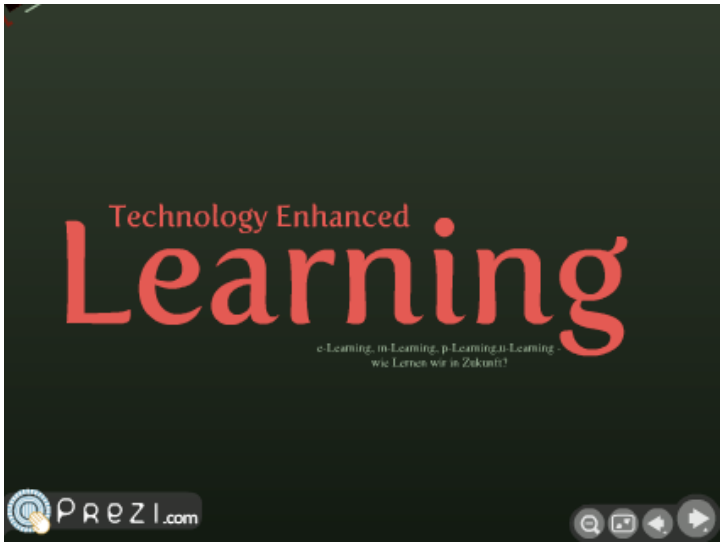
INHALTSVERZEICHNIS

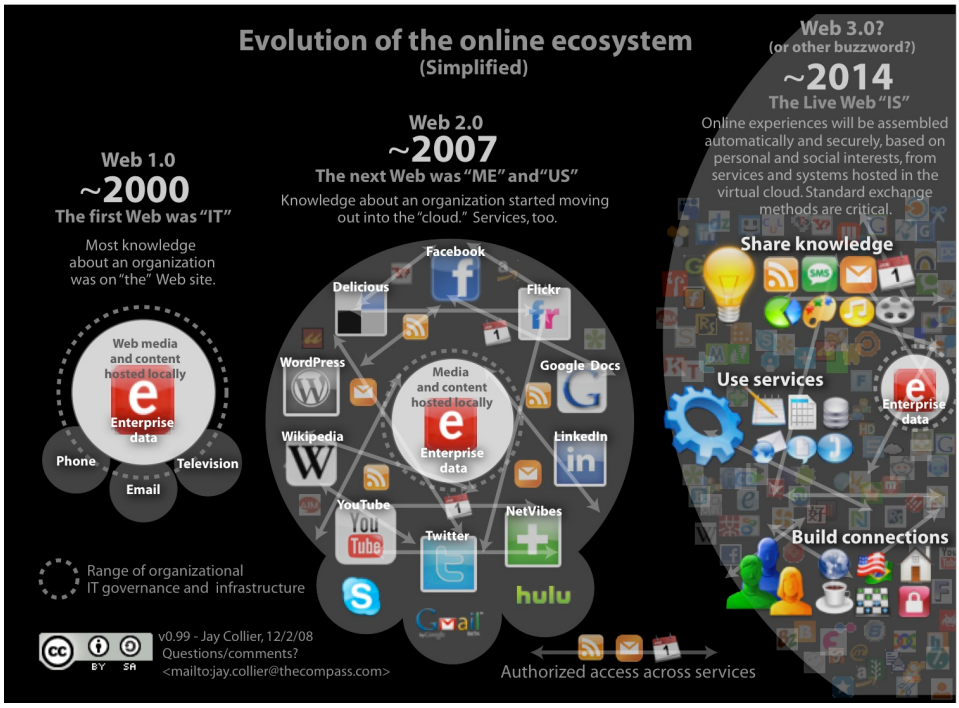
[presentation] Future of Learning

[presentation] e-Learning, m-Learning, p-Learning, u-Leraning - Wie lernen wir morgen?



http://elearningblog.tugraz.at/archives/2210

Evolution of the Online Ecosystem



Evoluton of the Online Ecosystem

Is Your University Ready For the Ne(x)t-Generation?

Is Your University Ready For the Ne(x)t-Generation?

View more **presentations** from **Martin Ebner**.

[presentation] Digital Natives

Digital Natives

[video] Evolution of mobile phones

[infrastructure] iPhone - the revolution of the mobile market

AdMob Mobile Metrics stores and analyzes data from every ad request, impression, and click and uses this information to optimize ad matching.

Report: February 2009

Top Worldwide Smartphones

Rank	Handset Models		Share of Smart Phone Traffic
1	Apple	iPhone	33.0%
2	Nokia	N70	7.1%
3	RIM	BlackBerry 8300	4.2%
4	Nokia	N80	3.5%
5	Nokia	N73	3.4%
6	Nokia	N95	3.3%
7	RIM	BlackBerry 8100	3.2%
8	Nokia	6600	2.8%
9	Palm	Centro	2.6%
10	Nokia	6120c	2.5%

Top US Smartphones

Rank	Handset Models		Share of Smart Phone Traffic
1	Apple	iPhone	49.5%
2	RIM	BlackBerry 8300	9.1%
3	RIM	BlackBerry 8100	6.9%
4	Palm	Centro	6.0%
5	HTC	Dream (G1)	5.2%
6	Danger	Sidekick II	3.4%
7	RIM	BlackBerry 9530	1.7%
8	Samsung	BlackJack II	1.6%
9	HTC	Touch	1.0%
10	Motorola	Q9C	0.8%

Worldwide Operating System Share

Rank	Manufacturer	Feb 09	Aug 08	6 mon Change
1	Symbian	43%	64%	-21%
2	iPhone OS	33%	4%	29%
3	RIM	10%	11%	-1%
4	Windows Mobile	7%	13%	-6%
5	Palm	3%	6%	-3%

US Operating System Share

Rank	Manufacturer	Feb 09	Aug 08	6 mon Change
1	iPhone OS	50%	10%	40%
2	RIM	21%	32%	-11%
3	Windows Mobile	13%	30%	-17%
4	Palm	7%	19%	-12%
5	Android	5%	--	5%

[infrastructure] iPhone - the revolution of the mobile market

Report (**January 2009**, **February 2009**) Outcomes:

- Smartphones generated 33% of worldwide traffic in February 2009, up from 26% six months ago.
- The Symbian OS is still number one with 43% share and six of the top 10 handsets. Windows Mobile and Palm each lost half their worldwide share over last six months.
- The iPhone generates 33% of all smartphone traffic worldwide and 50% in the US. Although RIM lost share in the US due to the rapid growth of the iPhone, the overall number of requests from RIM devices increased 48% in the last six months.
- The Top 5 US smartphones - Apple iPhone, BlackBerry Curve, BlackBery Pearl, Palm Centro, and HTC Dream (G1) - generated 77% of traffic in February.
- Android has captured 5% of the US smartphone market just three months after launch and is now the #1 device on T-Mobile
- Traffic from Western Europe increased 132% in the last 12 months to 550 million requests in January 2009. Growth was strong across France, Germany, Italy, and Spain.
- As new publishers have entered the AdMob network, requests have become more evenly distributed throughout Western Europe. The UK is now responsible for 46% of requests, down from 64% a year ago.
- The iPhone is now the number one device by usage in Western Europe with 21% share of total requests. This strong share reflects dramatically higher mobile Web and application usage by consumers and AdMob's strength on this device.

Digital Natives - Mobile Natives

Marc Prensky wrote in 2001

> "Our students have changed radically. Today's students are no longer the people our educational system was desinged to teach"

and addressed to the increasing digital world. Furthermore he defined

> "As Digital Immigrants learn - like all immigrants, some better than others - to adapt to their environment, they always retain, to some degree, their "accent", that is, their foot in the past."

Oblinger (Oblinger, 2005) are talking about some different habits of this generation:

> "they search online first, only parts of them use traditional forms like libraries. Their primary communication tool is the internet via MSN or Instant Messaging. They meet each other in social networks, they are blogging, creating online content, sharing files and pictures and so on. They are online socialised: multitasking, time shifting and zapping is usual to them."

Prensky, M. (2001) Digital Natives, Digital Immigrants, On the Horizon, 9(5), p. 1-6

Oblinger, J.L. (2005) Is it age for IT: First Steps Toward Understanding the Net Generation, in D.D. Oblinger & J. L. Oblinger (Ed.), Educating the Net Generation, p. 2.1-1.5

Digital Natvies II - Mobile Natives

According Oblinger (Oblinger, 2005) among the differences of Digital Natvies / Digital Immigrants are their:

- Ability to read visual images
- Visual-spatial skills
- Inductive discovery
- Attentional deployment
- Fast response time

Green & Hannon (Grenn & Hannon, 2007) recognized "that the use of digital technology has been completely normalised by this generation and it is now fully integrated into their daily lives. The majority of young people simple use new media as tools to make their lives eaiser, strengthening their existing friendship networks rather than widening them."

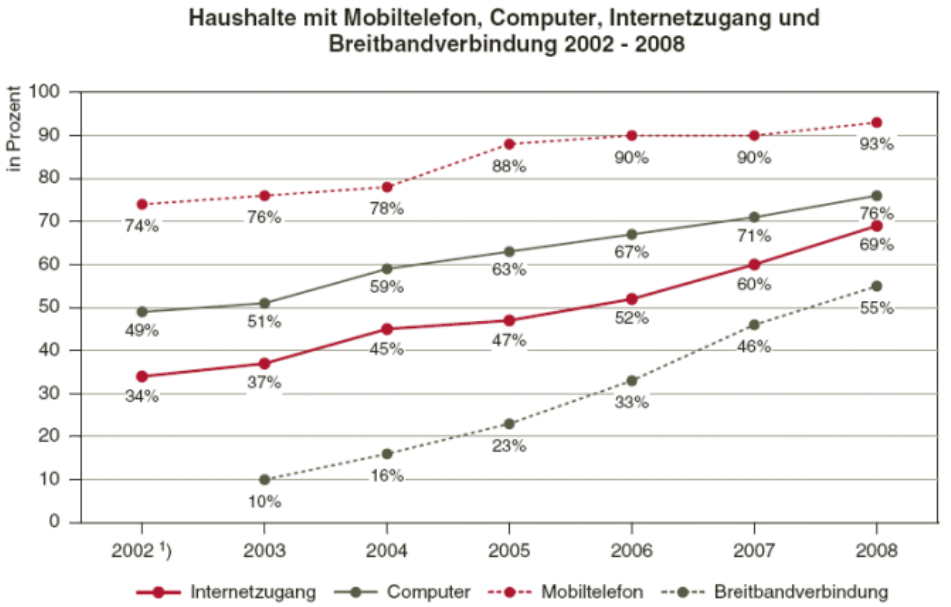
Oblinger and Oblinger (2005) constitute three crucial factors in socieites of the future:

- Multimodal communcation structure
- Culture of "do-it-yourself"
- Culture of choice

Oblinger, J.L. (2005) Is it age for IT: First Steps Toward Understanding the Net Generation, in D.D. Oblinger & J. L. Oblinger (Ed.), Educating the Net Generation, p. 2.1-1.5

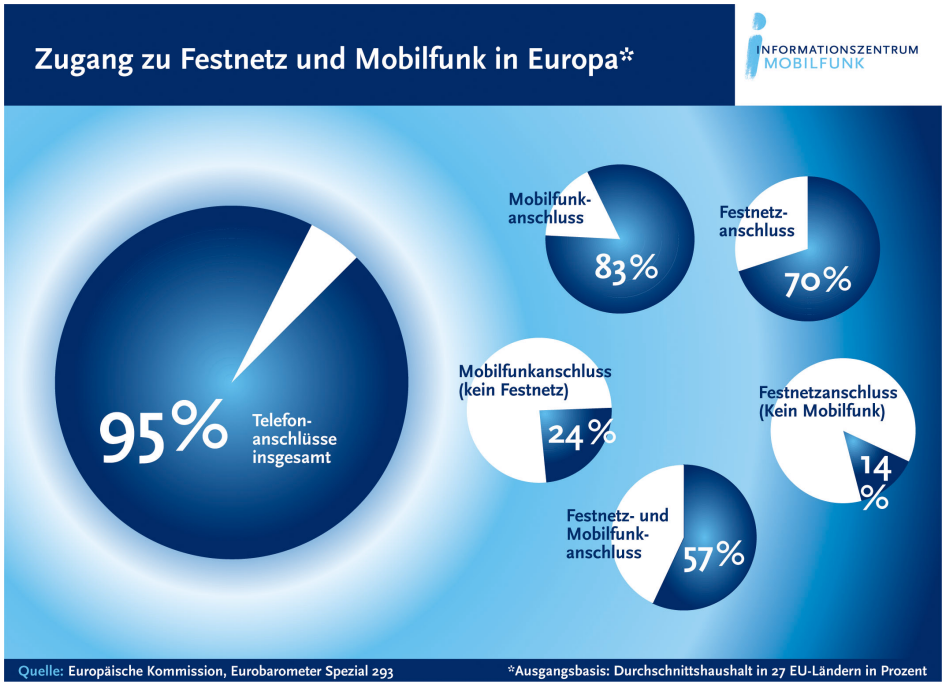
Green, H. & Hannon, C. (2007), Their space: Education for a digtial generation, London: DEMOS. Retrieved from: **http://www.demos.co.uk/files/Their%20space%20-%20web.pdf** (last visited June 2009)

How common is broadband yet?



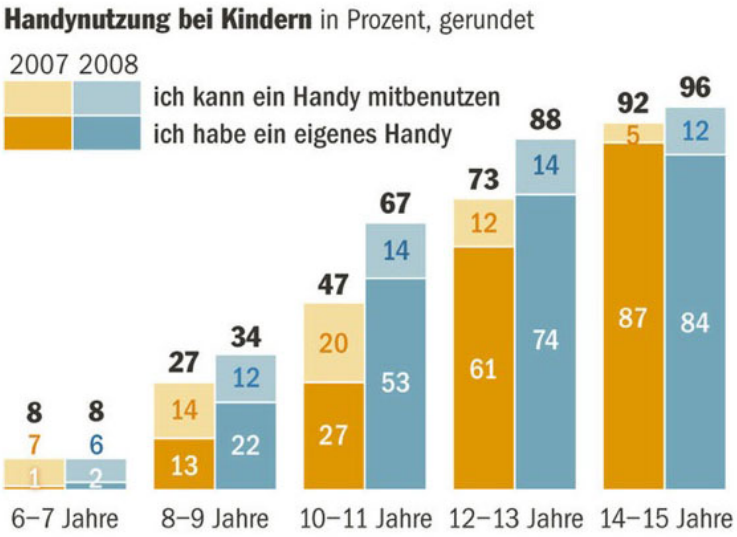
Q: STATISTIK AUSTRIA, Europäische Erhebung über den IKT-Einsatz in Haushalten 2008. - Nur Haushalte mit mindestens einem Haushaltsmitglied im Alter von 16 bis 74 Jahren. Erstellt am: 27.06.2008.
1) Angaben zu Breitbandverbindung nicht verfügbar.

Mobile or landline?



Children towards a mobile generation?

Mobile phones ownership of the youth



http://www.focus.de/digital/handy/mobilfunk-handy-in-kinderhand_aid_313166.html (last visited June 2009)

Mobile phones at school

Survey conducted by **Graz University of Technology** in spring 2009 at 6 usual undergraduate schools (**n=1130**).

Questionnaire:

My mobile phone:

□ I own following mobile phone:

Producer (e.g. Nokia, Sony Ericsson, ...):_____

Model (e.g. 5320, W880i,...):_____

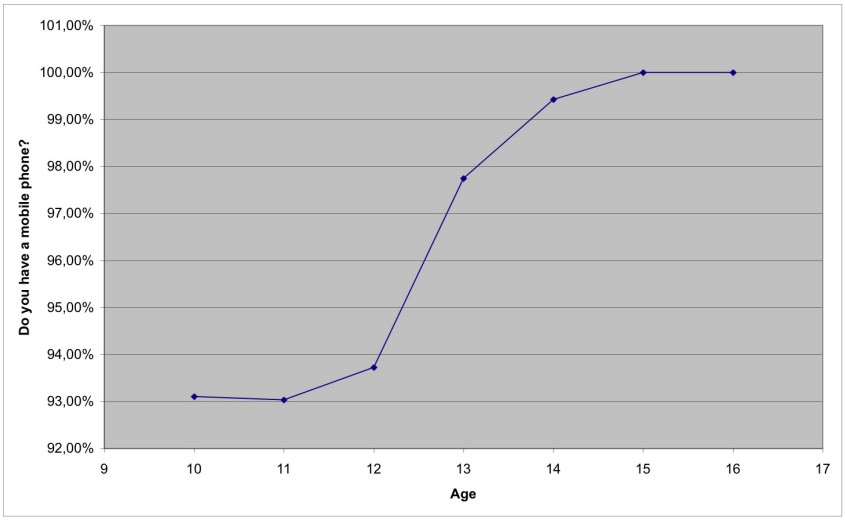
Mobile tariff:_____

□ I do not have a mobile phone

I use my mobile phone for:

	never	rarely	sometimes	frequently
• SMS	□	□	□	□
• Photographing/filming	□	□	□	□
• Surfing the internet	□	□	□	□
• Checking e-mails	□	□	□	□

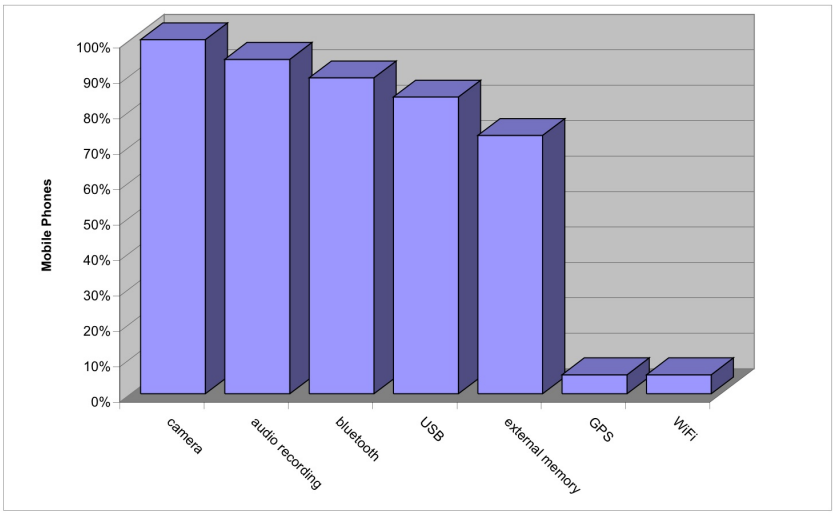
Do you own a mobile phone?



In average 95.8% of **1130** school children owned a mobile phone according to the survey of TU Graz / 2009

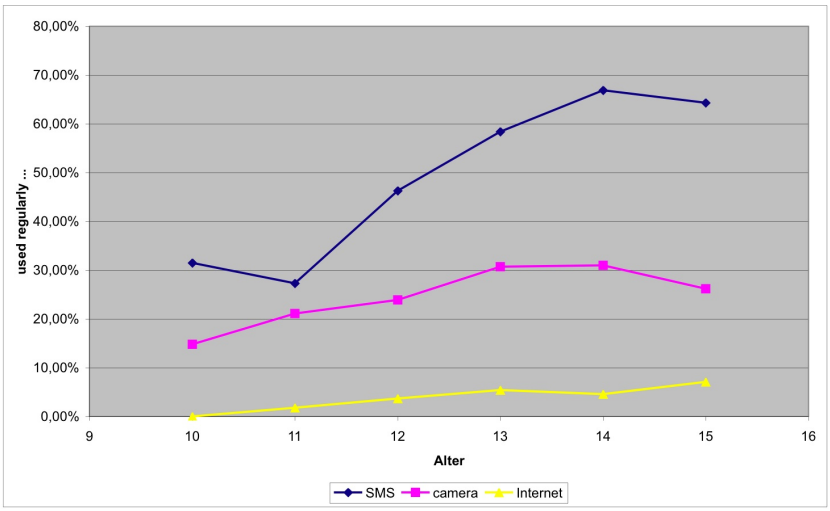
Compare: **Media Usage of children and teenagers (Source: ORF - in german)**

Your mobile phone allows ...



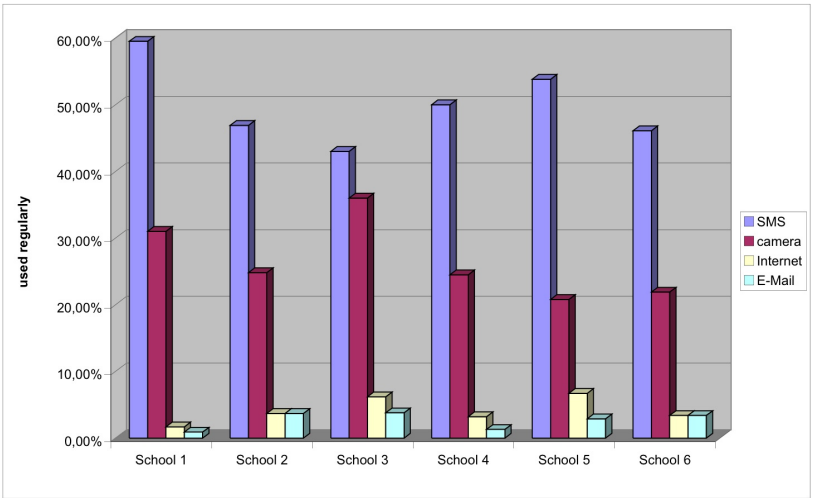
According to the survey of **TU Graz / 2009**: What would you be able to do with your mobile phone?

What do you use on a regular basis?



According to the survey of **TU Graz / 2009**: What do you use regularly?

Is there a difference between schools?



According to the survey of **TU Graz / 2009**: Is there a significant difference in schools?

The gap on m-Learning

According to the survey of TU Graz / 2009 **1130** school children were asked about their mobile phones they having in their pockets. Quite amazing was the amaount of devices and also their possibilities. One question aims to investigat how children see the future and if they would like to use the mobile phone for learning purposes.

"**81,3 %** would like to use mobile phones for learning purposes"

The same survey was given to their teachers. 100% of asked teachers (**n=20**) own a mobile phone, only 55% (n=11) were able to provide us more details about their devices. Theses 11 lectures juged their cell phone following:

- 2 said it is simply old
- 4 have a camera on board
- 5 (25%) were comparable to the majority of the children

The use of other possibillities like sending SMS or taking pictures is moreless not part of their daily routines. Therefore of course it is also not very estonishable, that only 25% of teachers can imagine to use mobile phones for learning purposes.

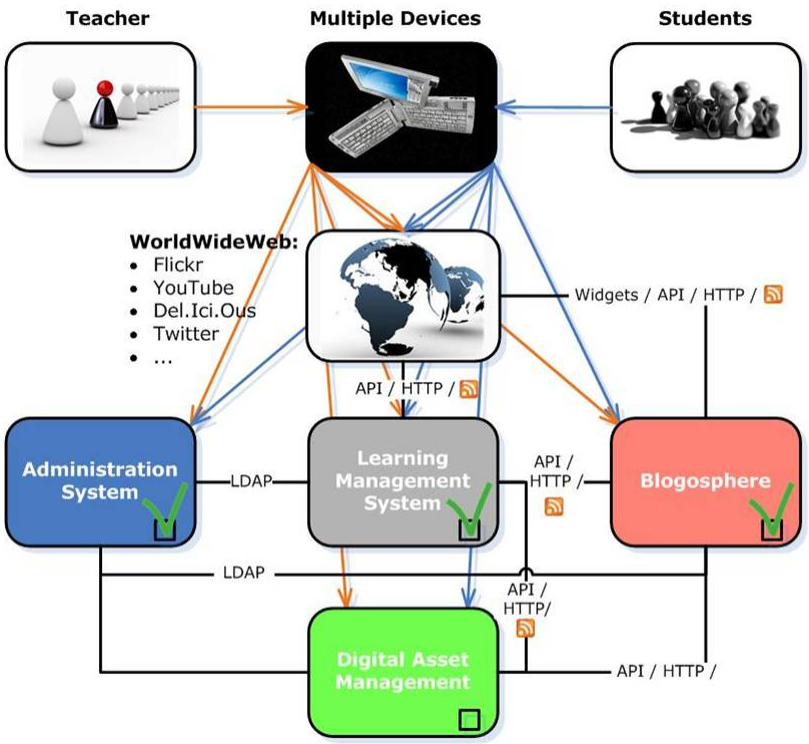
"The **digital gap on m-Learning** seems to be obviously - teachers use mobile phones for phoning and cannot simply imagien how such devices can be used for teaching and learning"

[presentation] EduPunk

Edupunk

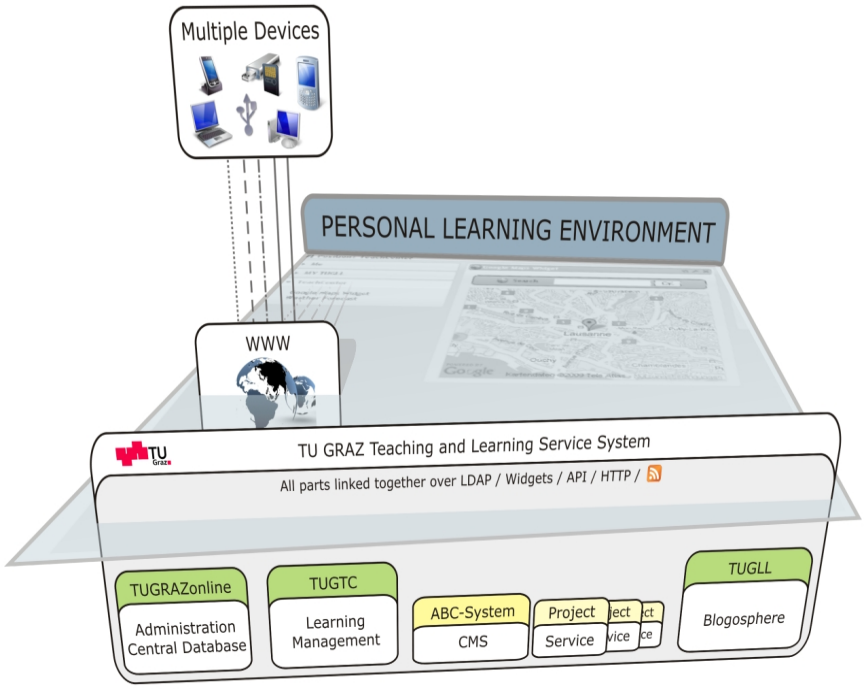
View more **documents** from **Martin Ebner**.

Concept TU Graz



Personal Learning Environment

First concept of a University-wide PLE



Interactive Lecturing

Interactive Lecture at Graz University of Technology 2008

[video] iPod in Education

Video about the Use of iPods in Education

[video] The Evolution of Google

Evolution of Google

What is the future of the library?

YouTube: What is the future of the library?

Multitouch Microsoft Surface: Cultural Heritage Browser

Multitouch Microsoft Surface: Cultural Heritage Browser from Jaap van de Geer on Vimeo.

Augmented Reality - The Future of Education

YouTube: Augmented Reality – The Future of Education

Libraries of the Future

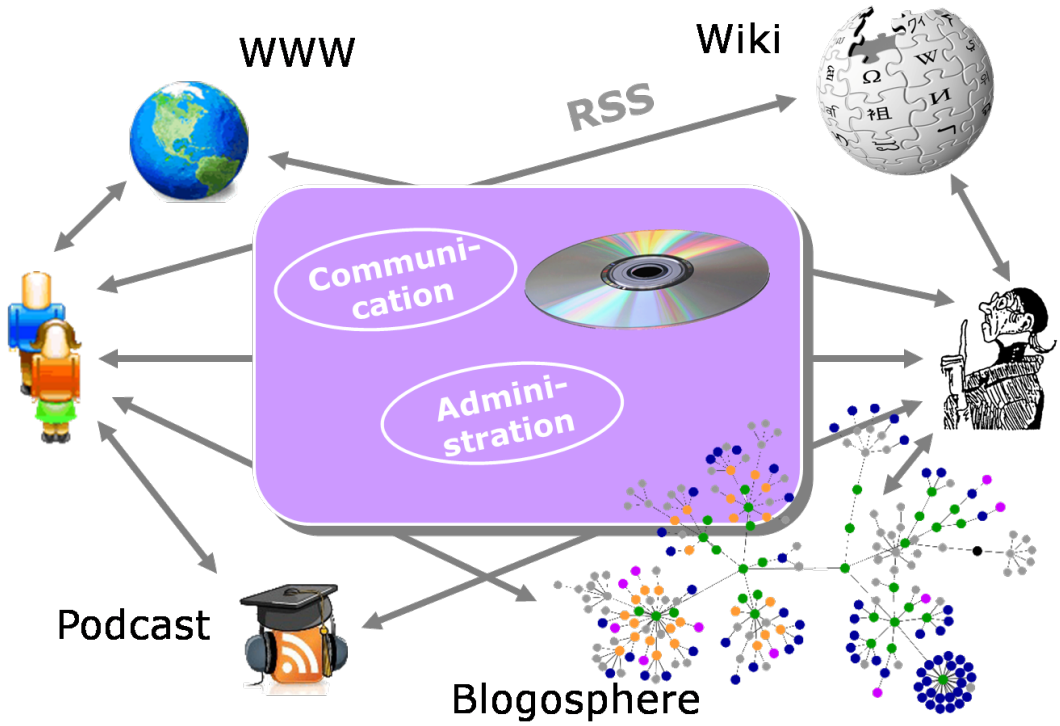
YouTube: Libraries of the Future

Why learning about Emerging Technologies is part of every librarian's Job

Why learning about Emerging Technologies is part of every librarian's Job

View more **presentations** from **sirexkat**.

E-Learning World 2.0 – Mash Up



e-Learning 2.0

Stephen Downes (Downes, 2005) states in his article "**E-Learning 2.0**" about the use of Web2.0 applications in the context of teaching and learning and proclaimed the term e-learning 2.0.

Many analysis followed how to use the variety of appications for teaching and learning purposes. It seemed that there is no end of application fields, concerning to wikis, weblogs, podcasts and microblogging. Communication and collaboration can be redefined with the web in a new way. This allows completely new didactic scenaries.

Although we cannot compare the way we had used the web some years ago with the way we do it now, there are a lot of of evaluations to support and tryout new learning- and teaching- processes. Social networks, blogs and wikis improved the mass and fast publishment of information as well as MashUps. By now we are at the beginning of the personalised content.

LearnLand (based on ELGG)

http://tugll.tugraz.at

Weblogs - Part 1

Definition of Weblogs by Walker (2003):

"A weblog, or *blog, is a frequently updated website consisting of dated entries arranged in reverse chronological order so the most recent post appears first (see temporal ordering). Typically, weblogs are published by individuals and their style is personal and informal. Weblogs first appeared in the **mid-1990s**, becoming popular as simple and free publishing tools became available towards the turn of the century. Since anybody with a net connection can publish their own weblog, there is great variety in the quality, content, and ambition of weblogs, and a weblog may have anywhere from a handful to tens of thousands of daily readers."

Seen from the point of informatics this defintion seems not to be very spectacular. Why is there such boom about weblogs in the course of discussing Web2.0? Are they the substrate for the whole Web2.0 revolution?

Before discussing this question, some definitions will help:

- Blogging: The action of writing and composing within a Weblog
- Blogger: The person owning a Weblog
- Blogosphere: The aggregation of all Weblogs. An amount of Weblogs linkes together outlines a Blogsphere.

Technorati: Search engine for blogs

Links:

Technorati
Technorati - Popular Blogs
Technorati - Search

Geschichte der Weblogs
Was sind Weblogs?
What We're Are Doing When We Blog?

Weblogs - Part 2

To get a better knowledge of weblogs, another closer look on the definitions is to be taken:

- "Frequently Updated": New articles (blog posts) are added to weblogs within constant periods. It is not a static website, it is "living". **RSS-Technology** is used to observe weblogs. Readers of a weblog are able to subscribe to the RSS-feed of the blog and get automatically informed if the weblog is updated.
- "Website": Weblogs are websites and in that case stored **online**. An internet-acces is needed to use them, which was not standard a few years ago.
- "Data entries" point out the "**user-centered**" idea of weblogs. Bloggers write there posts without any knowledge of programing. A couple of years ago a minimum knowledge of HTML was needed to edit a website. Today **WYSIWYG** - editors have become standard.
- "Reversere Chronological order" explains the possibility of **collecting and shareing**. New posts are always top-listed, they are depicted with keywords (tagging) and can be linked to other weblogs easily.
- "Published by individuals" reflects the subjectivity of weblogs. Weblogs are centered on peoble, display the editor's point of view and are therefore subjective. One of the most common phenomenon of Web 2.0 ist the growing **subjectivity** - the "humanisation" of the web.

Links:
Diploma thesis of Folksonomy - one of the phenomenon of Web 2.0
Weblog Usability: The Top Ten Design Mistakes (Jakob Nielsen)

Tagging

Tagging is the idea of "common indexing"and is used in the context of social software. It is essential that users can add keywords to their posts, pictures etc. The most popular form ist the Tag-Cloud.

The cloud with the most common
Example: **TagCloud**

Weblogs - Services

- Weblog - Hoster: Host providing weblog-enviroment
- Weblog - System: Installing on a webserver a weblog

Examples:

Weblog - Hoster:

- **blogger.com**: Weblog System, bougbt by Google 2003
- **blogger.de:** German weblog system
- **twoday.net**: Kommercial weblog system

Weblog - Systeme:

- **WordPress**: The moist common service
- **Moveable Type**: by the californian company **Six Apart**
- Sun

System of TU Graz:
TU Graz LearnLand

Weblog - FAQs

Jetzt Kommen die Wir Medien

How to start a blog an how to make it common

The little weblog compendium

How to create your personal weblog

LearnLand (based on ELGG)

http://tugll.tugraz.at

Weblogs im Einsatz

WIKI

Wiki systems were invented by Howard Curringham, with the aim to provide *„a simple tool for knowlegde management and effective online collaboration*" (Cunningham, 2001). A Wiki (Hawaiian: "fast") is an interactive system including single websites linked to each other that gives writing- and reading-permissions to a know or unknown group of users. So websites can be edited very easily and authentic collaborative working via the internet has become reality.
Editing a Wiki-website is done by using a simple markup-lnaguage. Links between the websites are generated automatically. A version-control is embedded and it is possible to embed different file-formats.

In the basic idea Wikis are *open* (anybody can edit structure and content), *organic* (scruture an content are changing and growing), *observeable* (all contents are logged and traceable) and in relation easy to use.
So they are very interesting for any kind of collaborative working and for learning- an teaching-scenarios.

Links:
Ward Cunninham Interview**Ward Cunningham Interview**
Bergin, J (2002) **Teaching on the Wiki Web**
Wikis - an abstract

WikiPedia

Wikipedia did develop from the **Nupedia-Projekt**, which was founded 2000. The aim of Nupedia was an online-encyclopedia, but it failed because of the complex review-processes and the small number of attending experts. 2001 **Jimmy Wales** took the idea and gave everybody the opportunity to edit and create contents uncensored.

The success tells that that was the right decision: After 5 years this project has become the twelfth often visited **websites worldwide** each day. Today it has become the most long ranged encyclopedia online and offline. No other encyclopedia can reach it.

More about Wikipedia can be found **here**.

„The whole of mankind is cooperatively working on a pool of knowledge as one big community

- the vision of Wikipedia

A website no one owns and every one can contribute

- the concept of Wikipedia

Being ths world´s largest open conten project with 4 millions articles in 100 languages, outnumbering all other encyclopedias

- the reality of Wikipedia"

(Ebner, M., Kickmeier-Rust, M. & Holzinger,A. 2006)

Blog of Jimmy Wales
About Wikipedia's range

Wiki Systems

Today a couple of different Wiki systems exist. The most common is **MediaWiki**, which is used by Wikipedia.

Wiki Matrix overviews the different wiki systems an their features.

TU Graz uses a so-called **TWiki** system, because managing user-rights is much easier than in other systems. An example is **BauWiki**, which is in use for allready three years. It contains many articles about construction engineering.

Examples for Wiki systems at TU Graz.

- **Media Wiki**
- **TWiki**
- **TiKiWiKi**
- **PHP Wiki**

Links:

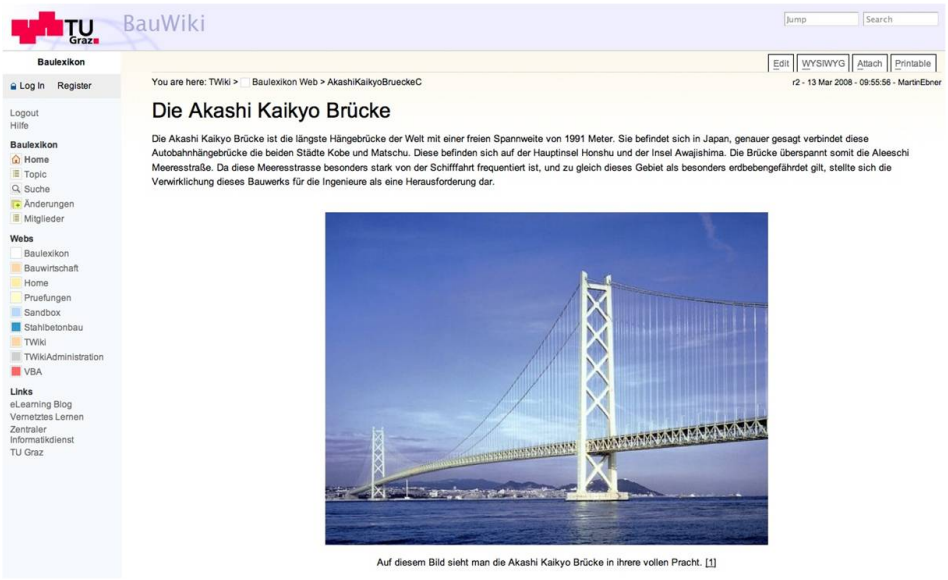
How to select the right Wiki software

Wiki Engines

Wiki Engins comparision

Offizial website about Wiki

Bauwiki



http://bauwiki.tugraz.at

Podcasting

"A podcast is a multimedia file that is distributed by subscription (paid or unpaid) over the Internet using syndication feeds, for playback on mobile devices and personal computers " (**Source**)

The term Podcast itself is a mixture of the popular audioplayer –**iPod**– by Apple and the englisch term broadcasting. The reason for this name probably is that the process of podcasting was engineered by Adam Curry in 2002 for **iTunes**.

Lets start from the beginning: With podcasts a multimedia file is distributed via the Internet. In the beginning (and nowadays) these are audio-files (.mp3) recorded by the sender. For broadcasting RSS technology is used.

Short description: The sender submits the multimedia file to a webserver and includes it into a web-environment. Next it is offered via RSS-Feed to all it's subscribers. If the listener uses a program (**PodCatcher**) for reading RSS-Feeds, downloading up to a mobile device is automatised. In other words, after plugging - for example - an Ipod to an PC with internet access the audio-file is sent to the device without any assistance of the user.

Links:
Adam Curry - the iPod Papst
Van Aken, diploma thesis: Ich bin der Sender

Application fields

(Source: **www.podcast.de**)

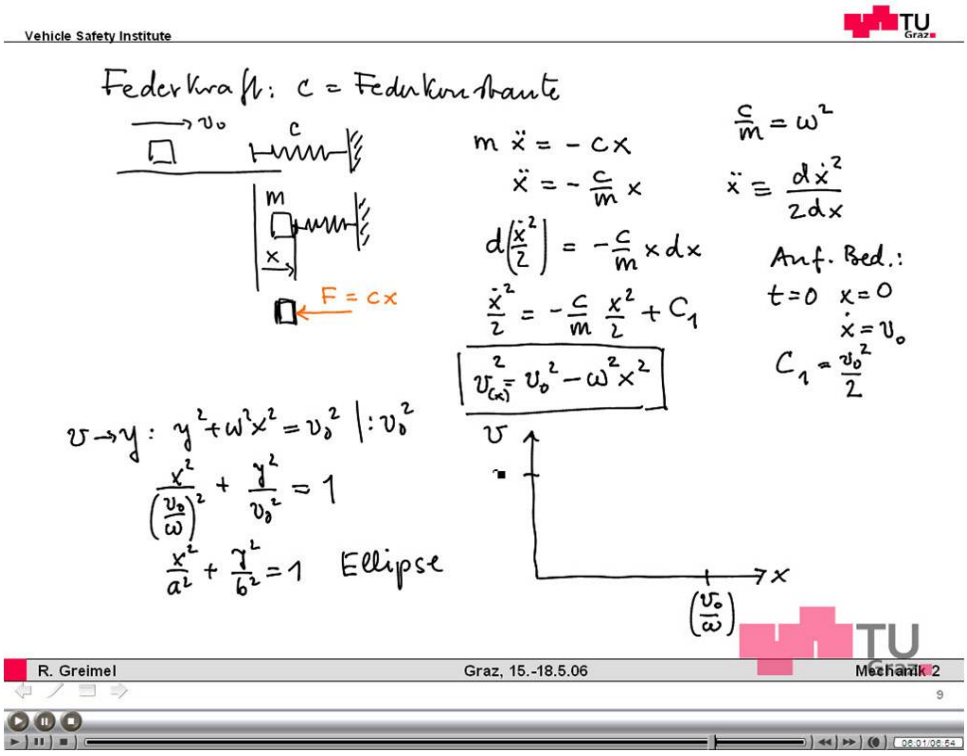
Short description: The sender submits the multimedia file to a webserver and includes it into a web-environment. Next it is offered via RSS-Feed to all it's subscribers. If the listener uses a program ((**PodCatcher**) for reading RSS-Feeds, downloading up to a mobile device is automatised. In other words, after plugging - for example - an Ipod to an PC with internet access the audio-file is sent to the device without any assistance of the user.

Nowadays podcasts are offered by many different suppliers. Because every user of the Web can easily create an audio-file and distribute it via a weblog, it seems that there are no limits for this technology.

Examples:
Podcast TU Graz

How to create my own Podcast
German Podcast Portal
Podster.de
Guide for Podcasting
Guide for Podcasting freshman
How to subscribe a Podcast

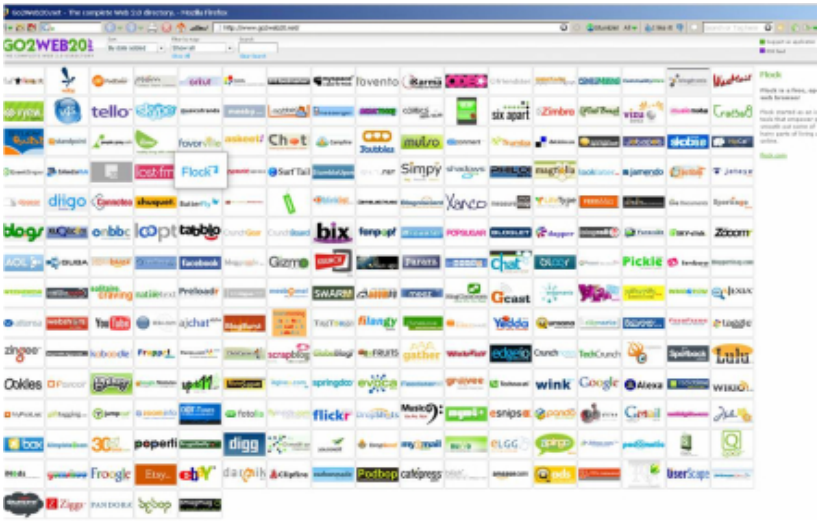
Podcast Sample



More Web 2.0 applications

Weblogs, Wikis and Podcasts comprise not the whole variety of Web 2.0 applications, but the most common ones.

A couple of suppliers try to create an overview - a so-called Web 2.0 directory. For example take a look at **Go2Web20.net**. For the Web grows in a speed never reached before such directories will never be current at all.



PopURLS (the last URLS of the social web)
Connecting Blogs and News (Sphere)
Blogsearch (Bloggdigger)
Overview on the biggest Weblogs (Originalsignal)

Flickr

[picture] White House

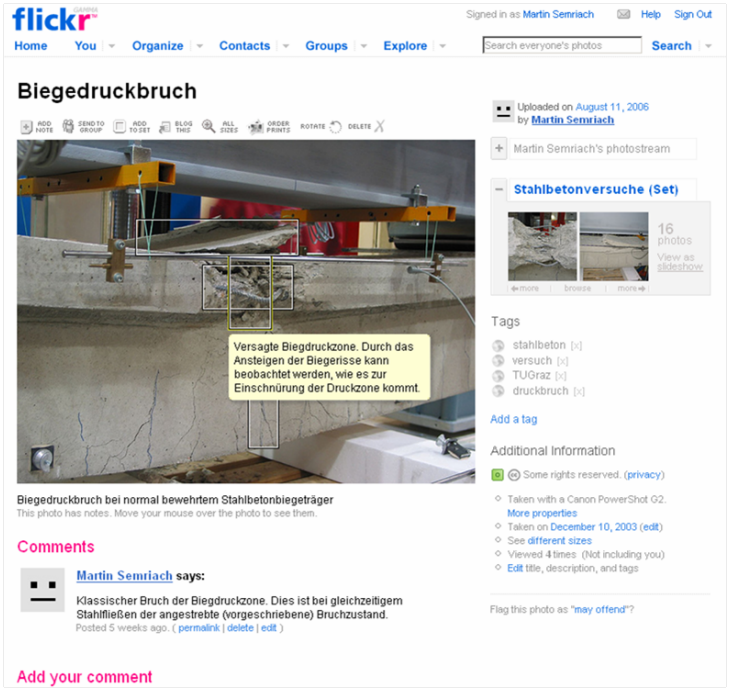
Flickr says about itself to be "... almost certainly the best online photo management and sharing application in the world." - and this is true. On 14.11.2007 **announced** heise.de that there are 2 billion images on Flickr.

Flickr is used to share images online, to discuss them and give access to them for other web applications.

On the left side the example demonstrates how easy it is to change pictures online:

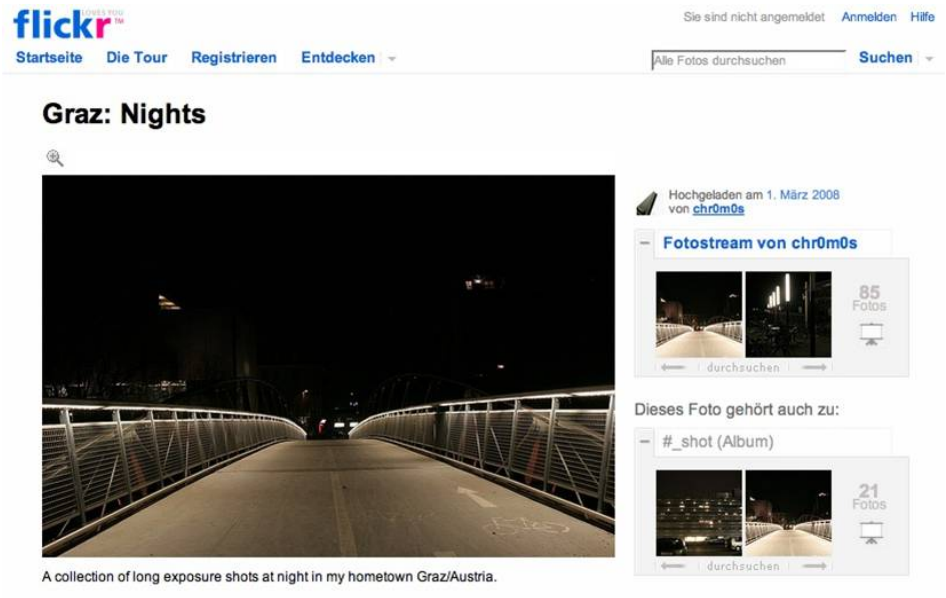
Flickr Blog
Introduction in Flickr

Flickr: Photo sharing



http://www.flickr.com/photos/mebner/212326879/in/set-72157594232634107

Flickr: Photo sharing



http://www.flickr.com

YouTube

Similar to Flickr the Google-owned platform **YouTube** enables users to view videos online, upload them and share them with other users.

"Broadcast yourself" - YouTube today is the most common and biggest but not undisputable platform for video-sharing worldwide.

For example: "Studieren in Zukunft?" (by Michael Wesch)

Video-explanation: YouTube - sharing videos

last week Google bought YouTube

Web 2.0 Applikation - Social Bookmarking

Short explanation-video by **Commoncraft**:

Social Bookmarking systems are Web-systems to save Hyperlinks, share and indexing them with other users.

Links:
7 things you should know about Social Bookmarking

Social Bookmarking systems:
del.icio.us
Digg
Mr. Wong (german)

Web 2.0 Applikation - ... the never ending story

Finally some of the most common Web 2.0 applications of today:

- **MySpace**: Biggest sozial networtk
- **FaceBook**: Complement to MySpace, more orientated on worlking
- **Xing**: Web-based personal managment
- **Protopage**: Virtual desktop
- **YouOS**: web-based operating system
- **Flock**: Social Webbrowser
- **Twitter**: Microblogging Tool
- **Writely**: Web complement for Word
- **Netvibes**: Virtual Desktop

Web2Null.de (German Web 2.0 guard book)

The Best of Web 2.0

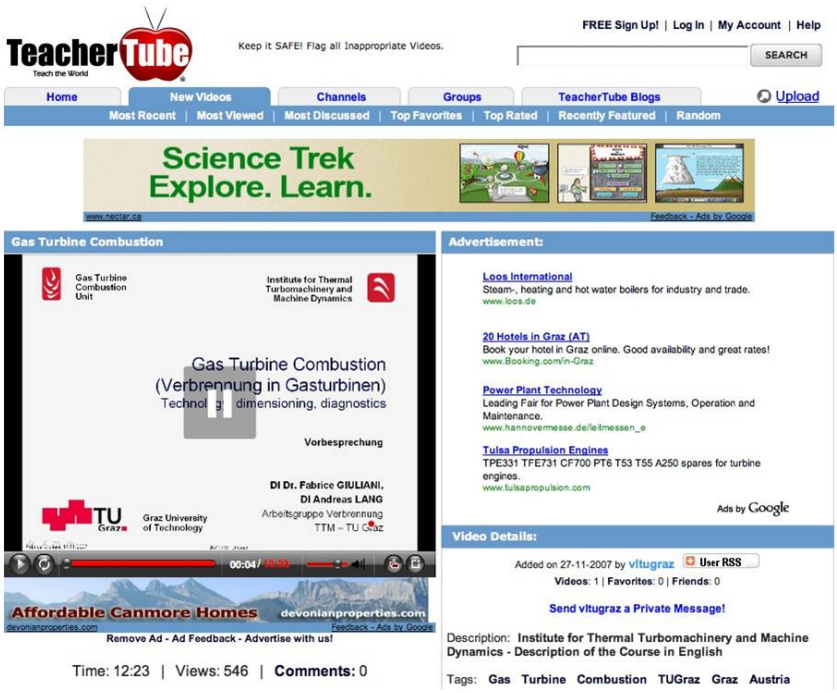
[presentation] Microblogging

How Twitter & Co changes the world

[presentation] QR Codes

QR Codes

TeacherTube: Video sharing



http://www.teachertube.com