Perspectives from learners in the CELSTEC Learning Media lab

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at the MATURE Workshop on User Centred Requirements Processes for E-Learning and Knowledge Management – A European-Wide Perspective

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Learning Media Programme

• Assumptions:
  • Learning from experience
  • Mixed reality environments
  • Personalised and contextualised support

• Exploration of new media technologies for learning and teaching
  • Immersive media
  • Social media
  • Mobile media
Immersive media

- Virtual laboratories
- Virtual practicals
- Real world complexity
- Computational dynamics/simulations
- Serious games, role play/multi-user
- Virtual worlds
Social Media

- User-generated content
- Data mash-ups, content aggregation
- Tool aggregation, PLE mash-ups
- Social networking
- Content sharing
Mobile media

- Cross media authoring and delivery
- Ubiquitous access
- Location-based learning
- Contextualised, personalised learning
- Mixed & augmented reality learning
Basic idea: User Contexts

- What does this mean for the service the @education provider is providing?
End-users Learners Tutors Teachers

• Scary.. but !
• Key is the support of the learning activities, tutoring activities or teaching activities
• It is attractive to focus on the new technologies themselves.. better to do so from a user perspective!
• Keep it simple... is what our adult learners express
• Slow take up of new approaches in actual curricula, LLL .. even in an Open University focussed on TEL.
Design of TEL environments

• Needs analysis!
• full fledge instructional design?
• Drafting of ‘learning scenario’s’ involving different actors and tools, work out the flow
• Cyclic approach, improving prototypes in a few cycles

iteration 1  iteration 2  iteration 3  iteration 4

• Prototype can be new but preferably built on top of existing tools, OS or web 2.0
• Continuous discussion; compile an environment from multiple existing tools or design a specialistic one geared towards a specific context of learning
Usability testing

- Usability inspection by experts (cognitive walk through)
- Testing of various prototypes by end-users:
  - tool should be new to them
  - ‘think aloud’ / work in couples
  - given relevant tasks to perform
  - elaborate on improvements
- Cyclic approach with ‘fresh’ end-users after analysing results and improving prototype
- Approaches used are (can be combined)
  - observer taking notes
  - capture of screen, video of users
  - eye-tracking
  - Online version, easy to organise for small groups.
Usability testing

Psychologic process
- Evaluation
- Action
- Cognition
- Perception

Measurement
- Interviews
- Log-analysis
- Think aloud
- Eye tracking

:-)
Apply
Grasp
Find

based on Groner, Raess & Sury
Open innovation policy

Directed by Celstec

Directed by partners

Laboratory

R&D → Experiments → Implementation → Appliance

Celstec staff

Partner staff

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Example projects

• MACE (Metadata for Architectural Contents in Europe) www.mace-project.eu
• Share.TEC Sharing digital resources in the teaching education community http://www.share-tec.eu/
• Mobile Learning Content for Ubiquitous Learning Environments (MOLECULE) http://celstec.org/content/molecule
• ICOPER (Interoperable Content for Performance in a Competency-driven Society)
• LTfLL (Language Technology for Lifelong Learning) http://www.ltfl-project.org/
• TenCompetence http://www.tencompetence.org/
• STELLAR Network of Excellence http://www.stellarnet.eu
• complete overview at http://celstec.org
CELSTEC news

Special Issue Computers in Human Behavior on cognitive load

The new issue of Computers in Human Behavior contains a special issue on Cognitive Load Theory. CELSTEC's Tamara van Gog and visiting professor Paul Ayres edited this special issue.

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Minister of Education congratulates CELSTEC and Iselinge

Yesterday, 25th of June, Minister of State (staatssecretaris) of Education Van Bijsterveldt, congratulated OUNL/CELSTEC and Hogeschool Iselinge on their collaboration in the academic teachers training. “This is a great initiative. It offers young people who want to become a teacher, a whole range of possibilities.”

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Questions? Follow up?

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