<h1 style="text-align:center">ALT response to RAE02/2004
RAE2008
Panel configuration and recruitment</h1>

The Association for Learning Technology, the body representing learning technology researchers, practitioners, and policy makers in HE and FE, is pleased to have this opportunity to respond to this consultation and information paper. Please note our precise name is as given here and not as in Annex B to the paper. The aims and objectives of ALT and further detail can be found at http://www.alt.ac.uk.

The main aspect that we wish to address is that of panel configuration in the area of research in Learning Technology and related pedagogy. As is pointed out in paragraph 12 of the paper, this is an area that affects many disciplines. It also affects the future success of the sector itself. It is therefore important that a solution be found that addresses the current problem of a lack of appropriate mechanisms to cope with the area. The problem will not go away.

We are at a time when there are profound changes in the type of student, expectations of learning, social models, and roles of those supporting the learning processes, especially for learners who so do by choice rather than legislation. These changes are ultimately pedagogic but in many cases are made possible by advances in technology, driven by changes in the learning population and the costs of traditional learning methods. It seems unlikely that these are "one-off" challenges: change is profound and ongoing.

The problem has been recognised by HE funders. The last year has seen unprecedented coverage of the problem. The DfES e-learning strategy, the HEFCE e-learning strategy, the SHEFC consultation, and the JISC strategy and committee structure all emphasise the need for a significant increase in research in the area. This is complemented by an ongoing series of supporting articles by senior members of the community, most recently in the Higher on 23rd April p16 and 30th April special supplement. It therefore seems a little odd that the RAE should continue to act in a way that discourages this work, either directly or by reputation. Even if there is a declared need to be neutral as regards the utility of a subject area, that does not imply ongoing action that actively hinders the emergence of a new discipline that is key to the future success of UK higher education. Research and accreditation are emerging as the key high level issues that need addressing: evidencing the establishment of a mature discipline and associated profession and corresponding industry.

One consequence of this is rapid growth in the quality and quantity of research into how to utilise the changes in learners, pedagogy, and technology to the benefit of the learning process, and to improve quality and access. We estimate, from journals, conference attendance and membership, that UK HE contains in this area over 2000 research workers with full time contracts and a much larger number of part-timers. Research is undertaken within a broad educational context (pedagogy led), within a specific hardware or software context (technology led) or within a discipline specific environment (learning led); but a combination is more usual.

As with other disciplines that have emerged from interdisciplinary work (e.g. Computer Science or Environmental Science), there comes a point when the researcher is genuinely engaged with a new discipline with its own distinct values, codes of practice, mores, and goals. This is now the case for Learning Technology. A brief summary of the ALT position on LT research and its future importance is given in Annex B and an outline of what we believe to be the research agenda is given in Annex A. Annex A is related to the ALT LT research strategy that will be presented in July 2004 at a policy meeting on 6th July, to be addressed inter alia by HEFCE and EPSRC, to try and provide a framework in which to situate the diverse activities undertaken by workers in this field.

Accordingly, there must be some clear, fair, identified infrastructure for handling the area within the RAE. We propose that this would best be achieved by a panel specifically addressing the area of Learning using Technology, distinct from the more generic Education panel.

Education is a very wide area and its panel has largely concerned itself with traditional K-12 and related education. It has been slow to look at technology, perhaps reasonably as LT research has been led by HE which has not been its primary concern. Journals used by traditional education and those involved with educational technology have a small overlap. The education panel would especially have difficulty coping

properly with submissions across a wide range of technology and discipline bases. Whilst we believe that pedagogy is intrinsically more stable than technology or discipline, LT is not merely the application of traditional educational techniques in specific situations.

We propose that the panel is best situated in area K and is most closely related with education but that a major component will be working through interactions with many other panels, in particular Computer Science.

The proposed new panel would not be restricted to higher education although that is where a lot of current research, especially that undertaken by workers in their own disciplines, is situated. A less satisfactory solution would be to have a panel specifically in HE learning and pedagogy. This would restrict the level at the expense of including broader, non-technological research in HE pedagogy such as some work done at the Academy. Given that much of the work is independent of sector, this leads to less coherence.

For those working in specific disciplines, the differences between the two approaches may in practice be relatively small. A lot of such HE pedagogical work, whether it is statistical, learner focused, based round the development of communities of practice or whatever, is using technology as a major delivery component or underpinning vehicle. Thus, most of the work being done in disciplines, which might be referred to this panel by others, is in HE and is technology focussed. For those solidly within the subject area however this solution gives less coherence and undermines cross-sectoral work currently underway.

An inferior minimalist solution, following paragraph 29, would be to establish a group of experts to give "specialist" advice to all panels. ALT could take a key role in such provision through its research activity (a special panel on research advises the chair of ALT). We would be able to help with expertise widely distributed across disciplines. This would be far better than leaving it to each panel to have its own member with expertise with resulting differences of treatment and other quality issues, together with an overall feeling that the problem had been "shelved" yet again.

In considering the proposed panels, at first sight it seems as if size of community has little relation to panel configuration. However, if one factors in historical lag and use a decay model then the situation is easier to model. For instance, the presence in the scheme of three mathematics panels, dealing with small and possibly non-expanding communities, whilst only having one for the whole of the increasingly diverse large area of Computer Science, is a clear indicator of historically established taxonomies, which may align more closely with actual numbers of senior academics at the time of the first RAE, to drive the panel configuration. The scale and rate of change in our field requires a less conservative approach.

In launching the DfES e-learning strategy at the ALT Policy Board meeting in 2003, the Secretary of State stressed the importance for the UK of work in this new area and commented on the growing importance of work in the area for all sectors, and the need to understand transferability and reusability in particular. He also noted the need for UK HE to find effective ways of enhancing and deploying research in the area, especially within its own sector.

We submit that the establishment of a new Learning Technology panel as proposed would be a timely and strategically appropriate response to current developments.

Annex A Underlying Questions for research in LT

Note that the *questions* below are themselves essentially independent of subject matter, technology, and pedagogy. Research to address them is not. All these questions are essentially timeless although the answers depend on the particular moment in pedagogic and technology space that the enquirer inhabits. The questions are not in an order of priority but move in emphasis from technology to pedagogy:

1.   How do we make learning reusable across a variety of settings?
Learning object research is currently top-down, design led, and with standards that are largely technology-oriented; the real research – which is harder - needs to focus on supporting wider reusability.

2.   How do we integrate new learning opportunities with legacy systems?
New learning opportunities have to be introduced within existing administrative and learning systems and especially quality assurance regimes. The interaction between them is seriously under-researched.

3.   How do we make mass systems that are nevertheless personalised to the learner at the point of delivery?
There are two conflicting paradigms: mass higher education and the user expectation of a personalised learning experience. Research into how to resolve this conflict is vital.

4.   How do we make learning deliverable across a wide variety of sectors, ethnicities, cultures and modes of study?
Globalisation exacerbates the disparities in learning styles, approaches and attitudes to learning. Research is needed in how to support multiple understandings.

5.   How do we address disparities of opportunities for learners?
There have always been barriers to learning which divide societies into haves and haves not. Technology is both solution and problem: whilst research inevitably uses and develops the latest technologies, it can also mitigate disabilities and disadvantages.

6.   How do we maximise retention of students?
There is a growing tendency for students not to complete programmes. Research shows that e-learners are particularly susceptible to problems of de-motivation and feelings of low support and morale. Technology can help identify students at risk but is not yet properly deployed in this role.

7.   How do we devise diagnostic, formative, and summative assessments that are appropriate for the context?
Assessment has often lagged behind innovations elsewhere. We need assessment processes that reflect the learning outcomes of technology delivered education and avoid susceptibility to plagiarism. Again, technology appears as part of both problem and solution.

8.   How do we design learning that is cost effective, efficient, and has support for quality assurance processes inherent within it?
There is a growing need to have designs that inherently support subsequent quality assurance processes. Research in effective course models needs enhancing and the inclusion of costing considerations.

9.   How do we bring about an embedding of student directed learning into the whole teaching/learning process?
There have been many small scale case studies in student-directed learning; what is needed now is consideration of institutional strategies and technologies to effect the move away from teacher-centred approaches.

10.   How do we harness and extend informal technology-mediated learning into formal education?
Online communities of practice, games and edutainment have demonstrated significant learning outcomes. Research is needed to understand how these processes can be exploited in more formal situations.

Annex B The ALT view of Learning Technology research

The Status of Research in Learning Technologies within Tertiary Education

ALT understands learning technologies in a broad conceptual sense as the systematic application of a body of knowledge to the design, implementation and evaluation of learning resources. The growing body of research into the deployment of technologies to facilitate learning is recognising that a new discipline is arising as pedagogic paradigms and technology possibilities interact. A growing body of practice-based research is now being supplemented by theoretical underlying principles. Research workers come from a variety of backgrounds but the field has been fruitful. Relationships with technologists and with educationalists are being established based on mutual trust and recognition. ALT believes that sound research remains essential to the development and deployment of effective educational systems.

Research adds value because:
- research in e-learning is positively influencing deployment through a number of key products;
- understanding and evaluation of technology-based applications are facilitated;
- new researchers are being brought into academic research, in e-learning and in disciplines;
- expensive mistakes in deployment are avoided given appropriate research underpinnings;
- seminal research in the area is fundamentally interdisciplinary and hence in line with the growing interest in interdisciplinary research more generally.

However, a number of inhibitors lessen the perceived status of research and limit the widespread use of the research outputs.

- Too much disregard of previous research - work makes claims for e-learning without understanding previous innovative technology trajectories
- Hype in e-learning alienating traditional educational researchers, as claims have been made about it being a new paradigm
- Evaluations are often short term and use only simplistic measures such as exam marks and student enthusiasm
- Many traditional experimental scientists view the work as unscientific and poorly grounded in theory
- Evaluation and research work involves a lot of new researchers, often part-time and without formal research methods training, in common with some other disciplines.

A primary aim of ALT is to encourage and develop the research and the research workers and to disseminate the results of the work in a way that informs policy makers and those wanting to deploy the technology. Specifically ALT will:

- become a custodian of evaluation techniques ;
- generate and maintain a document describing the corpus of core elements of research in e-learning, in part to enable Masters Programmes to be developed;
- organise events for evaluators of e-learning;
- provide access to a pool of consultants specializing in in-depth technology – based applications who would also be available as expert reviewers;
- provide training and events particularly aimed at new researchers, including introducing them to funding opportunities and techniques;
- assemble and keep current, a digest of recent findings from research, focused on issues for deployers and funders;
- reconcile traditional educational and scientific researchers and e-learning researchers through a set of facilitating actions;
- expand and strengthen the research track at its annual conference ALT-C;
- seek alliances with home and overseas bodies to interchange ideas and results, including possible joint events and reciprocal membership and discount structures.

Association for Learning Technology (ALT)
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