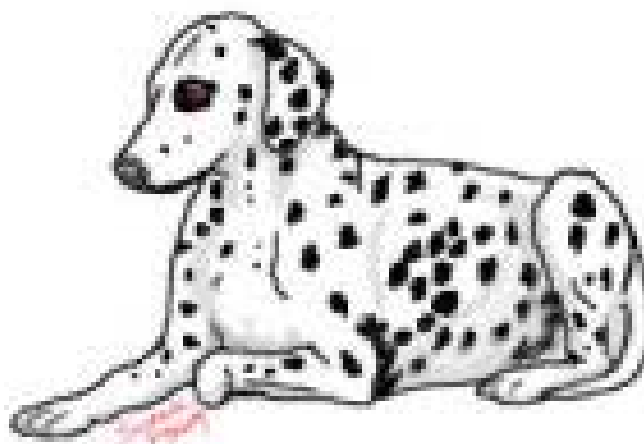


The Impact of ICT in Educational Reform

Philippine Association for Teachers of Educational Foundations

Speaker : Jerry Liao



MYTH

**Teachers will not be replaced
by technology**

REALITY

**But teachers who do not
use technology will be
replaced by those who do**

For many years **this** was the model of learning.



Classroom of the Future



Are you ready for this?



The Internet is changing ...

Soon all the information you ever encountered in your life will be linked together in this system across countries, across continents.

- © All languages

- © Every library

- © Every song

- © Every movie

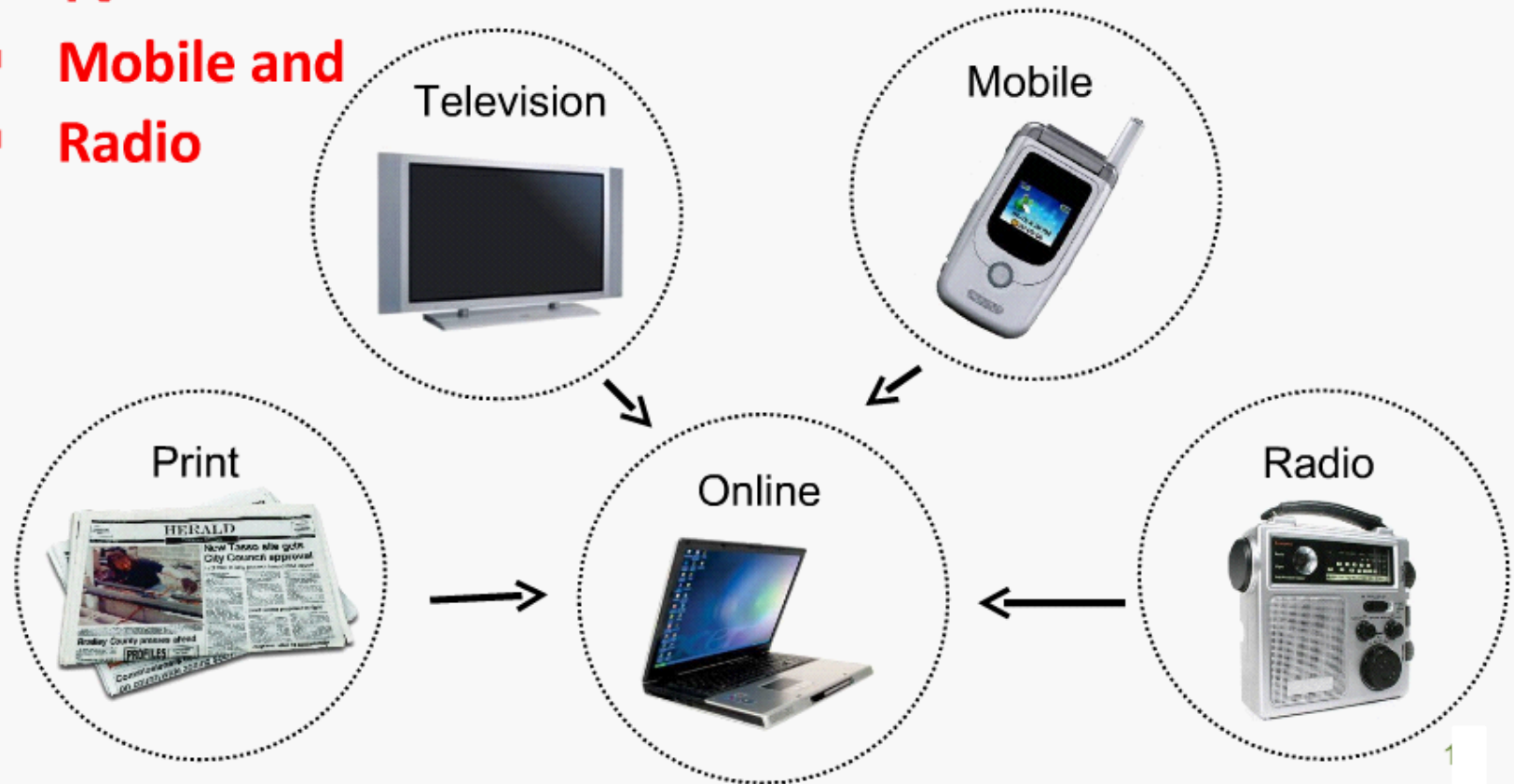
- © Every television show, sports game, news broadcast and book will be found somewhere on the World Wide Web

**21st Century Skills are all
about teaching our kids to
navigate the world as **THEY**
are experiencing it,**

not the world **WE
experienced.**

ONLINE CAN INTEGRATE

- **Print**
- **TV**
- **Mobile and**
- **Radio**



Two key issues

Education IN the future

- What will be our school like?
- Where will learning occur?
- What will be role of the teachers?
- What technology will be used?

Education OF the future

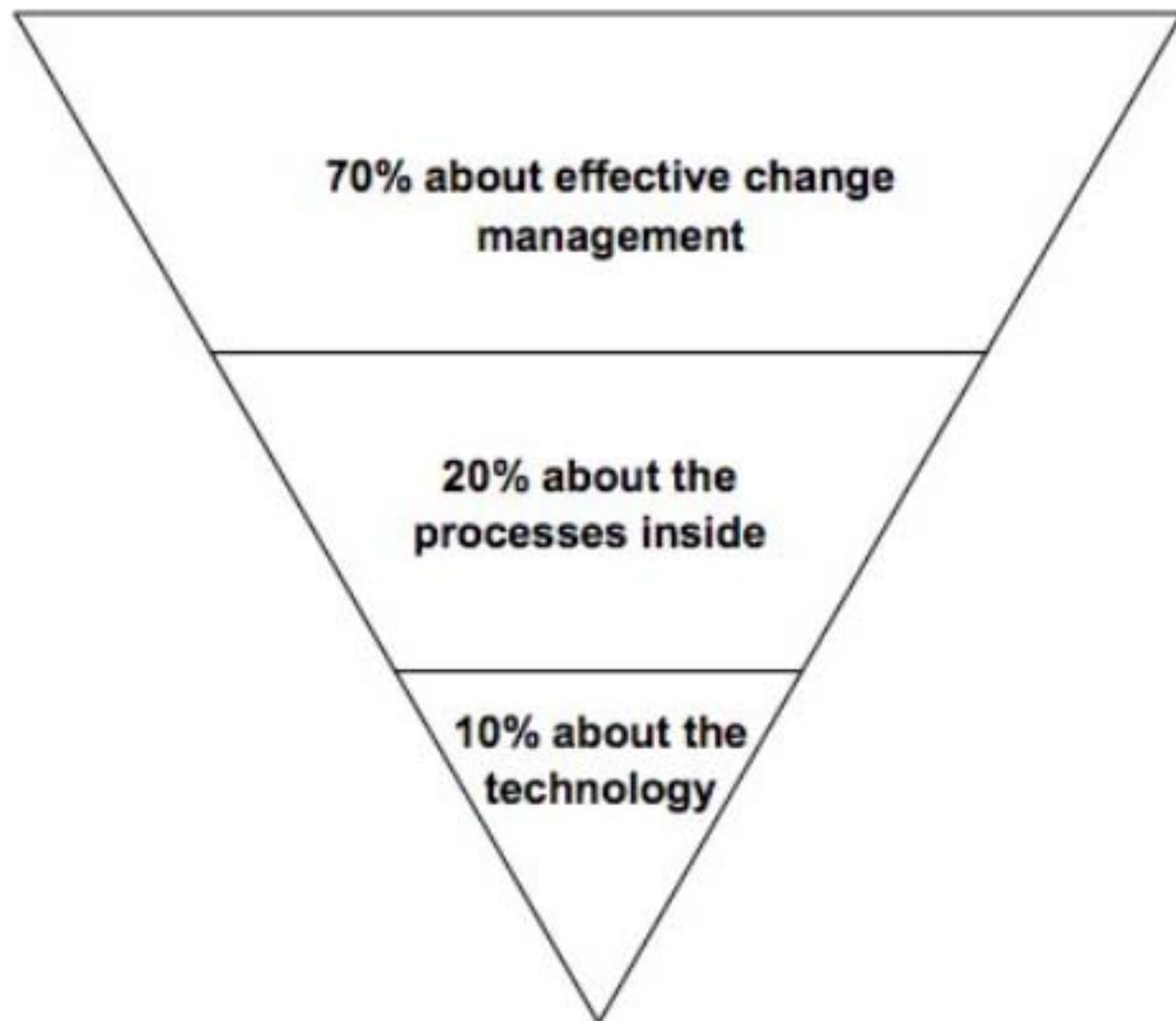
- What must we be doing today to ensure that our students are equipped with the skills and knowledge required in the world of tomorrow?

It's not about the

TECH...

Its about the TEACH

Planning strategically



The NET Generation of today

- 89% uses email
- 64% sends instant messages regularly
- 60% prefer IM over voice communication
- 93% have a Facebook and/or MySpace page
- 67% receive news from online sources

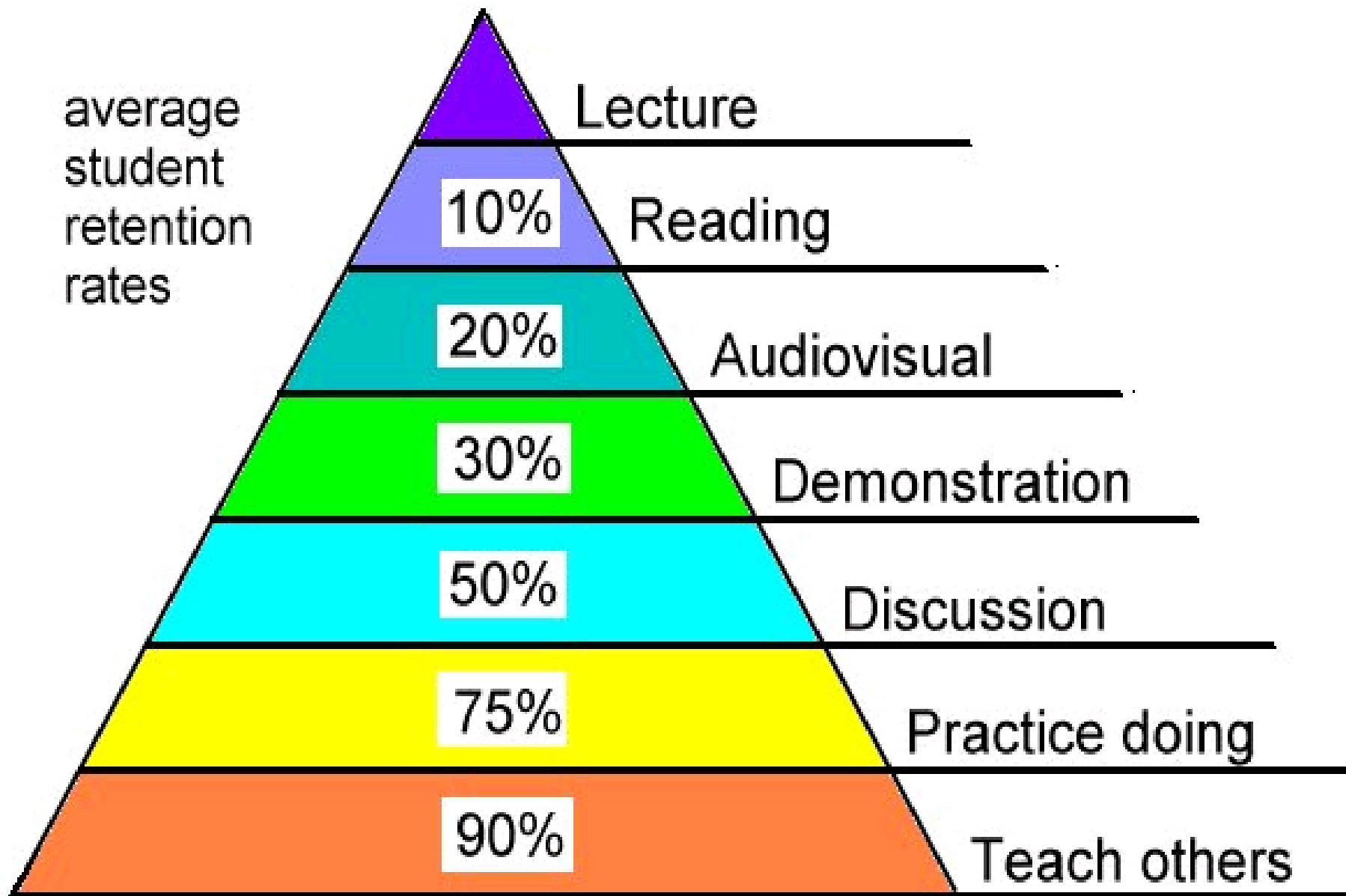
The NET Generation of today

- 74% watch or produce video online
- 56% have a portable MP3 device
- 52% read and/or has a blog
- 43% play online games
- 72% search for information first online
- More likely to check on Wikipedia rather than a book

Traditional Model of Teaching	New Model of Teaching	Technology Implications
Classroom lectures	Individual explorations	Availability of networked Computers with guided access to online information and learning Materials.
Teacher as deliverer of information	Teachers as guide	Teaching via programme websites and online learning environments; access to external experts over the Internet
Individual work	Collaborative learning	Access to email and online 'conferencing' tools

Traditional Model of Teaching	New Model of Teaching	Technology Implications
Face to Face Learning	Flexible and Distance Learning	Student access to networked computers for materials delivery and support
Consistent Content	Fast-Changing Content	Availability of networks, web space and web publishing tools; sharing of computer-based learning materials with other institutions

Learning Pyramid



Learning Styles

- Visual
- Auditory
- Tactile

The Visual Learner

- Learn what is seen
- Needs to read material
- Prefer to learn and study independently
- Remember faces than names

The Auditory Learner

- Learn from what is heard
- Learn most from discussions and lecture
- Prefer to learn and study in groups
- Can recall the spoken word almost verbatim

The Tactile Learner

- Learn from physically doing
- Calculators and computers are great learning tools
- Enjoys and learns from field trips and hands-on activities
- Has difficulty in conventional classrooms

Reasons to use Technology in Education

- Students need to be globally competitive
- Technology can help level the playing field
- We need to teach the future and not the past

Reasons to use Technology in Education

- We need to meet students where they are, and not where we are
- We need to engage students and not bore them
- Schools should be student centered and not teacher centered

Problems with using Technology

- School infrastructure is insufficient
- Software is outdated and insufficient
- Teachers are not adequately trained
- Too long to create lessons due to unfamiliarity with technology
- Lack of understanding and appreciation

CHALLENGES FOR EDUCATORS

- terminology
- technological development
- range of new tools
- teachers' lack of confidence in using new technology
- technologies are not created for educational purposes

Fun

Cool

Hard

Exciting

Sweet

Challenging

Keeps you on your toes

Frustrating

Different

Tricky

Great

Social Media Platforms



Blogging



Social Networking



Photo Sharing



Video Sharing



Podcasts



RSS

<http://www.flickr.com/photos/grahamstanley/231628852/>

Sharing is the New Viewing



What is Social Media

Digital Tools and Services that allow people to:

- Publish and share content
- Collaborate with others
- Form communities of interest
- Provide added value and context to knowledge
- a.k.a. Web 2.0, the read/write web

Out of the 17,000 Internet users across
29 countries surveyed

Social Networking Sites

- 83 percent of Filipinos surveyed are members of a social network - #1
 - Followed by Hungary – 80%
 - Poland – 78%

Out of the 17,000 Internet users across 29 countries surveyed

Uploading photos was regarded as the number
one activity as far as sharing content is
concerned

- Philippines - 86 percent - #1
 - China – 73%
 - Mexico – 72%

Out of the 17,000 Internet users across
29 countries surveyed

Watching Videos **online**

- Philippines – 98.6 percent - #1
 - Mexico – 94.6%
 - Brazil – 94.2%

Out of the 17,000 Internet users across
29 countries surveyed

Blog Readers

- South Korea – 92.1 percent - #1
 - Philippines – 90.3% - #2

Out of the 17,000 Internet users across
29 countries surveyed

Subscribing to RSS Feeds

- Russia – 56.6 percent - #1
 - Philippines – 45.2% - #6

Out of the 17,000 Internet users across
29 countries surveyed

Downloading Podcast

- China – 74.3 percent - #1
 - Philippines – 61.8% - #5

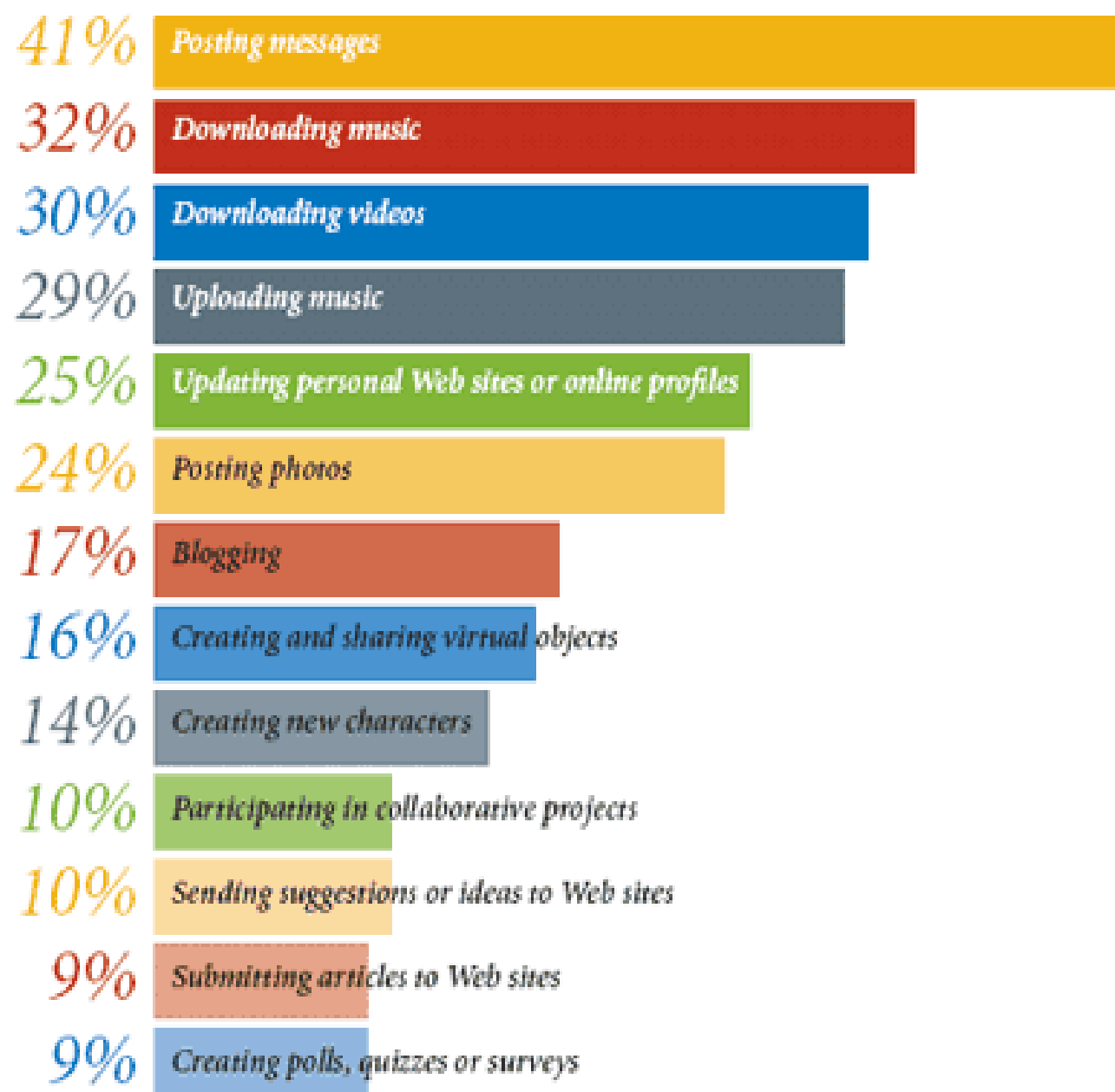
Out of the 17,000 Internet users across
29 countries surveyed

Uploading Videos

- Brazil –68.3 percent - #1
 - Philippines – 60.5% - #2

POPULAR SOCIAL NETWORKING ACTIVITIES

Percentage of online tweens and teens who say they do these activities at least weekly



Characteristics of Wikis

- Blank slates
- Collaborative editing
- Free-form structure
- Version tracking
- Discussion section

WIKI – What is it?

- A collaborative Web site set up to allow user editing and adding of content
- offer the opportunity to share knowledge and information
- can be used as a form of internal communication between teams in an organization.

WIKIS – What is it?



Why use Wikis?

- It's about collaboration, communication and creativity
- Uses generic workplace technologies
- Makes teaching and learning interesting and fun

Suggested uses of wikis in education

- Continual review
- Resource sharing and data collection
- Group authoring
- Group collaboration

BLOGS – What is it?



Create your own website



www.wordpress.com



www.blogger.com

Why use blogs?

- They are FREE
- They are easy
- They can serve numerous purposes
- You can add stuff (flexible)

Why use blogs?

- Posts
- Reverse chronological order
- Archives
- Categories
- Permalinks
- Templates
- Comments

Suggested uses of blogs in education

- Blogs as space to share about real life applications / examples
- Blogs as a place to direct class discussions
- Blogs as student-driven weekly summaries
- Blogs as students assignments

YouTube – What is it?

- Number one video sharing site
- Tens of millions of videos are watched each and everyday
- Vast majority of videos are user generated content

YouTube – Possible uses

- Distance learning
- Supplementary lectures
- Contextualizing issues (old footages)
- Perspective for students to examine critically
- Short humor items to break up a long lecture

Twitter – What is it?

- Micro-blogging site – limited to just 140 characters
- Supplementary lectures
- Contextualizing issues (old footages)
- Perspective for students to examine critically
- Short humor items to break up a long lecture

Twitter – What is it?



Twitter – Possible uses

- Pointers to online resources
- Students reminded of deadlines
- Giving instructions to students
- Keeping up to date for you and students
- Instant lecture feedback



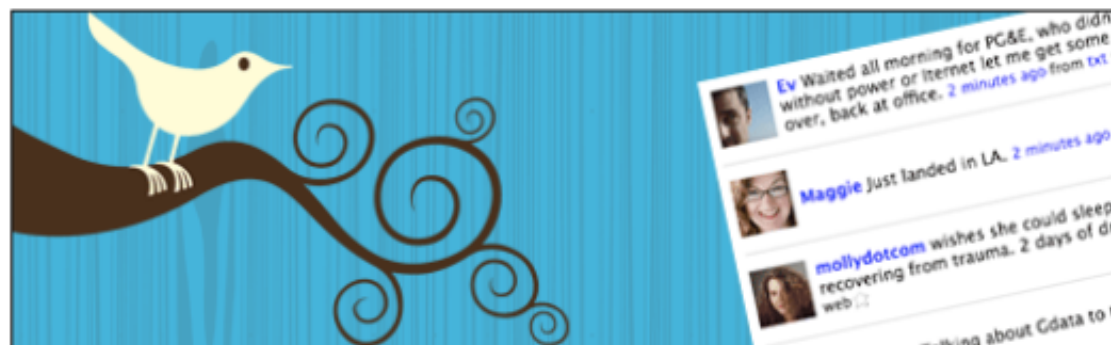
Select Language ... ▼

What is Twitter?

What?

Why?

How?



Twitter is a service for friends, family, and co-workers to communicate and stay connected through the exchange of quick, frequent answers to one simple question: **What are you doing?**

Join the conversation!

Get Started Now

▶ **Watch a video!**

Please sign in

user name or email address:

password:

☐ Remember me

Sign In »

Forgot password? [Click here.](#)

Already using Twitter from
your phone? [Click here.](#)



**Using mobile phones
in the classroom**

NOKIA

1111

ALARM

08.30h

**Its time to get up and do your
geography revision! You have
a test on Monday!**

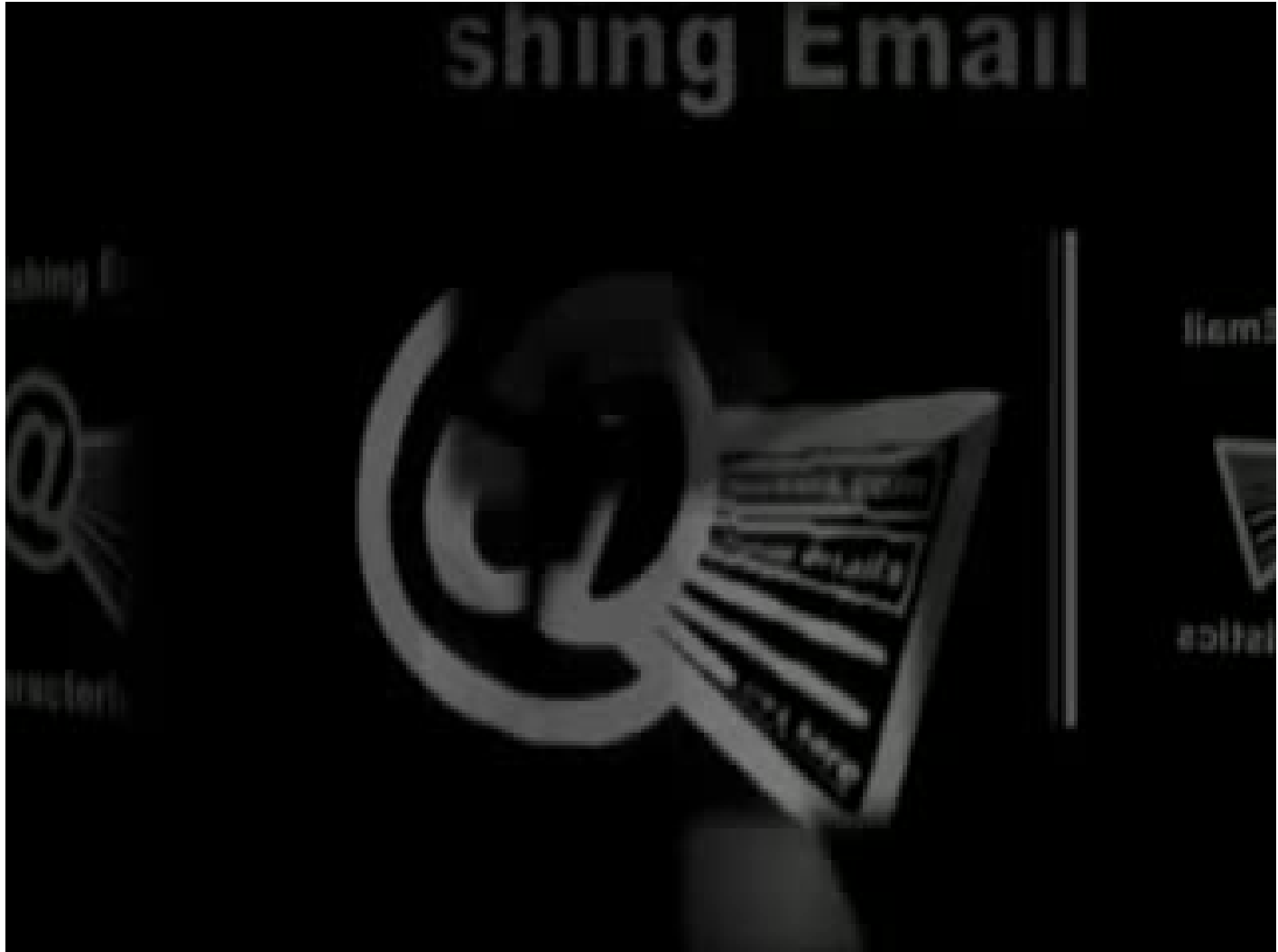
Options

Back



Threats are everywhere... and always evolving. Will you be protected?

PHISHING EXAMPLE



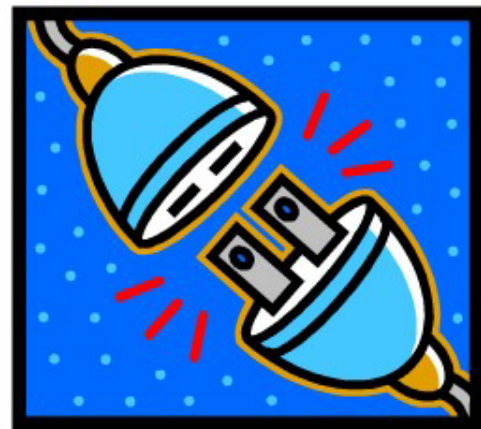
10. Check your computer security regularly

- Computers have different security configurations
 - web browser security settings
 - file sharing
- Some settings get changed with time
- Ex: cookies, pop-up windows



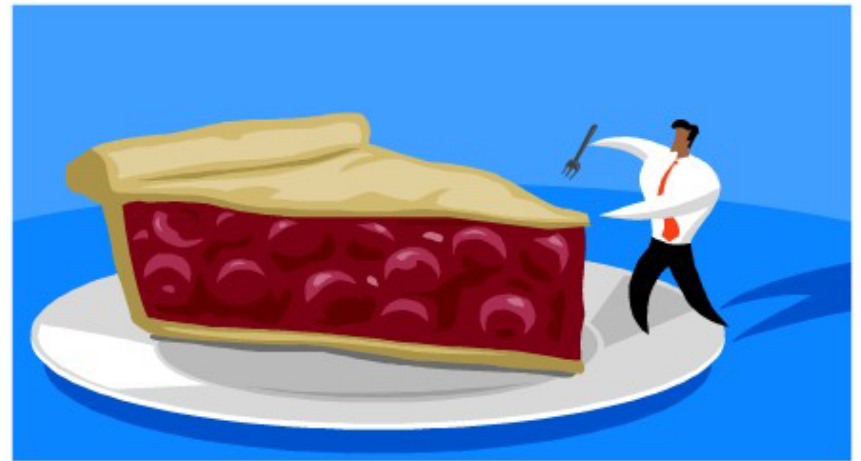
9. Disconnect from the Internet when not in use

- Limit the time your computer is exposed to getting hacked
 - hackers are always looking for target machines
- Pro: no risks when you are disconnected
- Con: may lose some functionalities when offline
 - Voice over IP
 - Instant Messenger
 - other services



8. Don't share access to your computer with strangers

- Your OS may allow others to access your files
- The ability to share files can be used to infect your computer
- File sharing risks:
 - get viruses
 - have personal data stolen



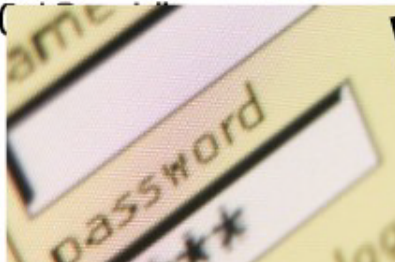
7. Back up regularly

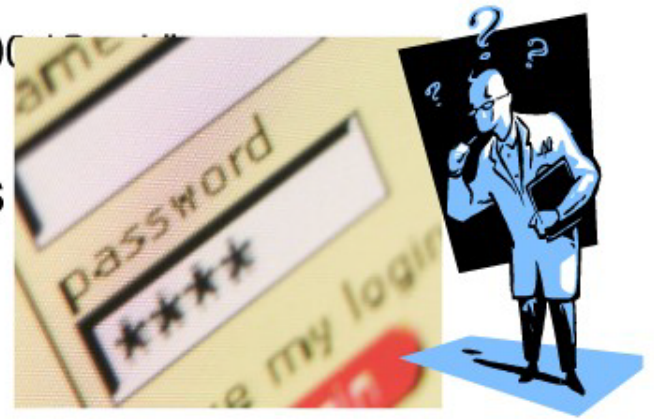
- Backup your system as “often” as how “much” data you are willing to lose
 - work done last month? last week? today?
- Use external devices
- Make sure you are able to restore data from your backup
- Have a start-up disk handy in case your computer system files get damaged





6. Use smart passwords

- Passwords give access to your machine and information
 - people may guess the password
 - lots of automatic systems discover passwords in few seconds
 - “Golden rule” for how to create a good password
 - 8 characters minimum
 - be as meaningless as possible
 - use uppercase & lowercase letters, symbols and numbers. e.g., xk2&LP97
 - use a “phrase” to remember: “MyWife1sAg001”
 - Use multiple passwords
 - Do not share passwords with others
 - Change passwords regularly
- 



Commonly Used Passwords

1. 123456
2. 12345
3. 123456789
4. password
5. iloveyou
6. princess
7. rockyou
8. 1234567
9. 12345678
10. abc123

5. Download and install security patches for your computer

- Sometimes bugs are discovered in a program that may allow a hacker to attack
- Patches are solutions to those breaches
- Check your vendors' websites for updates
- Ensure you are getting the patch from a trustworthy source



4. Protect your computer: use firewalls

- Firewalls create a protective “wall” between your computer system and the outside world
- they determine which ports the machine is allowed to receive your data through
- Available at most computer stores and in some operating systems



3. Use care when reading email and downloading files

- Emails are the principal sources of computer virus infections
- Be sure you know the source and the reason for receiving an attachment before opening it
 - Many viruses spread because they originate from a familiar email address
- Be wary of URLs in email
- Use care when downloading files:
 - Do not run/install program with unknown origin
 - Do not download software unless you know it was written by a person or a company you trust
 - Do not give permission to third parties to download software on your machine



2. Use antivirus/Spyware software, and keep it up to date

- Protects your computer against known viruses/spyware
 - new threats emerge daily
- Update your software tools regularly
 - check the web site of your anti-virus software company to see some sample descriptions of viruses and to get regular updates for your software
 - Use Windows automatic updates



• Be aware and a promoter of proper cybersecurity practices

■ Learn cyber security practices:

- how to update antivirus/spyware tools
- how to download security patches
- how to backup your system
- how to create a proper password
- Try a site-advisor tool (e.g McAfee)

■ Educate your family members, colleagues, friends





Top Ten Tips Summary

- ⇒ Check your security settings on a regular basis
- ⇒ Disconnect from the Internet when not in use
- ⇒ Don't share access to your computer
- ⇒ Backup your data regularly
- ⇒ Use smart passwords
- ⇒ Download and install security patches for your computer
- ⇒ Use a firewall
- ⇒ Open email attachments only from known people and when expected, and download files only from trusted sites
- ⇒ Use antivirus software and keep it up to date
- ⇒ Become aware and share awareness



MILI^{PRO}

Video Projector





As seen on

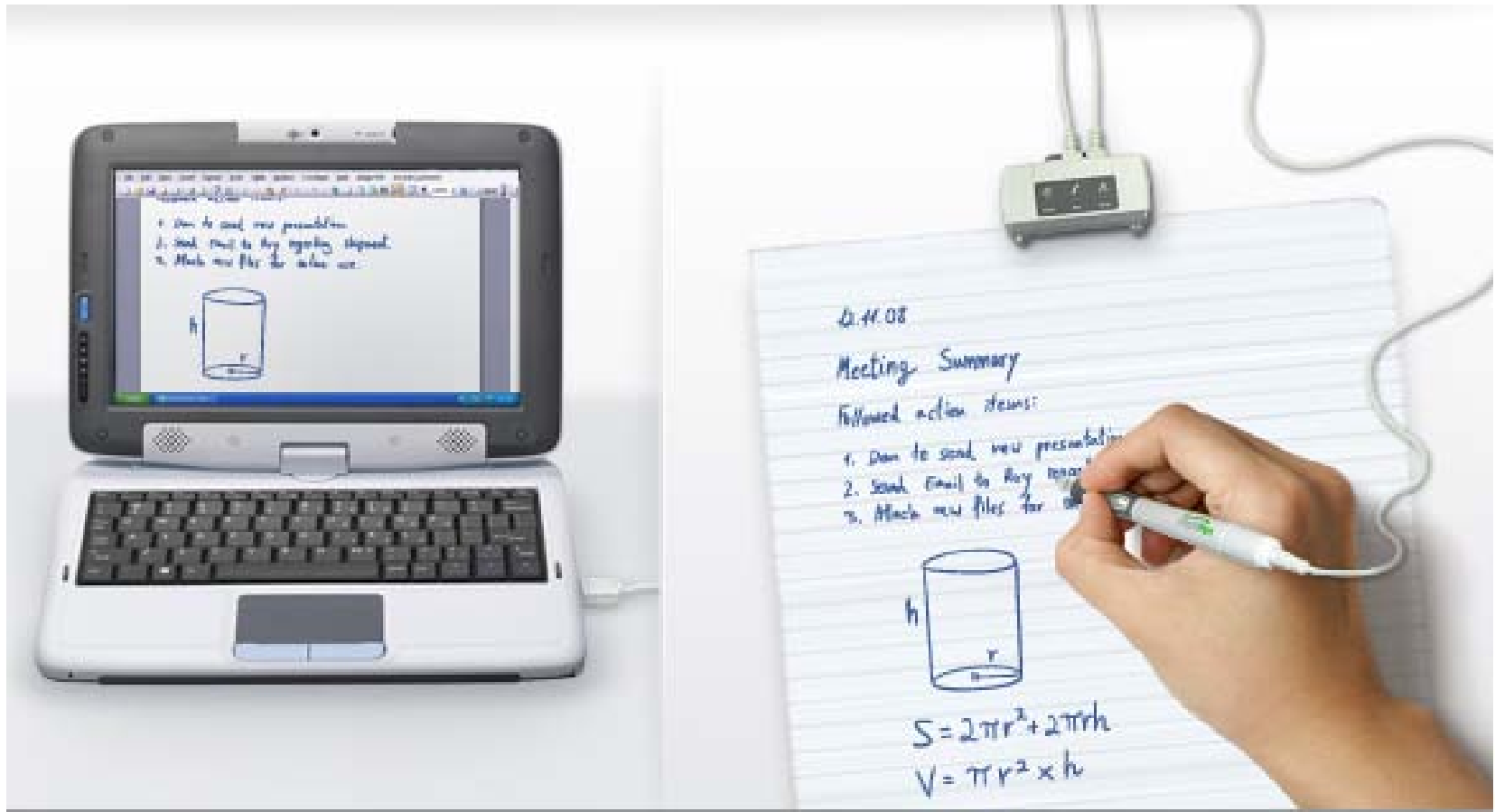
 **The Gadget Show**

No.57 on the T3 Top 100 gadgets 2010

MiLiTM

Evolution iPhone Projector

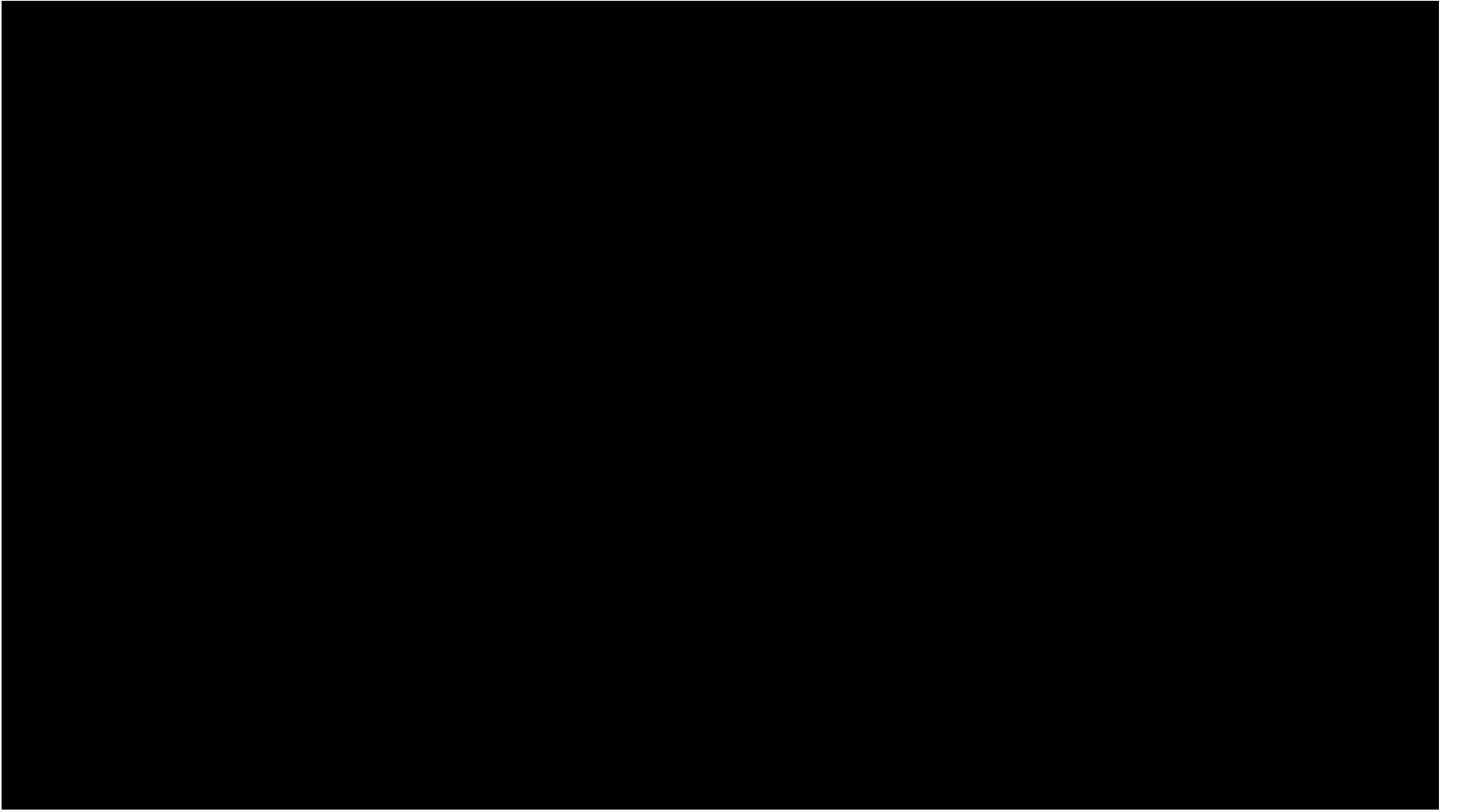
COMING SOON | ALSO AVAILABLE IN BLACK



INTELLIPEN



Samsung Galaxy Tab




Samsung Galaxy Tab



DELL INSPIRON DUO

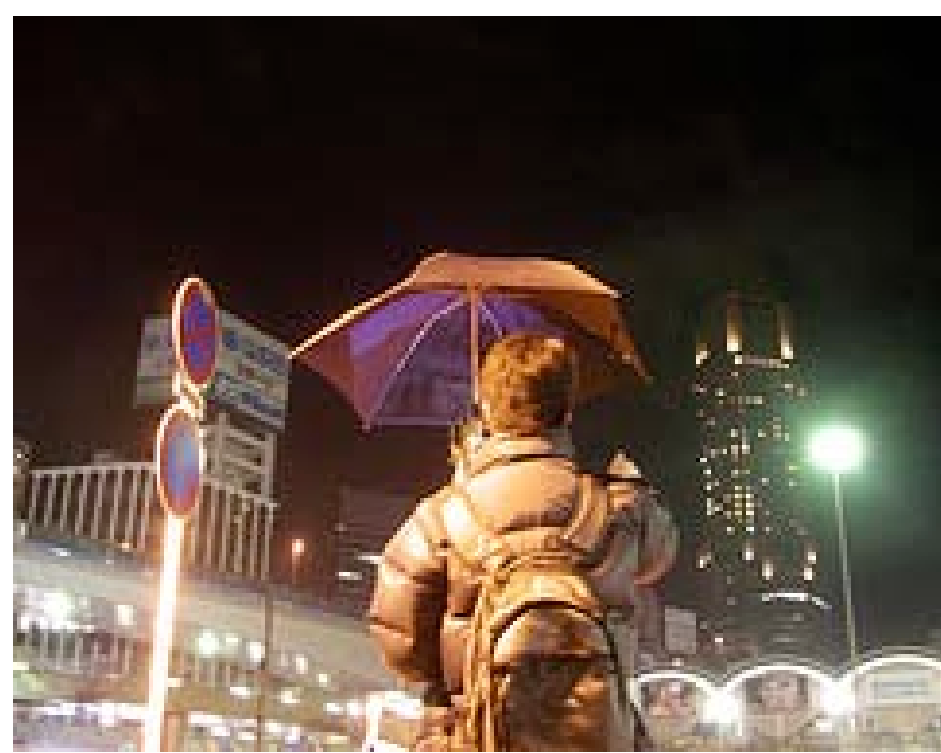
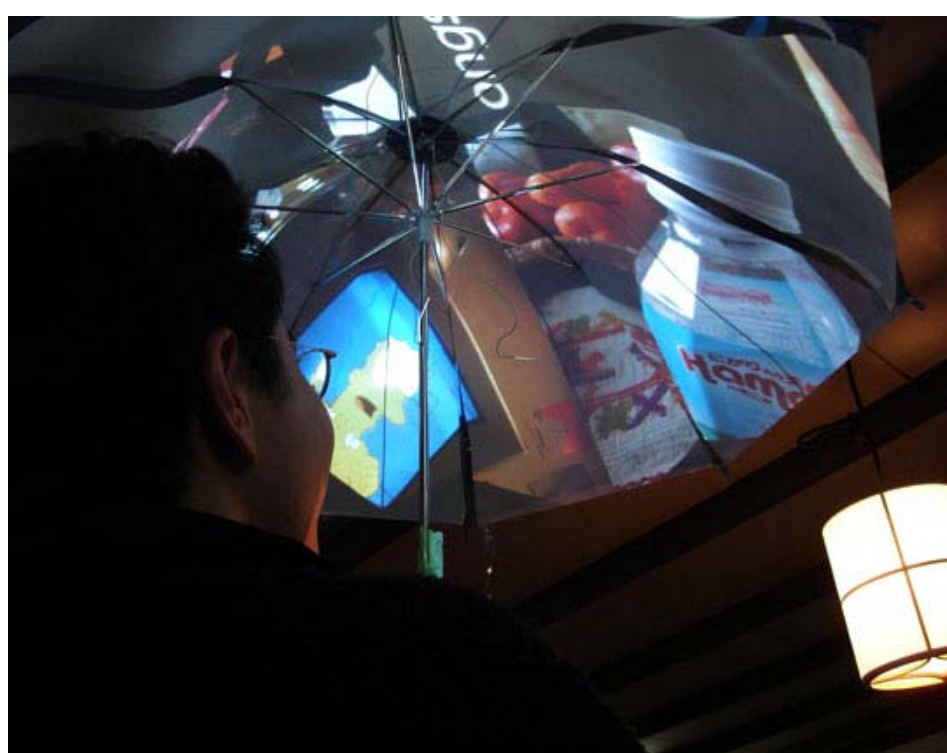


LENOVO U1 HYBRID



LENOVO U1 HYBRID

The Internet Umbrella





Internet Umbrella

Learning Environments

- From fixed to flexible
- From static to dynamic
- From prescribed to desired
- From classroom to anytime / anywhere learning

Future of Education

- The internet is becoming a platform for unparalleled creativity
- Students are the ones responsible creating the new content of the web
- Information is changing, where and how is changing

We are currently preparing
our students for jobs and
technologies that don't yet
exist.. in order to solve
problems we don't even
know are problems yet

From
KNOWLEDGEABLE
to
KNOWLEDGE ABLE

The illiterate of the 21st
century will not be those who
cannot read and write, but
those who cannot learn,
unlearn, and relearn.

- Alvin Toffler

You are invited to attend:

TECHTUTOR 3

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Question and Answer

