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TLRP-TEL

Feedback Workshop: Nov 9. '07

Richard Noss

Associate Director (TEL) TLRP



Introductions..

- Prof Stephen Brewster (Glasgow Interactive Systems Group)
- Steve Buchanan (ESRC)
- Prof Andrew Pollard (director, TLRP)

Agenda

11.30-1.15 Presentations and discussion

1.15 Lunch

1.30-5.30 Richard's surgery slots

1.30-3.30 Steve's CS-surgery slots (signup!)

TLRP (TEL)

- TEL 1
 - 7 development awards
 - 3 large research grants.
- TEL 2 outline proposals
 - 62 small ---> 8 shortlisted
 - 29 large ---> 9 shortlisted
 - 4 rejects
 - overall 20% shortlisted
 - funding for £5.6m

What is TLRP-TEL trying to achieve?

- **cumulative** research outcomes
- **exploiting** intelligence, mobile technologies, social networking, adaptivity
- the challenge of **designing and understanding**
- **sustainability** through co-design
- **generalising** domain-specific evidence
- **integrating** perspectives from the social, cognitive and technological sciences

4 themes in need of elaboration

1. Interdisciplinarity

- the ways in which different literatures necessitate individuals stepping outside of their range of expertise;
- an acknowledgement that interdisciplinarity is an evolving and uncomfortable state, not one that can be 'declared';
- that passing (or testing or evaluating) ideas between disciplines is, at best, *multi-disciplinary*;
 - interdisciplinarity involves added value to **all** the participating disciplines
 - could project be funded by EPSRC or ESRC alone?

an aside...

The logo for the Engineering and Physical Sciences Research Council (EPSRC). It features the acronym 'EPSRC' in a bold, dark red serif font, centered between two horizontal green lines.

Engineering and Physical Sciences
Research Council

Discipline Hopping in Information and Communication Technologies

Open Call

The target of this open call is to generate proposals at the interface between Information and Communication Technologies and other disciplines including the physical and biological sciences, social sciences, arts and humanities.

Proposals are invited for an established ICT researcher to work in a new field or alternatively for researchers outside the discipline to spend time in an ICT research environment. Proposals are also encouraged for researchers to spend time in a user environment to gain a deeper understanding of user-driven problems and facilitate knowledge transfer.

The logo for the Teaching & Learning Research Programme (TLRP). It consists of a dark blue square containing the text 'T·L·R·P' in a large, white, serif font at the top, and 'TEACHING & LEARNING RESEARCH PROGRAMME' in a smaller, white, sans-serif font below it.The logo for the Economic & Social Research Council (ESRC). It consists of a dark blue square containing the text 'E·S·R·C' in a large, white, serif font at the top, and 'ECONOMIC & SOCIAL RESEARCH COUNCIL' in a smaller, white, sans-serif font below it.

2. Design

- CS supports learning research
- learning research supports CS
- co-evolution of and interplay between:
 - learning activities & outcomes
 - technical innovation

3. Addressing the challenges

- Productivity:
 - Achieving higher quality and more effective learning in affordable and acceptable ways
- Personalisation:
 - Transforming the quality of learning, by matching technology with learners' needs
- Inclusion:
 - Improving the reach of education and lifelong learning to groups and individuals
- Flexibility:
 - Enabling more open, variable, and accessible learning

4. Methods

1. Does the proposal clearly and fully describe a research design and schedule appropriate for the achievement of the stated research objectives?
2. Are there rigorous methods for assessing learning outcomes (broadly conceived)?
3. Are there realistic proposals for data collection and data analysis?

TEL and Computing Science

Steve Brewster

Department of Computing Science

University of Glasgow



Where does CS research fit?

- Many topics in CS would fit with aims of call and contribute to learning and supporting learning
 - Grid computing / eScience, visualisation
 - Semantic Web
 - Computer supported cooperative working, social networking
 - Ubiquitous computing, mobile computing, gaming
 - Multimodal interaction and human-computer interaction, accessibility

User-engagement aspect of call

- “User engagement and partnership throughout all stages of the research”
- In CS this is commonly found in Human-Computer Interaction (HCI) domain
 - Very user focussed and problem oriented
 - User centred design
 - Many common areas of interest already, many HCI projects in technology and learning areas
 - Many HCI researchers interested in this topic

Grand Challenges in computing

- Focus for future research in CS
 - www.ukcrc.org.uk/grand_challenges/current
 - In Vivo -- In Silico
 - Bioinformatics, systems biology
 - **Ubiquitous Computing**
 - User experience, design, theory + modelling
 - Memories for Life
 - Understanding memory, supplementing it, information retrieval, information management
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Grand Challenges in computing

- The Architecture of Brain & Mind
 - Understand and model natural intelligence at various levels of abstraction, robots
- Dependable Systems Evolution
 - Reliability, security, trust, serviceability of large s/w systems
- Journeys in Nonclassical Computation
 - Quantum computing, autonomous systems, bio-inspired algorithms

Grand Challenges in computing

- **Learning for Life**

- Development of new forms of e-learning environment and the effective use of new e-learning tools and facilities
- Modelling and dynamic evaluation, informal and lifelong learning, creativity and problem solving
- Inclusion and accessibility
- Lots going on in HCI in these areas

Grand Challenges in computing

- **Bringing the Past to Life for the Citizen**
 - Citizen should be able to witness events of the past
 - Allowing viewer to explore and discover more about the circumstances and motivations of the participants
 - Linking the reconstruction to modern day evidence and receiving explanations of the differing socio-political perspectives

Questions and Discussion

And now..

- Aims of feedback sessions
 - Richard's slots
 - Steve's slots
- Lunch