

The logo for e-Health, featuring a stylized blue 'e' with a person icon inside a circle, followed by the word 'Health' in a blue sans-serif font.

eHealth

The word 'Education' in a blue sans-serif font, with a blue horizontal bar above it. The logo is reflected below it.

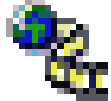
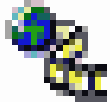

Education

e-Health and Web 2.0:
*Looking to the future with sociable
technologies and social software*

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Agenda

- What is Web 2.0 or the Social Web?
- The Machine is Us/ing Us (video) 
- Web 2.0 is useful for... (some possibilities)
- Geriatric1927 YouTube example (and video) 
- Some definitions/concepts: ratings, ‘wisdom of the crowds’, folksonomies, mashups, etc.
- 3D social networking, virtual worlds and the 3D Web (with part of ‘NMC Campus: Seriously Engaging’ video) 
- Conclusions
- Recommended bibliography

What is Web 2.0 or the Social Web?

- Compared to 'Web 1.0', the traditional, mostly read-only Web we all know, Web 2.0 is the **read-write Web** *par excellence*.
- In Web 1.0 users follow links to content, while in Web 2.0 they can also rate, comment, annotate, edit, create, mix and share content.

What is Web 2.0 or the Social Web?

- Web 2.0, the ‘people-centric social Web’, thus facilitates **social networking**, collaboration and a level of participation beyond that associated with traditional online methods of learning and information delivery.
- Greater levels of democratic participation, agency and choice are possible, where users act **simultaneously as readers and writers**.

BBC NEWS | Programmes | Click | Web 2.0 wave starts to take hold - Windows Internet Explorer

http://news.bbc.co.uk/2/hi/programmes/click_online/6574839.stm

BBC NEWS | Programmes | Click | Web 2.0 wave s...

BBC Home News Sport Radio TV Weather Languages Search

Low Graphics version | Accessibility help Help

>Click

The BBC's flagship technology programme

BBC NEWS

Last Updated: Friday, 20 April 2007, 16:49 GMT 17:49 UK

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Web 2.0 wave starts to take hold

About the programme

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Meet the team



By Ian Hardy

Click's North America technology correspondent

Whether you use your computer for work or fun, the programs you use generally have one thing in common - they are stored on your PC. Increasingly though, that software is moving online.



WATCH NOW

The Web browser as the central business and productivity tool, much like a Swiss army knife

The move to put more and more of those familiar programs on to the web has been happening for a while but its latest incarnation has won the name of Web 2.0.

What is it - the definition is imprecise at best, but it loosely describes a category of websites that are known for interactivity, collaboration and community.

Developments in underlying web technology make this all possible and mean that what the sites can do is very new. Simplicity is often the key. Often it is an online application that does one thing and does it well.



Google has made a variety of programs available online

BBC News 24 - Sat 11:30, 20:30, Sun 04:30, 07:35, 15:30, Mon 00:30

A short version during BBC Breakfast is shown on:

BBC News 24 & BBC One - Sat 06:45

TAKE PART

- Have your say
- Get on the programme

SEE ALSO

- Microsoft goes on web offensive 16 Nov 06 | Technology
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RELATED INTERNET LINKS

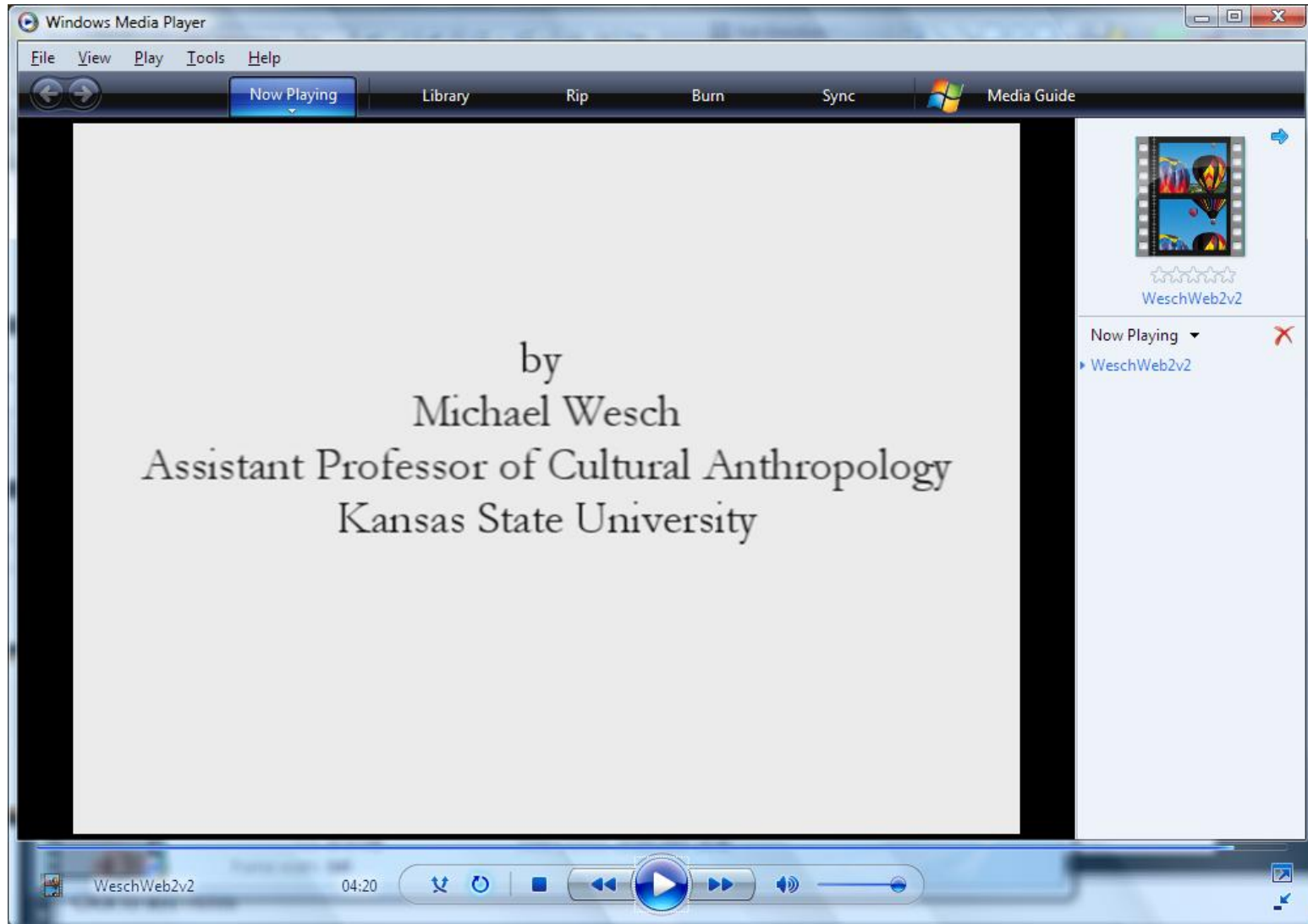
- CNET
- Remember The Milk



Web 2.0 (applications): More Than Just a Buzzword!

Video station

The Machine is Us/ing Us



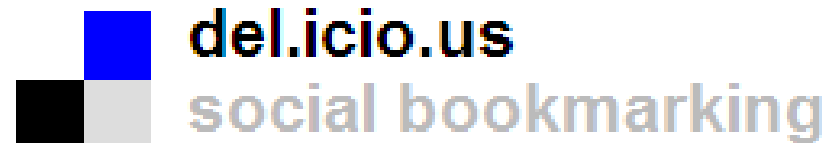
<http://www.youtube.com/watch?v=6gmP4nk0EOE>

Web 2.0 is useful for...

- People who use multiple computers in various locations (e.g., the <http://del.icio.us/> **social bookmarking** service, and **collaborative document authoring and editing** in Google Docs <http://docs.google.com/> and in **wikis** like AskDrWiki.com <http://www.askdrwiki.com/>);
- **Sharing** resources with others (e.g., <http://www.SlideShare.net/> and <http://www.flickr.com/> services);

Web 2.0 is useful for...

- **Discovery** of items (Web links, papers, audio/MP3 clips (podcasts), videos, presentations, photos, etc.) similar to your current selections; and
- **Building communities** and discovering like-minded people and groups (**social networking** services like <http://myspace.com/>).



[Sermo.com](http://sermo.com/): 'The Wisdom of the Medical Crowd' - a social networking site for physicians

Geriatric1927 YouTube example

- YouTube <http://youtube.com/> is not just a video file repository for online dumping and sharing of (large and bandwidth-intensive) video files that would otherwise be difficult to host and serve to a wide audience, but is also a true Web 2.0 **video community**, where people can meet and discover videos based on interests they have in common, and where they can even **communicate with each other using asynchronous video (video blogs)** and ‘broadcast themselves’.



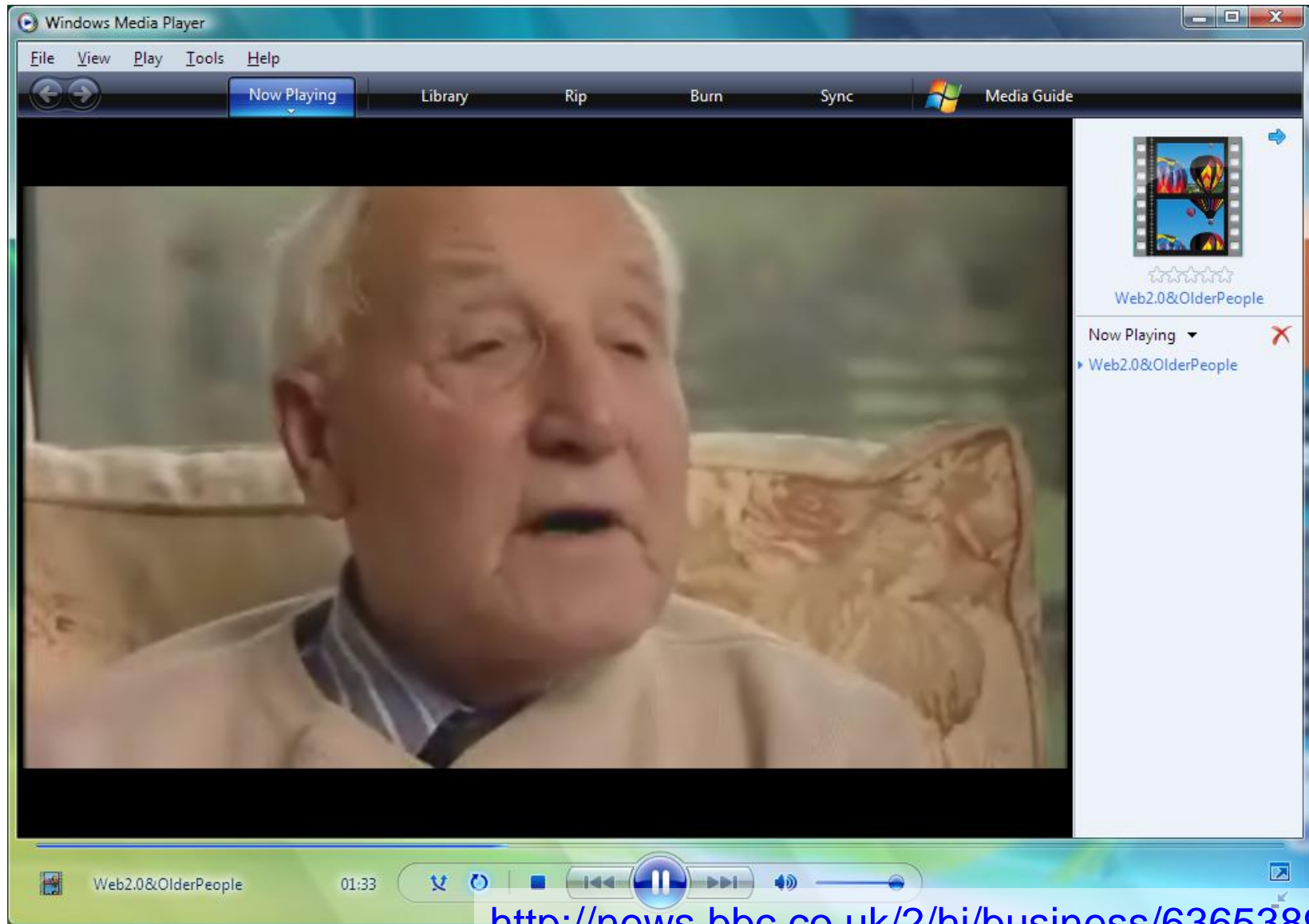
Geriatric1927 YouTube example

- One such YouTube broadcaster is **79-year-old** Peter Oakley known by the nickname **Geriatric1927**.
- He used a webcam to shoot his videos, and posted them on YouTube, where they have been **seen over five million times**.
- Geriatric1927 made his YouTube debut in August 2006 with a series of videos about his life entitled 'Telling It All'.

See: <http://en.wikipedia.org/wiki/Geriatric1927>


Video station

BBC interview with Geriatric1927



<http://news.bbc.co.uk/2/hi/business/6365389.stm>

Some definitions/concepts

- **Ratings** (voting): are a feature of Web 2.0, be it users' ratings of content, services, or other users. Ratings reflect the '**wisdom of the crowds**'* and their experience regarding the rated subject/item (e.g.,  <http://patientopinion.org.uk/>).
- **Folksonomies**: collaboratively-/user-generated free-form metadata **tags** that categorise Web 2.0 content. Can be used to discover similar(ly-tagged) items.

* Or '**collective intelligence**'

Some definitions/concepts

- **Remixing/repurposing** of content: content viewed in one online location but originating elsewhere.
- **RSS** XML-based feeds and **mashups** are the main buzzwords here.
- Issues include **copyrights** and **authorship**.





You aren't signed in Sign In Help

Home Learn More Sign Up! Explore

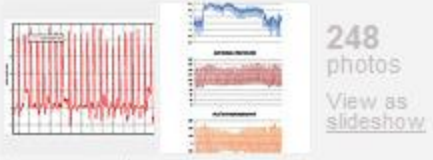
Search everyone's photos Search

AORTIC BLOOD FLOW VARIATIONS DURING MECHANICAL VENTILATION

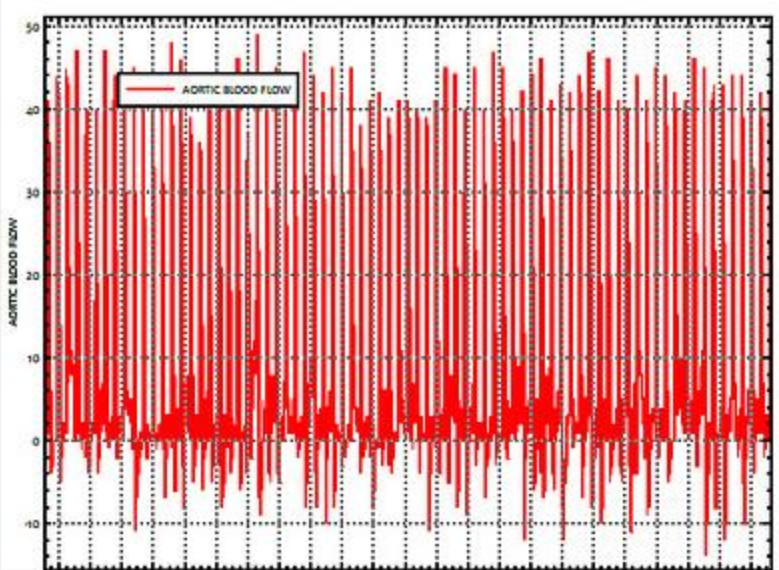
Uploaded on March 25, 2007 by [M. Ignacio Monge](#)

M. Ignacio Monge's photostream

Medical Imaging Gallery (Pool)



ALL SIZES



Streaming data plotted using KST program (<http://kst.kde.org>).

Tags

- hemosonic
- aortic
- blood
- flow
- hemodynamic
- esophageal
- doppler
- cardiac
- output
- monitoring

Additional information

Would you like to comment?

Some rights reserved.

'Social' search engines replace computer results with human recommendations

Updated 7/9/2006 4:38 PM ET

E-mail | Save | Print | **RSS**

By Jeffrey McMurray, Associated Press

Google Co-op

<http://www.google.com/coop/>

for one introduces social recommendations and tagging (the 'wisdom of the crowds') to the search process for better search results.

Yahoo! Pipes

<http://pipes.yahoo.com/> is an interactive feed aggregator and manipulator. Using Pipes, you can create feeds that are more powerful, useful and relevant.

Pipes: del.icio.us flavored web search - Windows Internet Explorer

http://pipes.yahoo.com/pipes/pipe.info?query=second+life&username=joshua&_id=5BiciiOz...

del.icio.us flavored web search

Run this Pipe Clone

home my pipes browse pipes create pipe discuss documentation

Search for Pipes...

Pipes is Hiring!

how this pipe was made

view/edit pipe

ACS :: Second Life Relay For Life

Configure This Pipe

Query: second life

Del.icio.us username: joshua

Run Pipe

Pipe Preview

Article - Cream of London Business Sector

Ridder/Tribune...

Excerpt: "If ever there was a snapshot of com Awards. These were the second annual set o

Second Life: Your World. Your Imagination.

Official site for the online game where the wo

Second Life | What is Second Life?

Second Life is a 3-D virtual world entirely built Virtual World 2007 ...

Second Life - Wikipedia, the free encyclopedia

Article discussing the culture, economy, avat

Reuters/Second Life

Offers news, videos about first and second life Linden limits new Second Life signups ...

Sources

- Fetch Feed
- Fetch Data
- Flickr
- Google Base
- Yahoo! Local
- Yahoo! Search

User inputs

Operators

- URL
- String
- Date
- My pipes

URLBuilder

Base: http://del.icio.us/rss

- Path elements
- Query parameters

Fetch Feed

URL: url

For Each: Replace

Replace each item in input feed with all items output from

Yahoo! Search

Search for: text

Site restriction: title

Unique

Filter non-unique items based on: title

Del.icio.us username

Name: username

Prompt: Del.icio.us username

Position: 1

Default: joshua

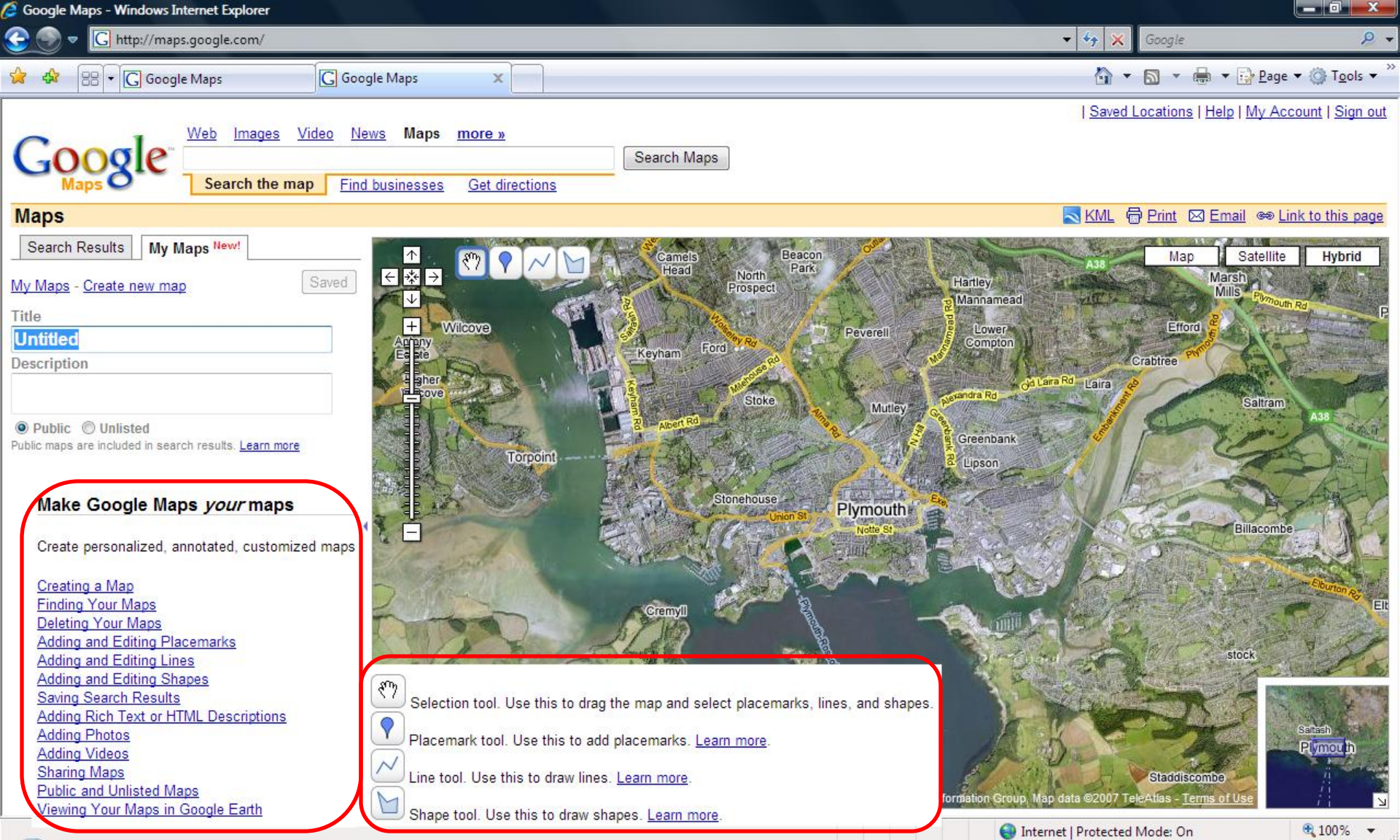
Debug: pasha

Query (text)

Name: query

Prompt: Query





Position: 2



Make Google Maps *your* maps

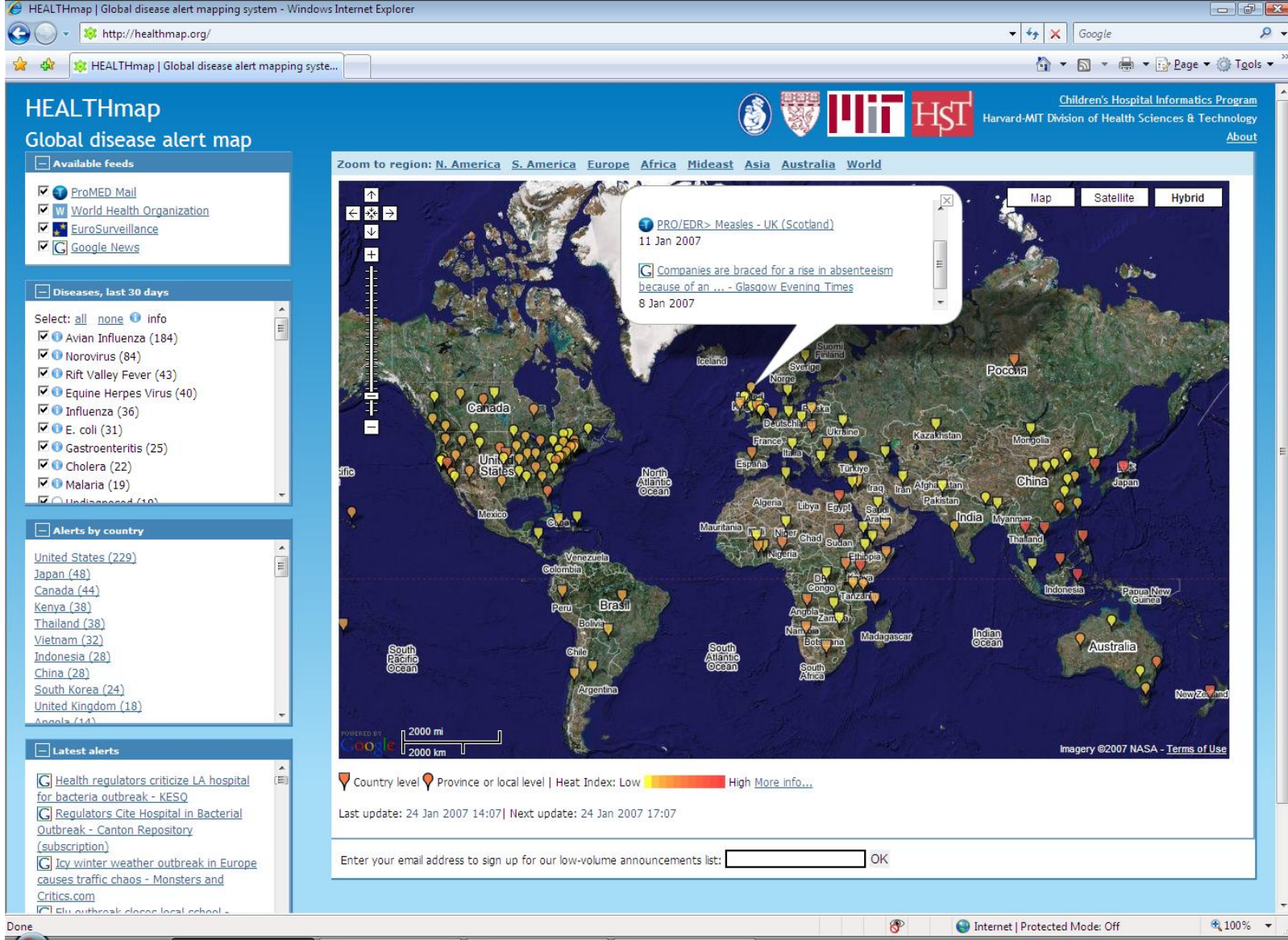
Create personalized, annotated, customized maps

- [Creating a Map](#)
- [Finding Your Maps](#)
- [Deleting Your Maps](#)
- [Adding and Editing Placemarks](#)
- [Adding and Editing Lines](#)
- [Adding and Editing Shapes](#)
- [Saving Search Results](#)
- [Adding Rich Text or HTML Descriptions](#)
- [Adding Photos](#)
- [Adding Videos](#)
- [Sharing Maps](#)
- [Public and Unlisted Maps](#)
- [Viewing Your Maps in Google Earth](#)

-  Selection tool. Use this to drag the map and select placemarks, lines, and shapes.
-  Placemark tool. Use this to add placemarks. [Learn more](#).
-  Line tool. Use this to draw lines. [Learn more](#).
-  Shape tool. Use this to draw shapes. [Learn more](#).

- New from Google: **create and share map mashups with just your mouse** (no coding)

<http://maps.google.com/help/maps/userguide/index.html>



Screenshot of HEALTHmap (<http://healthmap.org/>), a mapping **mashup** service that overlays health-related news links from multiple sources on maps sourced from Google Maps. (A good example of Web 2.0 content **syndication** – *cf.* **stickiness** of Web 1.0 content, which stays on originating sites.)

More on mashups...

- Mapping mashups could also prove useful in the fields of medical geography, tropical medicine, and parasitology, among others; for example, to communicate and publish geo-tagged field work results and photo/video collections from tropical countries.
- Users can even overlay on the same maps their own position on Earth, and also view the position of their colleagues (or clinical cases/surveyed households) in **real-time** over the Web, if they have a USB GPS mouse receiver or similar connected to their laptop.



A 'Google Books and Maps' mashup

GPS-enabled mobile phones (GPS-enabled cameras and other gadgets also exist) will enable millions of people to **collectively annotate the Earth** in ways never done before!*

* See <http://tinyurl.com/yojr6h> and <http://tinyurl.com/362zjx>



A simple USB GPS mouse receiver (~£40)

Some definitions/concepts

- **Social networks** are online social structures made of nodes, which are individuals linked together through **common interests or some common theme**.
- Individuals belonging to a social network usually post an online **profile** detailing their interests. Using these profiles, the social network can then facilitate the discovery of **like-minded people**, and support their **online meetings and conversations** with each other (IM, chatting, blog posts, etc.).

Some definitions/concepts

- Three-dimensional (3D) virtual worlds like **Second Life** <http://secondlife.com/> and **There.com** can also be considered as 3D social networks, where people can collaboratively create and edit objects in the virtual world, besides meeting each other and interacting with existing objects.
- Issues include Internet addiction, gambling and pornography, trust/identity/privacy issues, and potential 3D navigation/user interface issues with older people.



Your World. Your Imagination.



The 3D Web is more natural and engaging!

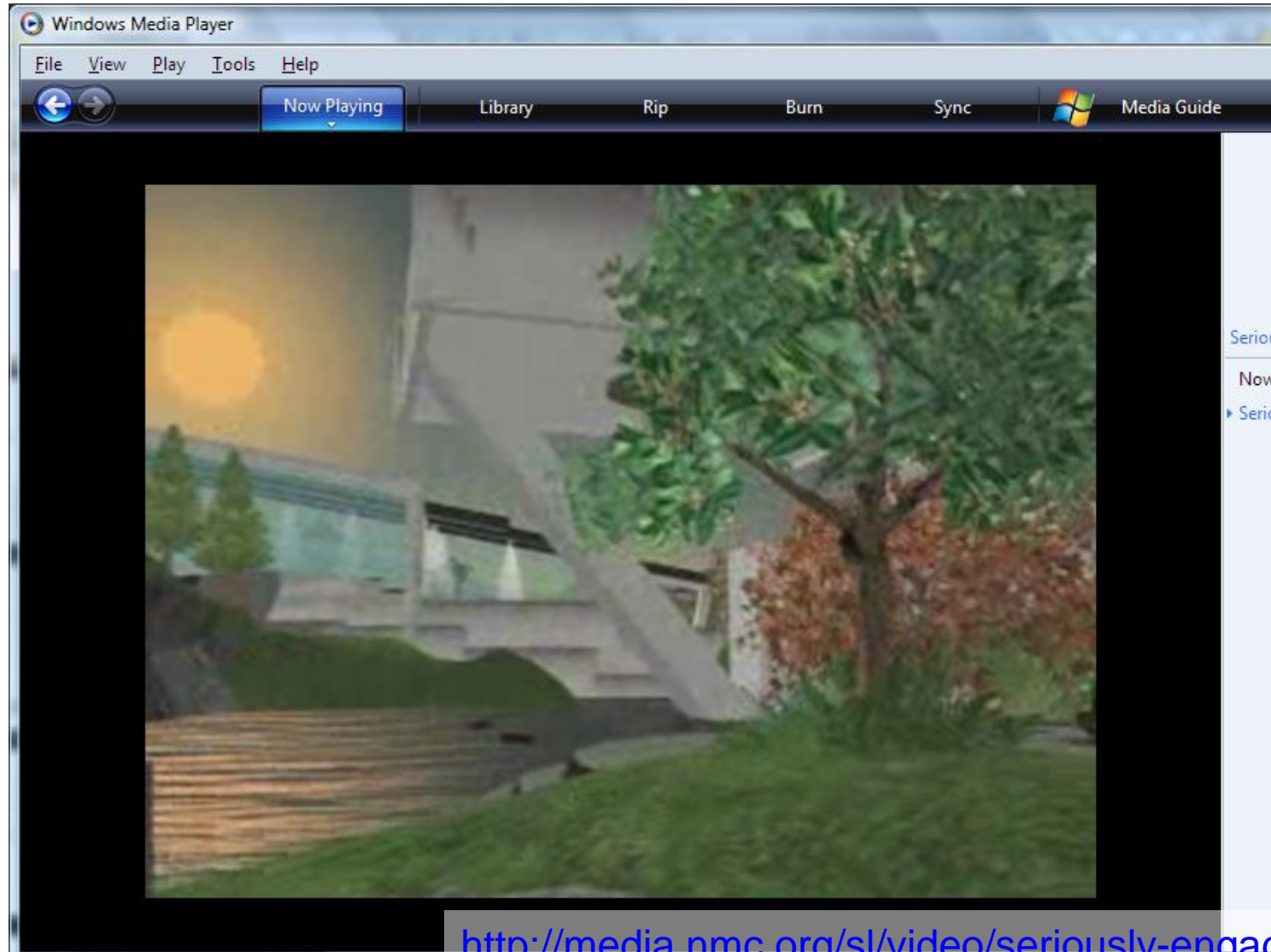


The US CDC place in **Second Life**. Inset: Two persons communicating with each other through their **avatars**. Second Life will have **voice chat** capabilities later this year (2007).



Video station

Part of 'NMC Campus: Seriously Engaging' clip



<http://media.nmc.org/sl/video/seriously-engaging.wmv>

Virtual worlds – The 3D Web

- Offer novel, intuitive ways to:
 - **navigate** streaming audio/video/TV collections;
 - **browse** information spaces/document collections/virtual libraries (see, for example, Second Life Medical and Consumer Health Libraries in Healthinfo Island);
 - **relax, visit new places**, and sample new cultures (virtual tourism, e.g., visit virtual Morocco in Second Life, or virtual Egypt in There.com);
 - **play** multi-player games in the virtual world;

In virtual worlds, you can stand/sit, move and walk through, **fly**/swim, ride virtual vehicles, and get **teleported** to various places and spaces.

Virtual worlds – The 3D Web

- Offer novel, intuitive ways to (cont'd):
 - **buy, sell and advertise** virtual and real-life goods and services;
 - **develop social (and even clinical) skills/socialise** and interact with other people via customisable, realistic, 3D, fully-textured and animated **avatars** (3D social networking);
 - attend and **participate in live events** like SL lectures, conferences, festivals, and concerts; and
 - **build communities**, including learners' communities, among many other things.



= SL + Moodle <http://sloodle.com/>

The possibilities are virtually **endless...**

For example, turning **Google Earth** into a virtual (“real”? 🤖 🧠)
social world *a la* **Second Life**!



<http://slfuturesalon.blogspot.com/second-life-future-salon/2005/09/brave-new-virtu.html>

<http://www.youtube.com/watch?v=L4CbjeSTV78>



A genetics lab/museum and learning area, **The Gene Pool**, in SL's Immaculate

Visit: <http://slurl.com/secondlife/Immaculate/215/207/21/>

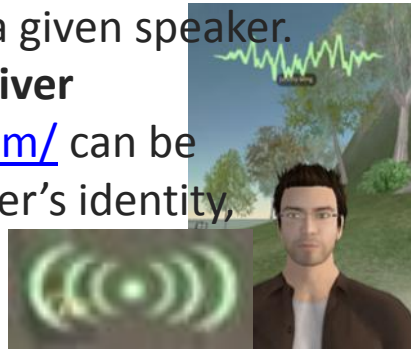
Read more: <http://slnn.com/article/genepool/>



The possibilities are virtually **endless...**

New **interaction/navigation interfaces** in virtual worlds

The latest Second Life client is voice-enabled, featuring **3D-mapped voice and 'audio focusing'** capabilities. Walk around someone who is speaking to you in SL to hear the voice move around in 3D, based on where you are relative to that avatar. If you turn toward someone and move closer, for example, their voice will be louder. As you move away, their voices will become softer until you won't be able to hear them at all. If you speak while walking around someone else, they too will hear your voice tracking your position. Also, each speaker's volume is attenuated/boosted by their distance from your camera position. Second Life camera controls can thus be used to create a momentary 'audio focus' on a given speaker. A **voice changing software driver** <http://www.screamingbee.com/> can be optionally used to hide speaker's identity, or just for some added fun!



Wii and Second Life are expected to very soon merge in different ways, and there will be many **more exciting opportunities, especially given the suitability of Wii's 'motion-sensitive controller' (Wiimote) for use by older people .**

The New York Times
nytimes.com

March 30, 2007

Video Games Conquer Another World: Retirees



Software

Wii Invades Retirement Home

Marcus Yam (Blog) - February 22, 2007 7:44 AM

Print E-mail del.icio.us Digg 47 comment(s) - last by oTAL.. on Mar 16 at 10:23 AM

Nintendo console has officially gone geriatric

Nintendo is off to an incredible start with the Wii. With continued demand and leading sales even after the holiday season, Nintendo couldn't be happier with the system's early success. The Wii's innovative controller design has opened up video gaming to a previously untapped market—non-gamers.

The marketing minds behind Nintendo looked beyond the traditional gamer mediums and advertised its innovations at targets as far from gaming as you can imagine, such as



Wii goes where no video game has gone before - Image courtesy Chicago Tribune

Conclusions

- Social software has the potential to advance online learning and knowledge databases beyond traditional methods of delivery, toward a user-centred form of information management and retrieval through the collaborative creation and indexing (tagging) of digital knowledge repositories.
- Web 2.0 offers great potential to creative medical and health educators, but many of the associated possibilities still need to be fully identified, explored in various settings/scenarios, and carefully researched and evaluated to document best practices and pitfalls to avoid, before they can be used in daily teaching and learning activities.

Conclusions

- The more popular Web 2.0 applications in common use today in education like wikis, blogs, podcasts, document sharing services, and RSS feeds, are but the tip of the social software iceberg.
- There are still many exciting sociable technologies and usage scenarios for educators to explore, like mapping mashups and virtual worlds.
- Mashups are an excellent example of remixing, reusing and repurposing information in Web 2.0 to produce value-added content.

Conclusions

- Virtual worlds like Second Life are *not mere* three-dimensional multiplayer games. The immersive, rich experience that such environments offer combines many of the features of Web 2.0 like instant messaging/voice chat, profiles, users' ratings, and social networking, and a unique form of online social interaction that involves sharing various objects and creative collaboration on building and running places and services in the virtual world (user-generated content).
- Virtual medical/health libraries, access to remote librarians, and other medical and health-related educational applications through such worlds are not remote possibilities.
- For some current health-related educational examples, see [http://www.simteach.com/wiki/index.php?title=Top 20 Educational Locations in Second Life](http://www.simteach.com/wiki/index.php?title=Top_20_Educational_Locations_in_Second_Life) and Second Life - Heart Murmur Sim video <http://www.youtube.com/watch?v=xJY2Iwbzop4>

Recommended bibliography

- Kamel Boulos MN, Wheeler S. **The emerging Web 2.0 social software: an enabling suite of sociable technologies in health and healthcare education.** *Health Information and Libraries Journal* 2007 Mar;24(1):2-23 <URL: <http://www.blackwell-synergy.com/doi/abs/10.1111/j.1471-1842.2007.00701.x>>
- Kamel Boulos MN, Maramba I, Wheeler S. **Wikis, blogs and podcasts: a new generation of Web-based tools for virtual collaborative clinical practice and education.** *BMC Medical Education* 2006, 6:41 (15Aug2006)
<URL: <http://www.biomedcentral.com/content/pdf/1472-6920-6-41.pdf>>

Thanks!

- You may download an electronic copy of this PowerPoint at <http://healthcybermap.org/sl.htm>



Your World. Your Imagination.