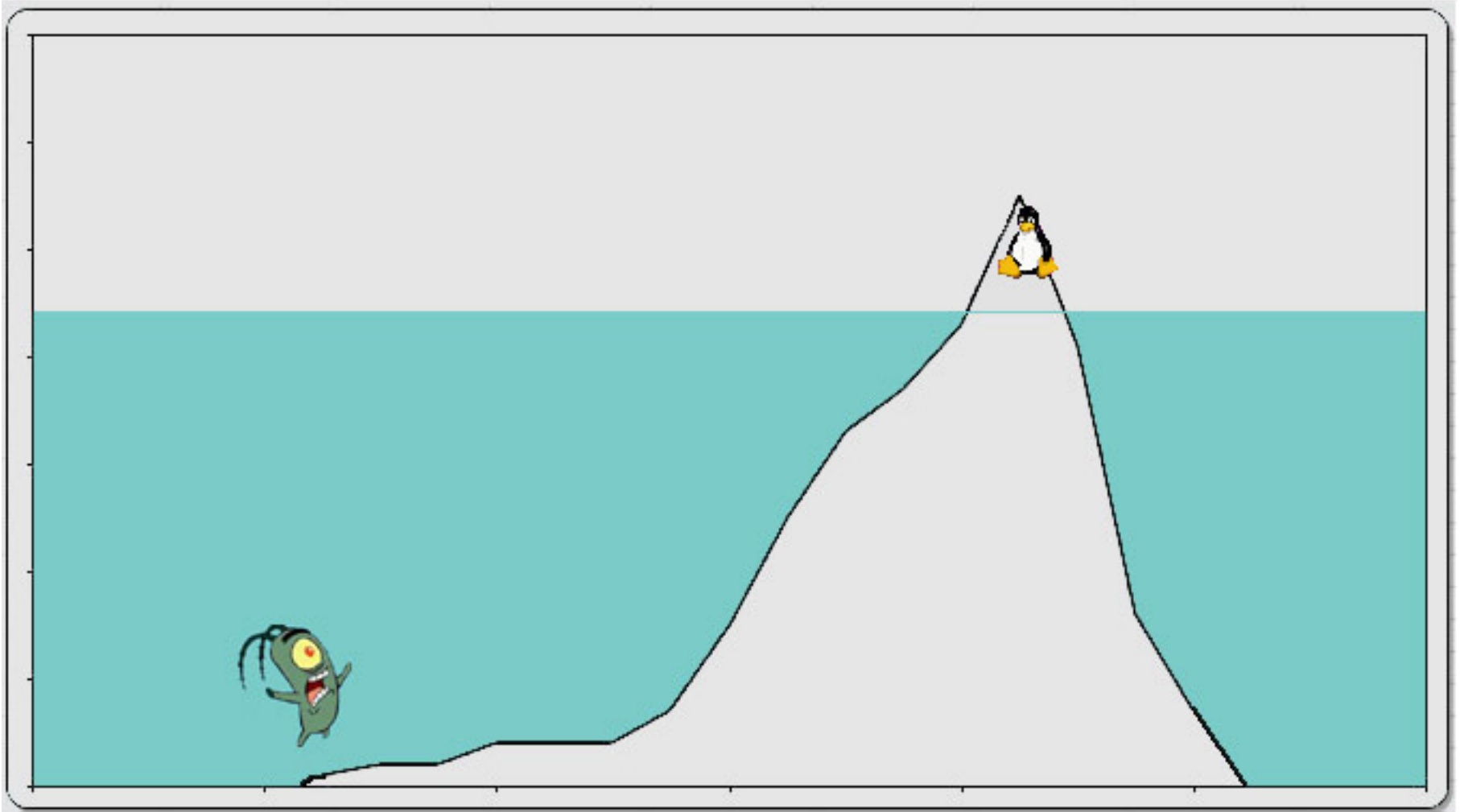
4,517 total



The Long Tail



Let me put it another way...

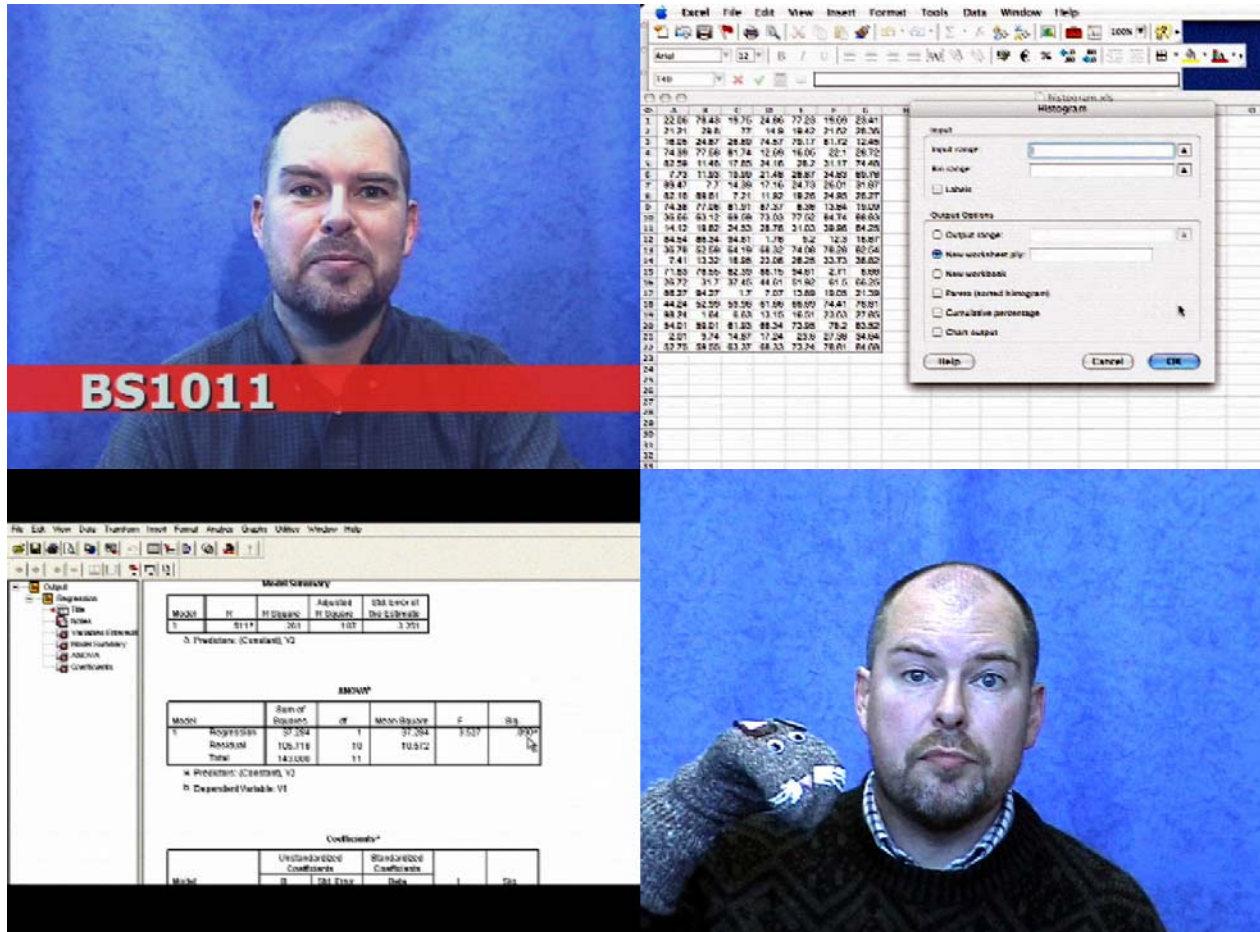


lonelygirl15

The screenshot shows a YouTube video player for the video 'First Blog / Dorkiness Prevails'. The video player shows a young woman with long brown hair speaking into a microphone. Below the player are two identical sets of interaction options: 'Rate this video' (5 stars, 1342 ratings), 'Save to Favorites', 'Add to Groups', 'Share Video', 'Blog Video', and 'Flag as Inappropriate'. To the right of the player, the video statistics are listed: Views: 224062, Comments: 1070, Faves/Reb: 400 times, and Banned: 1. The 'About This Video' section includes the upload date (June 16, 2006), the channel name (lonelygirl15), a description, category (Gossip), tags, URL, and embed code. Below this is the 'Explore More Videos' section with 'Related' videos, including 'First Blog / Dorkiness Prevails #1:35' (220663 views) and several 'First Blog / Dorkiness Prevails #1:11' videos (334 views each). On the far right, there is a 'Director Videos' section with thumbnails for 'Standoff Systematics #495' and 'Official Checks & Trainers #159'.

en.wikipedia.org/wiki/Lonelygirl15

Viral Video Statistics is fun!!! (really)



VLE

A software system designed to help teachers by facilitating the management of virtual courses for their students, especially by helping teachers and learners with course administration.

[\(source\)](#)

PLE

Systems that help learners take control of and manage their own learning. This includes providing support for learners to use their own learning and manage their learning, manage both content and process, and communicate with others in the process of learning.

[\(source\)](#)

CONTROL

LEARNING

VLE



Authentication

([OpenID](#), [Shibboleth](#), [OpenSocial](#) ?)

Convenience (wrapper)

Support

Reliability (?)

Student progress

PLE



Current tools

(video conferencing, social networks, collaborative writing, etc)

Better tools

Personalization

(choice: staff and students)

Cost

Avoids software sedimentation -
small pieces loosely joined

Disintermediation -
cutting out the middleman

([Martin Weller](#))

VLE

Inflexible

Walled Garden

Closed

Control

Excludes

Expensive

(how much does your institution spend on its VLE and what could you buy with that money?)

PLE

Flexibility:

- **Tiny:** limited to a project
- **Elongated:** lifelong
- **Deep:** mental models
- **Infinite:** reflective

Not a content management system

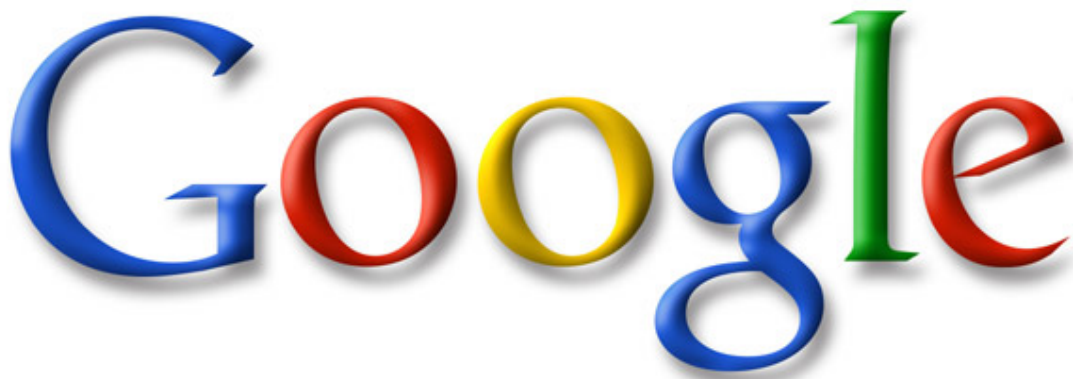
Engagement

Provides context and meaning

Cost

([Tom Haskins](#))

Where do students find information?

The Google logo is displayed in its characteristic multi-colored font: blue 'G', red 'O', yellow 'O', blue 'g', green 'l', and red 'e'.

Google's share of all searches was 64% in March 2007, an increase of 10% versus March 2006 ([ref](#))

[Case study](#): The adventures of Miranda in the brave new world - learning in a Web 2.0 millennium



WIKIPEDIA

How do we manage the long tail?

We don't.

- By embracing a Web 2.0 approach to learning objects, we can allow academic staff to support learners on a much more individual basis through new communication channels.

microbiologybytes.com/AJC