

## ACTIVITIES AND ACHIEVEMENTS QUESTIONNAIRE

### 1. Non-Technical Summary

A 1000 word (maximum) summary of the main research results, in non-technical language, should be provided below. The summary might be used by ESRC to publicise the research. It should cover the aims and objectives of the project, main research results and significant academic achievements, dissemination activities and potential or actual impacts on policy and practice.

This six-month development project had two complementary aims: (A1) to investigate the discourse processes, practices, and challenges of interdisciplinary research (IDR) by exploring a key Technology Enhanced Learning (TEL) theme i.e. personalisation of learning using digital artefacts; and (A2) to develop a competitive interdisciplinary TEL research proposal, including the mobilisation of external partners and users groups.

The project team comprised researchers from: social sciences, education, computer science, informatics, and business; all with experience and interest in the topic of personalisation of learning, and a shared interest in the new research grant opportunities for working with interdisciplinary partners when researching the uptake of new technologies for improving learning processes and learning outcomes.

The construction of an interdisciplinary research (IDR) space was taken up in five ways:

1. *By using an adapted version of the DELPHI process to organise our conversations.* This began by generating key questions for example “What do you understand by interdisciplinary” and “What do you understand by the term personalisation of learning.” These questions were discussed and treated in different modes led by different members of the team e.g. a face-to-face workshop, online conference and a meeting format with personal response software and electronic voting handsets. The objective was to sustain interdisciplinary conversations while collecting qualitative data on both the content and process of the interdisciplinary working.
2. *By investigating our in situ differences.* Each of us completed a writing task that recognised ourselves as ‘professional workers’, ‘learners’ and also ‘users’ who personalise digital artefacts. Importantly the writing was in a genre that was not typically located within any of our disciplinary worlds. The title was ‘Me and my artefacts’ in the style of ‘A day in the life of...’ We agreed to use ‘I’ in the writing. These accounts were anonymous and treated as qualitative data as they articulated everyday personalised usages of digital artefacts as people operate between domains of practices in their everyday lives.
3. *By enabling the flow of learning between spaces.* Activities in 1 and 2 exposed the group to new information, techniques, perspectives, methods and concepts and some were taken up, *but also changed*, in the design of further studies by members of the team. Some examples are: (i) private practices of desktop personalisation by informatics researchers; (ii) the personalisation of informal learning amongst voluntary sector organisations; and (iii) understandings of interdisciplinarity among Human Computer Interaction Design PhD students.
4. *By deconstructing various understandings of ‘interdisciplinary’ and ‘personalisation’ at University wide events:* (i) City University Staff Development Week called ‘Learning Futures – Now It’s Personal’; and (ii) City University Seminar Series: Multidisciplinary Research in Key Settings.
5. *By analysing the lessons learnt from developing a new interdisciplinary TEL research project including:* (i) making connections with other research projects; (ii) building relationships to develop a national interdisciplinary team; (iii) linking with international partners; and (iv) resolving issues around intellectual leadership, power, status and project control.

In these spaces our work on personalisation has fanned out into multiple streams. One stream is around learning on the move and personalisation of combinations of technology by researcher-learners across time and space. This is work in progress. In this summary we focus on IDR and make two claims.

**Our first claim is that IDR is about understanding and enabling a strong and sustained *commitment to work together*.**

We found evidence that TEL ideas and research methods did cross over disciplines and were taken up unexpectedly. We have consolidated a new interdisciplinary consortium and developed what our evaluation (and peer review) suggests is a genuinely interdisciplinary and new TEL project bid for funding. Based on our current understanding we propose a definition:

*IDR generates new knowledge that comes from new learning. It takes place in multiple reciprocal communications such as conversations, writing and joint activities which include researchers from different disciplines and TEL practices, as well as users, who are committed to work together.*

**Our second claim is that *TEL interdisciplinarity is about working with disciplinary differences rather than battling though them*.**

Previous work in the Sciences, Engineering and Medicine has characterised IDR in terms of consensus, integration and synthesis. We found that the enactment of differences, between and within TEL disciplines, shows that epistemological differences cannot be collapsed or merged. The differences are not trivial or irrelevant. In TEL research, claims about integration or synthesis may hide the powerful dominance of established research paradigms exerting authority to claim 'interdisciplinarity'.

We found evidence that disciplines are disciplining and that researcher identities are located within particular discourses, histories and social structures which give rise to particular kinds of research questions and research practices. IDR entails making choices about the significance and relevance of differences and strategies to work with uncomfortable partial consensus; therefore - quality of the relationships, social dynamics and interpersonal skills are integral to success. In addition IDR is pluralistic advocating a slower more painstaking treatment of taken for granted research methodologies, research practices, abstractions, and representations.

The two claims are implicit in our preliminary findings:

1. IDR needs experienced researchers across the TEL discipline areas. Experienced researchers are status/career conscious implicating complications in power relationships around roles and responsibilities, project leadership, allocation of funding as well as recognition and esteem.
2. The success of IDR groups depends on institutional commitment and academic leadership as well as intellectual leadership. This is because lead research groups and individual academics, while motivated by intellectual curiosity and practical TEL problems, are *driven* by strategic positioning and power relationships (see 1 above).
3. IDR in TEL depends on an interest in working with and the languages and cultures of researchers' from different traditions. IDR is only successful if researchers can talk about their work with other people in the group. This takes extra time and depends on quality of the relationships.
4. An important facilitation/communication role is taken by researchers who have been apprenticed in more than one TEL discipline.