Digitalization in university continuing education:
Crossed view of research and practice

Digital Ecosystems to promote Learning
The Researcher’s View

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Perspectives on Higher Education

Demand

Local
Open collaboration networks

New responsibilities

Offer
Training organization
New scenarios to build knowledge

Global
Local networks
EXPERTS’ FORUM

98 experts, 14 countries, 65 institutions, 22 work documents, 11 framework documents. 66 best practice
2015 - Teacher digital literacy
2016 - New tendencies
Strategic areas for the education of the future

**MASS MEDIA**
- To engage people in the generation and sharing of new ideas and in the participation of policy decision-making.
- Identify and manage the emotional states.
- Social networks as a learning environment and as a citizen participation tool.
- Interactions and the role of the participants in a network, and identify the optimal organization and the features of a network designed for a specific task.

**NETWORKS & PARTICIPATION**
- Joint dialogue between all stakeholders.
- Develop a Code of Technoethics.
- The socially responsible and committed use of digital technologies.
- Good practices within and outside the education system in the critical, safe and responsible use of digital technologies.
- Competence of trainers in incorporating ethical issues about context.

**SOCIAL INCLUSION AND COHESION**
- Generalizing the commitment to the goals of social inclusion and cohesion.
- Modifying cultural, institutional and curricular patterns.
- Advancing equity.
- Systemic approaches.

**ETHICS AND TECHNOLOGY**
- Transformational spaces for the emergence of talent.
- Definition of the functions and profile of the smart cities as an educational resource in itself.
- Universal and free access to the Internet and its resources.
- Increasing the use of city spaces as learning spaces, using the technologies that are available as augmented reality, QR codes, etc.

**SMART CITIES**
- Foster on research in open content / open data / openness.
- Accessibility and connectivity.
- Approach informal and formal education.
- Digitalization of culture to guarantee access to culture.
- Policies to promote inclusion and participation.
- Policies that guarantee rights of creators intellectual property in the open world.

**EDUCATION, CULTURE & TECHNOLOGY**
- New strategies to train teachers for a new generation of innovators/entrepreneurs.
- Methodologies, metrics and indicators for the assessment of the effectiveness of the implementation of pilot strategies and programs.
- Permanent dialogue between science and society.

**SCIENCE, TECHNOLOGY & INNOVATION**
- An educational policy that goes further than school.
- Basic curriculum to assure equality and to promote quality of learning.
- To link the professional development of teachers and educators by means of innovation.
- Extend focus to diversity with tutorial services in an integral view.
- Increasing pedagogical autonomy of centers and teachers team to develop innovation.

**NEW MODELS OF KNOWLEDGE CONSTRUCTION**
- New models of knowledge construction are now enabled through new modes of participation, interaction, collaboration, commitment, and co-construction of provisional representations of the real.
- Learners have access, integrate, assess and manage different types of knowledge, in multiple contexts, through new and varied forms of interaction.
- There are now more agents and knowledge mediators.
- The very notion of authority is being redefined by new forms of action and interaction made possible by means of emergent technologies.

**KEY COMPETENCES**
- For the institutions: Reports issued by different agencies on key Competences. In all digital competence appears.
- For the citizen and for the being born in a digital world.
- For the education: recognize the importance of digital competence.
- For the society: Having digital tools to facilitate access for all to information and knowledge.

**LEARNING ENVIRONMENTS**
- To understand the learning potential smart technology in learning environments.
- To better understand potential of emerging learning environments.
- To provide opportunities for creative construction of knowledge and critical thinking.
- How students learn in informal information rich learning environments.
- Involve all participants in designing learning environments.
- Explore user generated learning environments.

**TEACHER TRAINING**
- Map of educational innovació a Catalunya.
- Training process for faculty and students.
- Didactic methodologies by using technology.
- Overall vision: Business, school and technology.
- Technic and pedagogic Vademecum.
Our tools: are they analogue or digital?
Always connected (?)
The Network can be a neural network for the construction of knowledge
Knowledge?

Transfer ideas

Create content

Generate knowledge

Design new proposals
Digitization of information
Vs.
Open Contents
The construction of knowledge
Vs.
Open Learning
New models of knowledge construction

• New models of knowledge construction are now enacted through new modes of participation, interaction, collaboration, commitment, and co-construction of provisional representations of the reality

• Learners have to access, integrate, assess and manage different types of knowledge in multiple contexts, through new and varied forms of interaction

• There are now more agents and knowledge mediators

• The very notion of authority is being redefined by new forms of action and interaction made possible by means of emergent technologies
Which tools do we have to learn?
35 Digital Tools That Work With Bloom’s Taxonomy

Students Toolkit – Learning Environment?


http://learning.londonmet.ac.uk/digital-literacies/learningnetwork.htm
Digital Learners?
Digital Literacy
21st Century Student Outcomes and Support Systems

- Learning and Innovation Skills – 4Cs
  - Critical thinking • Communication
  - Collaboration • Creativity

- Life and Career Skills

- Core Subjects – 3Rs and 21st Century Themes

- Information, Media, and Technology Skills

Standards and Assessments

- Curriculum and Instruction
- Professional Development
- Learning Environments

(P21, 2007)
Connectivity
Accessibility
Security

Digital Orphans?
Digital identity
Digital literacy: digital identity and social presence

(Esteve, V., 2015)
Digital Teachers?
Teachers and digital competence:
Do they have digital competence?

Alec Couros
University of Regina (Canada)
Learning Ecosystems
Building Digital Learning Environments

Building Your Roadmap for 21st Century Learning Environments

A Planning Tool for Education Leaders

Leadership & Culture
- Distributed
- Open Culture
- Advocating
- Visionary

Learning
- Rigorous
- Personalized
- Collaborative
- Inquiry Based
- Adaptable

Teaching & Professional Learning
- Equitable
- Collaborative
- Student Focused
- Facilitated
- Flexible

Assessment & Accountability
- Adaptable
- Personalized
- Multiple Measures
- Promote Growth
- Contextual

Infrastructure
- Security
- Capacity
- Hardware
- Support
- Budget

Planning Stage

Building Stage

Transforming Stage

No matter where you are starting from, this flexible planning tool helps you chart a strategic path for transforming your school to meet the demands of today's students and their futures.

http://www.setda.org/2015/05/25/roadmap-supports-building-digital-learning-environments/
http://late-dpedago.urv.cat/simula

Scenarios
Information
Knowledge
3D virtual learning environment

- Develop and evaluation pre-service teachers' digital competence
The educational proposal

PHASE 0
• Installation
• Training for teachers

PHASE 1
• Technical and instructional design

PHASE 2
• Implementation of the teaching sequence

PHASE 3
• Data collection
• Results
• Assessment
The educational proposal
Digital Learning Environments

• Understand the learning potential of smart technologies in learning environments

• Understand the potential of emerging learning environments

• Provide opportunities for creative construction of knowledge and critical thinking

• Understand how students learn in informal information-rich learning environments

• Involve all key actors in the design of new learning environments

• Explore user-generated learning environments
The secret of a good base

Foto: Perito Moreno, Patagonia (Argentina)
Who are the players in this ecosystem?
A joint strategy

http://elpais.com/elpais/2016/10/03/album/1475487538_665917.html
Quality: an ambitious goal

Scalable

Flexible

Oriented

Collaborative

“No one can ever remove us everything we have learned”

Thank you very much!! for your attention

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