How social media is transforming learning, teaching and research dialogues

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Acknowledgements: JISC, VITAE, Faculty of Mathematics, Computing and Technology, The Open University, UK and colleagues at The Open University and elsewhere

In this talk

• What is distinctive about social media technologies?
• What have been the implications for?
  – students
  – educators
  – institutions, and
  – researchers
• What are the challenges ahead?
Social media, Social software, Web 2.0
Conducting research in virtual worlds

My name is Dr. Shelley Wener-Perez and I am based at the Open University, UK. I have set up this wiki with resources related to conducting research in 3D virtual worlds which researchers of virtual worlds including gaming environments would find useful.

You are very welcome to contribute to resources in this wiki. Please send me links to resources, and also if you have ideas on how we could make this wiki useful for researchers, please write to me: <s.wener-perez@open.ac.uk>

Contents of the wiki:

- Books with case studies, research methods and ethical aspects
- Prior work related to conducting research in virtual worlds
- Ethical considerations of conducting research in virtual worlds: papers, guidelines and other online resources
- Events and meetings which could be useful for researchers
- Case studies and method papers related to empirical studies in virtual worlds
- Recruitment strategies for participants
- Examples of research materials such as consent forms, non-invasive questionnaires, contact’s permission sheet, etc.
Learn through 3D simulations

Learning about an animal cell from a website

Immersive learning by moving around in the cell and its organelles

Practise real-life scenarios through role-playing

Learn about trauma management
Get acquainted with the surgical equipment and the environment
Explore unrealistic scenarios

Explore situations and places which may not be feasible or too cumbersome to arrange in real-life.
Experience marine life virtually and at a close distance by taking a tour in a submarine.

Studying underwater marine life

Blending physical spaces, 2D and 3D virtual environments

<table>
<thead>
<tr>
<th>Socialisation</th>
<th>Externalisation</th>
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<tbody>
<tr>
<td>Tacit to Tacit</td>
<td>Tacit to Explicit</td>
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<tr>
<td>Socialisation in Second Life: introductions, tours; face-to-face meetings</td>
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<td>Course activity in Second Life, or in a classroom setting</td>
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<td>Internalisation</td>
<td>Combination</td>
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<tr>
<td>Explicit to Tacit</td>
<td>Explicit to Explicit</td>
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<tr>
<td>Reflection-on-learning in forums or in Second Life or listening to podcasts</td>
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<tr>
<td>Connecting ideas, discussions in wikis, blogs, forums</td>
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Characteristics of social software use

• opened up possibilities for educators, students and researchers
• triggered creativity and innovation
• helped to bridge geographical distances
• facilitated global partnerships in teaching, learning and research
• encouraged public engagement

Other implications of social software use

• face-to-face interactions are fewer now
• sensitised us to ethical issues, about privacy, anonymity
• personal and professional profiles, social etiquette
• made us aware about how we manage our social and intellectual capital
• made us more aware of where and how our resources in the online domain are being stored and who can access them
Impact on students

Effects on students’ learning, skills development and employability

• collaborative learning; critical reviewing
• reflective learning
• peer-to-peer learning and teaching
• gaining transferable skills
  – reflective practitioner
  – online communication skills
  – team working in a globally distributed environments
  – an online ‘portable’ portfolio: collation of ideas and resources
Concerns for/about students

- conflict: learning vs. technology
- diverse mental models, experiences and expectations
- group-working: ownership, assessment
- interacting with tools in the public domain
- dialogues and resources may be unsubstantiated
- their perceptions of the educator
- can distract from deep reflection and cause information overload as individuals respond to frequent interruptions
- employers and prospective collaborators look at the social media profiles of the candidates

Impact on educators
**Educator’s roles**

- pedagogical design
- technical: installation, on-going support
- training and imparting digital literacy
  - *digital literacy* is the skills, knowledge and understanding that enables critical, creative, discerning and safe practices when engaging with digital technologies in all areas of life
- facilitation and mentoring

**Implications for educators**

- are able to intervene early; student retention
- teaching interactively rather than broadcasting
- conducting ‘evaluations’ of student experience and are taking a multi-disciplinary perspective
- able to provide a multi-media and a multi-modal experience to suit different student needs
- the rise of the concept of ‘digital or social scholarship’: *is the practice in which the use of social tools is an integral part of the research and publishing process, [and is characterized by] openness, conversation, collaboration, access, sharing and transparent revision* (Cohen, 2007)

Cohen, L. (2007) Social scholarship on the rise, Blog entry posted to Library 2.0: an academic’s perspective
Issues for the educators

- managing diverse needs of students
- not always possible to transfer the initiative to another context or discipline and assume that it will ‘work’
- learning activity design
- assessment design
- performing the role of a facilitator or mentor
- their workload
- managing diverse stakeholder relationships

Impact on institutions
Institution’s perspective

• tools can help to overcome geographical distance
• student retention
• image building: alumni community
• contribute to employability by showcasing work

Concerns of institutions

• tension between the virtual learning environment and the tools in the public domain: control, reliability, firewall
• concerns about support from external organisations
• resource implications
• how to get the ‘balance’ right between adopters and non-adopters
• appropriateness of the content being posted in the public domain
• how to ‘teach’ digital professionalism
Success factors

Pedagogical, technological and social factors that influence student experience

• pivotal success factor: the educator
• situating the technology within the learning
• clarifying the role of the technology to the students
• ensuring usability of the technology
• providing user guidance and social norms, etiquette
• designing for socialisation in on-line collaborations
Impact on researchers

Implications for researchers

- Using a variety of technologies to support research dialogues
  - formal dialogue with supervisors
  - informal interactions with peers and supervisors
  - document sharing and storage
  - space for reflection; working with ideas and the process
  - engaging with the community
  - keeping themselves informed
Issues for the researchers

- choice of the social media tools
- is it worth the time and effort
- ethical, moral or legal issues of interactions
- creating a researcher’s profile
- how to maintain professional boundaries
- who is the audience
- who owns the data in the cloud

Framework to guide blogging

Challenges and further research

Challenges

• how to get educators involved?
• how to sustain these initiatives?
• how to derive generic outcomes for transferability of the initiatives?
• learning analytics and the associated issues
• implementation and evaluation by educational researchers or educators
Evaluation of social software initiatives

• resource-intensive
  – planning and running the initiative
  – cycle of feedback and change has to be built
• even the researcher may not have the full grasp of the technology, its characteristics, and how it can be used
• combination of technologies may be required or may be in use
• ethical considerations may be ‘unique’

Research agenda for the future

• changing role of the educator: content-creator to curator; increased focus on facilitation; sense-making
• impact on face-to-face learning
• design of learning spaces: physical learning spaces, 2D and 3D spaces
• 3D virtual environments: STEM education
• learning analytics
For further dialogues

• Shailey’s contact details
  email: s.minocha@open.ac.uk
  profile: http://uk.linkedin.com/in/shaileyminocha

• Papers and reports on social software, wikis, blogs and 3D virtual worlds on Open Research Online (repository)
  http://oro.open.ac.uk/view/person/sm577.html