New Learning for a New Society:

Challenges and Opportunities for Europe

Models of ICT Integration in Education
Spanish Presidency conference, 16-18 March 2010
www.eu2010.es

Yves Punie,
C. Redecker, A. Ferrari & R. Cachia

Joint Research Centre (JRC)
Institute for Prospective Technological Studies
The European Commission’s Research-Based Policy Support Organization
IPTS: Research Institute supporting EU policy-making on socio-economic, scientific and/or technological issues
Have you been paying attention?
Have you been paying attention?

http://www.youtube.com/watch?v=gT2E2F0DmyE&feature=channel_page
In terms of numbers

- > 1 billion Hits a day on YouTube (9 Oct 2009, BBC Online)
- > 400 million Facebook users worldwide; > 120 million in Europe; ~ 50% of active users log on daily (2010, Facebook)
- > 61 million Netlog users in Europe, in 20 languages, > 150 million visitors per month, 80% between age 14 & 25 (2010, Netlog)
- 14 million articles on Wikipedia, > 3 million in English, ~240 active language versions, 1 million contributions, 85,000 people contributed 5 times or more in Sept09 (Wikipedia)

In terms of uses: % of active internet users worldwide (03/2009 Social Media Tracker)

- 80% watch video clips online
- > 70% visit a friend’s social networking page
- 70% read blogs, 46% left a comment and 35% started own blog
Social Media uptake in EU27

SC users
- 26% users
- 74% non users

Internet users
- 64% users
- 36% non users

EU 27

Internet

SC users

Young (15-24)

58% users
42% non users

91% users
9% non users

Source: IPTS estimation based on EUROSTAT 2008 & Flash EB N.241

=> Social Media part of mainstream Internet use

=> Implications for learning and E&T
Views from teachers on ICT importance and use

Untapped potential of

WEB 2.0
Views from teachers on Teacher Training (TT) and ICT

62% received training in **innovative pedagogies**

41% received training in **creativity**

36% received training in **ICT**

> 50%: Bulgaria, Cyprus, Czech Republic, Greece, Latvia, Malta, Romania, Slovakia

25% and below: Belgium, Germany, Portugal, Spain, Sweden

IPTS-EUN survey with Teachers in Europe, Oct. 2010

“Teacher Education and Training: a changing mindset”
- Turn Digital Competence into a key priority for TT
- Conceive teacher as a learner (also informal learning)
- Focus on ICT-enabled innovative pedagogies and new skills

2010 ICT Cluster Report, DG EAC
**Content:** New resources for learning (access and diversity)
- E.g. Wikipedia, Academic Earth, Videolecures.net, RSS, bookmarks, etc.
- Access to information and knowledge becomes **less exclusive and less hierarchical**
- Learning shifts from **know-what** to **know-how and know-where**

**Creation:** Constructionalist learning becomes real
- E.g. Blogs, Youtube, TeacherTube
- Learners become **co-creators** of meaning (empowerment)
- 87% of teachers (prim. educ): pupils are more **motivated** and **attentive** with ICT (STEPS 2009)

**Connecting:** Learning through connecting
- E.g. language learning, LinkedIn, Wikiversity, eTwinning
- Emergence of new **informal** learning networks and communities
- More **relevant** and **flexible** learning opportunities (Cf. Lifelong Learning)

**Collaborating:** learning through collaboration (not instruction)
- E.g. Wikipedia, Wikiprojects, blogs, eTwinning
- More active **participation** and meaningful learning

=> More active, participative, meaningful, inclusive and innovative learning
Ex. Connecting teachers and students abroad

- 68,859 registered schools
- 90,823 members
- 4,832 active projects
- 10,260 schools participating in projects

Source: eTwinning, March 2010
Social Language Learning - Online!

- Learn languages online at your own pace with fun language lessons
- Connect with foreign language partners around the world

IT'S FREE!

I Speak:  
Select language...

I am Learning:  
Select language...

5 million members (March 2010)
> 220 countries
> 100 different languages

> 1 million members
> 133 countries
> 115 different languages

myLanguageExchange.com

http://www.livemocha.com/

anavarrete 26 Female From Mérida Mexico
Teach: Spanish English
Learn: Japanese Portuguese French

munna 26 Male From Hyderabad India
Teach: English Hindi Urdu Gujarati
Learn: Japanese Arabic - Middle Eastern Chinese - Mandarin

http://www.languageexchange.org/
An urgent need for envisioning future learning that is more efficient, equitable, innovative and meaningful than it ever was in the past
Meeting future skills needs

According to European companies, 90% of jobs in 2015 will require some sort of ICT skills (IDC, Nov 2009)

In 2020, of all jobs
- 35% high qualifications
- 50% medium qualifications
- 15% low qualifications

Cedefop, 2010

Source: Cedefop, 2010
Expert consultation Phase 1:
- Group Concept Mapping
- 203 unique statements generated by 13 experts
- 12 clusters: key changes in education in 20 years

IPTS foresight project FORLIC – with TNO-NL, Open University NL and Attic Media-UK

Views from experts

One important change of Education in 20 years will be...

<table>
<thead>
<tr>
<th>Importance</th>
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High priority areas

**Expert ratings on....**

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Confirmation of LLL as key priority

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ICT: feasible priority

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- Roles of teachers
- Open education and resources
- Technology in education

assessments and feasibility ratings for various aspects of education.
Views from Teachers on Learning in 2025

Learning objectives in 2025

- Global and social citizenship
- Digital competence of 2025
- Communication
- Working collaboratively
- Learning to learn skills
- Skills updating

Environmental skills
- Understanding the world, being global
- Analysing critically the world and situations around
- Being social

Stay motivated
- Processing information for knowledge building
- Personal goal setting and risk evaluation

Being a lifelong learner
- Flexibility
- Preparedness
- Innovation and creativity
- Autonomy

Psychology
- Promoting awareness of global issues
- New ways of learning
- Teacher-specific

Information literacy
- Finding correct information
- Using ICT to get things done
- Digital competence of the time
- Creating digital content

Language competence
- Mother tongue
- Foreign languages

Different roles in teamwork
- Accept and listen to others’ ideas
- Collaborating and working in communities

Avoiding knowledge overload

Emerging Skills and Competences

Technical skills and knowledge

Self Management / Regulation skills

Social / Soft skills

Complex information problem solving skills

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Wrap up
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<td>Learning</td>
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<td>Learner</td>
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<td>Social</td>
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<tr>
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<td>Guide</td>
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<tr>
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<tr>
<td>Rote Learning</td>
<td>Learning by doing</td>
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<tr>
<td>Institutional</td>
<td>Multiple ways</td>
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**Learning Spaces: a vision of future learning**
Moving towards a **paradigm change in E&T**

- Need to combine technological, organisational and pedagogical change
- Open up E&T institutions and practices to work, everyday and LLL
- Blurring boundaries between informal, non-formal and formal learning
- Continued attention and focus on ICT for Learning
- Untapped potential of Social Media: more active, participative, meaningful, inclusive, innovative and creative learning

**Urgent need for digital competence & Information literacy for all:**

**Teacher training:** from basic ICT skills towards critical and creative use of ICT

Ensure **quality, reliability and safety** of online and user-generated content
Thank you

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