

‘Understanding my Learning’

Background and rationale

The JISC has recently funded a number of successful projects in e-learning and pedagogy, with a focus on helping practitioners to design effective learning activities.

The JISC is now seeking to fund a number of complementary projects, to focus on understanding the learner perspective on the role of ICT in learning, and to support the effective development and use of learning environments. Outcomes of the projects will be used to inform the development of the next generation of learning tools and services, funded through the Innovation, Technical Framework and Tools, and Distributed e-Learning strands of the JISC e-Learning Programme.

The background and rationale for these projects is given in the following notes.

Potential bidders should ensure that they understand the background and rationale for the e-learning programme as a whole, and the role of this strand within the e-Learning Programme, before submitting their bids. Projects will be funded on the basis of their potential to contribute to the overall aims and objectives of the e-learning programme, and will be expected to collaborate closely with other projects identified as relevant to their own.

The JISC context

The JISC regularly funds programmes, services and other activities that promote and support the use of e-learning. The aim of these activities is to identify how the use of e-learning tools can facilitate learning, and to advise on how these approaches might be effectively implemented.

The **e-Learning Programme** is funded by the JISC Learning and Teaching committee to run from October 2003 until August 2007. The programme focuses on four areas: e-learning and pedagogy; technical framework and tools for e-learning; innovation; and distributed e-learning.

The aims of the e-learning programme as a whole are to:

- *Identify effective approaches to e-learning practice*
- *Create examples of effective practice in learning, teaching and technology*
- *Design open standards-based e-systems to support learning and teaching*
- *Design innovative e-learning applications*
- *Enable the sharing of resources and practice across communities.*

The **e-learning and pedagogy** strand, launched in January 2004, initially focused on realising these aims through a focus on *practitioner* needs, based around the theme of ‘designing for learning’. A range of projects has been funded under this theme. Outcomes to date include: a practitioner publication *Effective Practice with e-Learning*; reviews and research reports; practitioner guidelines and planning tools; case studies in effective e-learning practice; evaluations of learning design tools in use by practitioners; and recommendations for further development of learning design tools, standards and guidelines. Projects continue to be funded under this theme.

However, the strand has always recognised that *learners* have a different perspective on learning with ICTs. Practitioners are driven by the demands of the curriculum, the needs of the group as a whole, and the tools available in the teaching environment. Learners see the same interactions through the lens of their own personal journey through different learning and life experiences. Some need or prefer to be guided by practitioners, while others benefit from informal and peer learning, or are highly self-directed. Some have little or no experience of ICT; others live and work in a technology-rich environment, without necessarily considering how those resources could contribute to their learning.

Understanding my learning is a new focus within the e-learning and pedagogy strand. Its aims are consistent with the e-learning programme as a whole, but with a particular focus on the following questions:

- *How can we support learners with their use and understanding of e-learning opportunities?*
- *How can we promote the development of frameworks, models and systems that will improve learners’ access to and choice of e-learning opportunities?*

- *What are the current approaches to the design of e-learning environments, and how can these be developed in the future to ensure that we are using sound pedagogical models?*

A major undertaking of this theme will be a national survey of learners' experiences of e-learning. Outcomes of this and other projects will include: reviews and research reports; guidelines relating to learner access and inclusion; and recommendations for further development of learning environments. The latter outcomes will directly inform the other strands of the e-learning programme: Innovations, Distributed e-Learning and the Technical Frameworks and Tools projects (see 'the Technical Development context' below).

A summary of the key questions and principle aims of the two strands is given in the following table.

| Designing for Learning – key questions | Understanding my Learning – key questions | Designing for Learning – principle aims | Understanding my Learning – principle aims |
|---|--|---|---|
| <ul style="list-style-type: none"> • <i>How can we support practitioners with their use and understanding of e-learning?</i> • <i>How can we promote the development of terminology and frameworks that will improve understanding and sharing of practice in e-learning?</i> • <i>What are the current approaches to the design of e-learning activities and how can these be developed in the future to ensure that we are using sound pedagogical models?</i> | <ul style="list-style-type: none"> • <i>How can we support learners with their use and understanding of e-learning opportunities?</i> • <i>How can we promote the development of frameworks, models and systems that will improve learners' access to and choice of e-learning opportunities?</i> • <i>What are the current approaches to the design of e-learning environments, and how can these be developed in the future to ensure that we are using sound pedagogical models?</i> | <ul style="list-style-type: none"> • <i>Develop models of effective e-learning practice</i> • <i>Explore how knowledge of effective practice can be applied by practitioners</i> • <i>Develop terminology and frameworks to improve the understanding and sharing of practice in e-learning</i> • <i>Describe and evaluate a range of approaches to learning design</i> • <i>Evaluate tools that support effective learning design</i> • <i>Develop practical guidelines and recommendations to promote the sharing of effective practice</i> | <ul style="list-style-type: none"> • <i>Explore how learners experience e-learning</i> • <i>Explore how knowledge of learners' experience can be applied to enhance access and participation</i> • <i>Develop terminology and frameworks to improve the understanding and sharing of practice in e-learning</i> • <i>Promote the development of frameworks, models and systems that will improve learners' access and participation in e-learning</i> • <i>Develop practical guidelines and recommendations to promote the sharing of effective practice</i> |

The wider strategic context

The new DfES e-learning strategy¹ emphasises the need for **personalisation of learning** experiences across the educational spectrum. Learners have different priorities, preferences and approaches to learning, and different requirements for support. The learning environment needs to reflect these differences. Understanding how different learners experience the tasks, resources and services offered to them is an important precursor to developing effectively personalised systems.

The government increasingly expects learners to take responsibility for their own **learning throughout life**, and for keeping their skills up to date. It is therefore important that learner information can be used by different providers, and by learners themselves, to promote the continuity and cohesion of their learning experiences. Without denying the importance of human guidance and encouragement, technologies can help support lifelong learning processes such as the recording of achievements and skills, planning and reflection, progression and transition across providers, and diagnosis of personal preferences and needs.

The **widening participation** agenda places a responsibility on FE, HE and ACL institutions to assess potential barriers to learning, and to address these through more flexible learning opportunities. **Accessibility** and **inclusion** are requirements that have moved beyond the 'special needs' agenda. Now the aim is to make all learning resources, tools and environments adaptive to individual needs. This demands an understanding of how individual learners make sense of their own learning process, and how learner differences should be represented and addressed.

As learners take on greater responsibility for their own learning, it is more important than ever that **learning environments** give them access to the resources they need, and the opportunities to

¹ See <http://www.dfes.gov.uk/elearningstrategy/>. The final strategy is due to be published in January 2005. HEFCE are carrying out a parallel consultation, the results of which can be seen at <http://www.hefce.ac.uk/pubs/rereports/2004/rd04%5F04/default.asp>.

collaborate with peers and experts in learning communities. However, learners clearly have different capacities to manage and direct their own learning, and to benefit from the cohort experience. Many learners also place a premium on contact with an expert practitioner and regard other forms of learning as a poor quality substitute. It is therefore important to investigate the benefits and limitations of learning environments, and to ensure this approach is not simply a cost-cutting measure.

Finally, many learners in the post-compulsory sectors have grown up with the internet and mobile communications as an everyday part of their life. **e-Living technologies** form a significant element of their everyday culture and are an important means through which they construct their identities. Understanding how learners experience these technologies outside of the educational system is an important step to closing the gap between their everyday lives and the learning opportunities they are offered.

All of these developments mean that the JISC e-learning programme needs to gather information about what learners want, need and expect from their access to e-learning, and how they can be helped to participate effectively.

The technical development context

Under the 'understanding my learning' theme, the pedagogy strand will also provide input to a range of development projects under the Technical Frameworks and Tools, Distributed e-Learning and Innovations strands of the JISC e-learning programme. This input might take the form of exemplary use cases, requirement analyses, reference sets or scenarios for the use of e-learning tools and services. The aim of this input is to ensure that developers have a sophisticated understanding of learners as users, so that emerging technical environments can support the widest possible range of learner needs for access and participation.

Key research and development issues

The following issues have been identified from a brief review of current research in this area, drawing on the knowledge of the experts' group and of earlier funded projects. They have also been developed into themes in collaboration with other strands of the e-Learning Programme. Clearly not all of these issues can be addressed within the context of the present programme, and nor is JISC the appropriate body to carry out some of the investigative studies necessary. These issues will be refined and further explored in the course of the study that forms the first work package for this theme. However, they provide a framework within which the activities of the theme will be oriented.

General

- *How is ICT changing learners' experience of learning (including both direct and indirect impacts, via changes in roles, practices, perceptions and divisions of labour)?*
- *What role do learners want ICT to play in their learning?*
- *What skills do learners need to participate effectively in e-learning?*
- *What are the significant differences among learners that need to be taken into account when designing flexible environments for learning?*

Personalised learning

- *In what ways do learners benefit from personalised/individualised learning?*
- *What aspects of the learning experience and environment should be personalised/individualised for maximum benefit to learners?*
 - *e.g. within courses: tasks, content (media, level, complexity), assessment methods, pace/place of study, support available*
 - *e.g. across courses: guidance and support, mode of access, mode of reflection/personal development planning, learner records*
- *How can personal learner information (e.g. PDP records) be leveraged at the point of learning? What skills do practitioners need to take advantage of these opportunities?*

- *What is the cost of these different forms of personalisation (e.g. provision of multiple resources; staff and learner time)?*

Collaborative and peer learning

- *In what ways do learners benefit from a shared learning experience in a cohort?*
- *How can e-learning technologies help learners to collaborate, mentor and learn informally from one another? What role can new mobile and wireless technologies play in this?*
- *Does the use of collaborative technologies promote greater: motivation, participation, equality of contribution?*
- *What is the role of peer and informal learning in post-16 education?*
- *Can new technologies capture the process of informal and collaborative learning, and how can this information be used by learners (including learners not actively participating)?*

Assessment

- *How can ICTs support a wider range of assessment modes and techniques, including assessment of extended performance and of the learning process?*
- *What forms of peer assessment are currently practiced in post-16 learning? How can ICTs support this more effectively?*
- *How can ICTs be used to capture extended performance and learning processes, making these available for reflection and assessment?*

e-Portfolios

- *How do learners undertake the processes of planning, capturing and reflecting on their own learning? How can technologies better support this process?*
- *How can e-portfolios help learners to integrate learners' formal, informal and self-directed learning in a meaningful way?*

Widening participation

- *What are the barriers to access and participation in learning, and how can ICTs address these?*
- *How can ICTs be used to diagnose learning needs for all students (e.g. in relation to knowledge representation, media and format, access, language etc)?*

Funding and management

Work will be funded in a rolling programme of short-term projects. Larger-scale projects will be funded under open Invitations to Tender. Smaller-scale projects – typically those involving synthesis and communication of outcomes – will be offered through a closed tendering process, with an initial open invitation for expressions of interest. This will cut down considerably on the time-lag between designing projects and awarding contracts. Potential bidders with appropriate expertise can be approached on a known-cost basis, with a minimum of add-on costs per contract; and bids can be considered economically while ensuring fair and open access to funding opportunities.

An added advantage of inviting expressions of interest from individuals as well as research teams is that participation rates from FE and ACL are likely to improve.

New work funded under the 'Understanding my Learning' theme will take place concurrently with ongoing work under the 'Designing for Learning' theme, and the two will be mutually informed. Projects will be expected to work in close collaboration with other relevant projects across the whole e-learning programme, for example providing input to demonstrator projects within the Distributed e-Learning (Tools) programme if appropriate. Drawing on lessons learned from the first nine months of the e-learning and pedagogy strand, all funded projects will be required to set aside time for meetings with other members of the team and (where appropriate) with other projects to ensure coherence of effort.

All projects will be overseen by the Programme Manager under the supervision of the Steering Committee. Outcomes from projects will be delivered to the Experts' Working Group for comment, and this valuable group will also be consulted on the general direction and strategy of the programme.

Programme of work

The exact nature of work to be undertaken by the strand will be determined in part by the outcomes of early review and scoping activities. Therefore this programme of work can only be provisional. It is designed to produce outcomes that can readily be coordinated with outcomes from the 'Designing for Learning' theme, which continues to run alongside 'Understanding my Learning'.

| Objective | Work Packages/Activities | Details | Outputs |
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| (1) to review and enhance current knowledge about effective pedagogies for e-learning; | 1c. Review: learner perceptions of e-learning | <ul style="list-style-type: none"> Review existing research into learner perceptions of elearning Scope effective form and process for national learner consultation | <ul style="list-style-type: none"> Summary of existing research and implications for e-Learning programme Recommendations for methodology (1d) |
| | 1d. National consultation: learner perceptions of e-learning | <ul style="list-style-type: none"> Design methodology to capture both broad trends and narrow/deep representations of learner perspective, in collaboration with the Distributed eLearning and Frameworks strands Develop research instruments and protocols based on outcomes of 1c. Deliver consultation between February to July 2005 Analyse and evaluate findings | <ul style="list-style-type: none"> Detailed report on learners' perceptions and use of elearning to support their learning experience. Models of elearning from learner perspective Recommendations for further detailed work under this theme (esp WP2c-e). Range of publication and dissemination outcomes |
| | <i>Consultation and synthesis</i> | <ul style="list-style-type: none"> Comment on findings of scoping study Comment on emerging methodology Advise on interpretation of findings and appropriate recommendations Ensure synthesis of findings with outcomes of 4d (elicitation study under 'Designing for Learning') | <ul style="list-style-type: none"> Enhanced recommendations Enhanced reference models and use cases for technical projects (in collaboration with WP4d) |
| (2) to explore how this knowledge can be effectively applied to enhance learners' access to and participation in e-learning | <i>2b: Review: learner differences</i> | <ul style="list-style-type: none"> <i>Review current research into learner differences and the implications for effective engagement with e-learning opportunities</i> | <ul style="list-style-type: none"> <i>Report into learner differences</i> |

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| | 2c. Exploratory work on e-portfolios 2d. Exploratory work on e-assessment 2e. Exploratory work on personalised learning environments | <ul style="list-style-type: none"> To be developed in light of outcomes from 1d. and in collaboration with other programmes (internal and external to JISC) currently working in this area Recommendations for further development work in these areas (WP4) | |
| (3) to develop terminology and frameworks that will improve understanding and sharing of practice in e-learning; | Consultation and synthesis | <ul style="list-style-type: none"> Identify whether existing and emergent terminological frameworks do justice to the richness of learner conceptions of their learning. Make appropriate recommendations | <ul style="list-style-type: none"> In association with WP3 under 'Designing for learning' |
| (4) promote the development of frameworks, models and systems that will improve learners' access to and choice of e-learning opportunities | <ul style="list-style-type: none"> Input to development work on e-portfolios, e-assessment and personalised learning environments, in the light of findings from WPs 2c-e: including use cases, reference models, recommendations | | |
| (5) to develop recommendations and resources for the community, e.g. practical toolsets, methodologies etc. | Collation and synthesis | <ul style="list-style-type: none"> Collate outcomes from programme activities Collaborate with other programmes and agencies to ensure strategic alignment Develop recommendations and disseminate to other JISC programmes and services, JISC user groups, and externally to partner organisations | <ul style="list-style-type: none"> Embedded recommendations to further aims of the e-Learning programme as a whole Continuation strategy |

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| | 5b. Design, create and maintain practitioner-based resource(s) | <ul style="list-style-type: none">• Develop the e-Learning and pedagogy web site as a resource for all those involved in the support of learning• Produce articles, conference papers and newsletters as appropriate• Explore other outlets for programme deliverables e.g. an edited book of papers, Participate in community events and communication opportunities• Evaluate how resources emerging from the project are being used by practitioners | <ul style="list-style-type: none">• Established practitioner resources with community ownership and input |
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