Web 2.0-based PLEs

Building order into the chaos

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PLEs vs VLEs

• Dissatisfaction with VLEs for facilitating learning (poor communication functions, storage, limited interactions outside learner cohort)

• VLEs – tools of institutional control; institutionally-owned; serving the needs of the institution rather than the learner

• Policy and academic discourse on ‘personalisation’ of learning, and learning environments

• Emergence of and widespread access to a new generation of internet-based tools and technologies (Web 2.0 tools)

• Learners familiar with these technologies, ownership of technologies..

(Scalter, 2007; Chen et al, 2007)
PLEs

Students are given back control over their learning and management of information (van Harmelen, 2006)

Different approaches to PLEs

- Manchester PLE / VLE framework: desktop-based client
- Browser and web server based
- Social software based (e.g., Strawberry)
- mPLE 2; Sapo (Portugal, from Sept 2008); many others....

Central software, institutionally driven, lack of information on learner experience....

Assumptions on 'digital natives' and 'digital immigrants', and NOW 'digital wisdom' (2009).

...learners ... now have the capacity to break away from the traditional structures of top-down centralised education systems and learn with the aid of a range of web-based tools, quasi intelligent agents and remote learning companions in distributed online affinity groups (Francis, 2008, p. 10).

PELICANS: Personal E-Learning IN Communities And Network Spaces

- PLEs as objects and as concept

  PLE as an object
  § Static
  § Compatibility issues

  PLE as a concept:
  • Flexible
  • Changing
  • User-tailored

- PLE is not a goal, but showing how Web 2.0 tools can be used in a more systematic way...
Web 2.0-based PLEs - A framework

- Help students embrace Web 2.0 for their studies
- Helping students learn how to use Web 2.0 tools for lifelong learning
- Preparing students for future employment

Web 2.0-PLEs: four approaches

- Wiki-based
- Social-networking based
- Start-page based
- Browser-based
Social network-based PLE: Facebook
Aggregator-based PLE: Netvibes
Browser-based PLE: Flock

Pilot study

- Group: 33 students, ages 19 to 24, undergraduates, enrolled in a Business Administration programme, in Barcelona, Spain

- Subject: Business Information Systems

- Period: September 2008 - present (ends May 2009)
Pilot study

- *Prosumers* approach to Web 2.0
- Students creating and managing their own content
- Collaboration
- Bottom-up approach instead of top-down, to allow for creativity and user participation

1st phase (September 08-January 09)

- Introduction to Web 2.0 concept and tools
- Twitter, first tool to be introduced
- Peaks before exams and school events, frequent users around 20% of class
- Other tools chosen and introduced by the students themselves
Other tools:

In teams:
- Podcast & screencast project (HTML review)
- Wetpaint

Individually:
- Flickr
- Picasa
- Clipperz
- Jooce
- FriendFeed

Results 1st phase

- 27 out of 33 students adopted Twitter as main channel of communication for the class, after 3 weeks.

- 25 submitted "Web 2.0 diagrams" showing their approach to connecting and managing the tools - also mentioned tools they were missing
2nd phase

- Web 2.0 tools diagrams showing connectivity
3rd phase

- PLE concept introduced,
- 4 approaches
- 5th approach introduced by student: use of virtual desktop (G.ho.st) - in study
- Essays and interviews
Results 3rd phase

30 students, 19 - 24 year old

Business Administration programme, International school (english)

16 students built or developed a PLE
4 students did not see the usefulness

10 students did not participate (as this phase was not graded)

In their own words...
Evidence of learning and developing skills

"I have been introduced to tools I do not think I would have been using already now, if it was not for this project"

"PLEs increase my level of learning opportunities, as I don't miss anything in a news perspective"

"a proper working PLE decreases the level of stress and increases the opportunities to learn"

"a well-developed PLE can lead to enhanced (autodidactic) learning"

"[PLE] has changed my personal learning process"
Evidence of PLEs as organisation and management tools

"this is 'not only my PLE but also my PEE (Personal Entertainment Environment” and PSE (personal Socialisation Environment)"

"I really support the use of PLEs, because it can help me to share information and exchange many things through the web 2.0 tools"

"there is such an overload of tools today that we need some kind of organiser for them"

"Flock has taken it to another level for me, by centralising all my different [web] stops that I do in one page"

"[a PLE] is an easy way to manage and organise all the information I get from online sources, and also offline ones"
Evidence of strengthening social interactions

"one thing I started using through Flock is Facebook [...] I started to have conversations with classmates, friends and even teachers"

"what I like the most about all these web 2.0 tools is the ability to get inspiration, knowledge and to be able to interact with other people"

"I am developing a network that most probably will become extremely valuable in the near future"

"the social element has had a large impact in my learning process, helped me to create stronger links with classmates, friends and teacher because you interact more and put your opinions forward"
Negative points and criticism

Next phase: Parallel studies

Potential collaborators:

- Two chemical engineering programmes (1 subject each)
- Two business administration programmes (3 subjects)
- One module at the University of Leicester (Media and Communications)

To be started September 2009
Preliminary conclusions

- NetGens, Millennials, Digital Natives (?) still need help and guidance to learn how to use and take advantage of Web 2.0 tools - for learning

-Scaffolding approach helped students realise the usefulness of a PLE to help them organise content and strengthen their social network, while helping them in their learning process

- PLE not as a goal, but as a means to help students realise the potential applications and usefulness of Web 2.0 tools

“The PLE is what happens when we apply Web 2.0 principles to e-learning”

(M. Metcalfe)
Thanks for your attention!

Do you want to share your own PLE with us?

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