Annex A

Consultation on HEFCE e-learning strategy

Section 1: Introduction

1.   HEFCE is charged in the Government's White Paper 'The future of higher education' with working with partners on plans to embed e-learning in a full and sustainable way within the next 10 years. This paper sets out our initial proposals for the task. We would welcome your views on the questions raised in Annex B.

2.   On 8 July 2003 the Government published its e-learning strategy, which covers the whole spectrum of education. That strategy provides the context for our proposals and we will take account of feedback from the Government's consultation in our final strategy.

3.   We intend to finalise our strategy in January 2004, taking into account views from the sector and discussions with partners.   We believe that any strategic approach to e-learning will require us to work with others and build upon existing activities. These partners will include:

- the DfES: to draw upon its e-learning strategy with opportunity for connectedness across Government and other education sectors
- the funding bodies' Joint Information Systems Committee (JISC): to build upon the significant contribution already made by JISC in providing the technological base for e-learning and bridging aspects of pedagogy and technology
- the HE Academy: to draw upon the opportunities provided by this new organisation to give a strategic voice on enhancement of the student experience and the curriculum, and on pedagogic and professional development. The Academy was proposed in a report by the Teaching Quality Enhancement Committee[1] earlier this year, to bring together the strengths of the Learning and Teaching Support Network (LTSN), the Institute for Learning and Teaching in HE (ILTHE), and the Higher Education Staff Development Agency (HESDA). Professor Leslie Wagner is leading the set up of the Academy
- the e-universities project through UK eUniversities Worldwide (UKeU): to draw upon the services already provided for global internet-based learning and international partnerships, and the experience and expertise of UKeU, including its Committee for Academic Quality
- the HE representative bodies and other HE funding bodies in the UK: to engage with developments in the HE sector, including the proposed Leadership Foundation[2], and to seek opportunities for synergy with e-learning strategies in other areas of the UK
- partners in the further and adult education and schools sectors, and employers.

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[1] Report of the Teaching Quality Enhancement Committee, January 2003, www.hefce.ac.uk under Learning and Teaching/TQEC.

[2] The business case for the proposed Leadership Foundation is available at www.universitiesuk.ac.uk under Media releases.

Section 2: Context of our strategy

Aspects of e-learning

4.   We believe that there are three aspects we need to take into account in devising an e-learning strategy.

5.   First, the internet and use of new technologies are changing the total operation of HE. Learning and teaching are changing as we explore the possibilities presented by new technologies, for example in communications, and the creation and use of databases and digital resources. But these technologies are also bringing about new approaches in research, libraries and resources, and administration. Change therefore may come not just from explicit focus on technologies relating to learning and teaching, but from pervasive impacts and changes in other HE functions. In addition, students' expectations and experiences are changing because of their rising e-literacy. And finally employers are increasingly exploring e-based training in the workplace and particularly in e-commerce.

6.   Second, new approaches to learning and teaching are emerging, both to respond to new and diverse student and employer demand and to utilise new technologies. These new approaches, such as e-learning and workplace learning, may be blended with each other, with campus-based learning and/or distance learning, and in the longer run with mobile learning. A major focus of our strategic plan (HEFCE 2003/12) is innovation in approaches to learning and teaching, and enhancement of the quality of the learning experience.

7.   Finally, wholly internet-based e-learning has recently captured the imagination because of the opportunities to explore exciting technological possibilities, and to provide global delivery, new HE markets and partnerships with the private sector.

Current state of e-learning

8.   The evidence we have at the moment on the state of e-learning in HE is complex to interpret. It is difficult to identify methodologies to capture exactly the extent of e-learning, including blended approaches to learning and teaching or pervasive impacts of the internet. So studies that focus on wholly e-based learning undoubtedly underplay the amount of innovation and use of technologies in the sector. On the other hand, studies that have attempted to gauge the level of wholly e-based learning have found it difficult to disentangle the amount of provision that is in pure form. Usually, even substantially e-based forms of learning may use some face-to-face support, summer schools, or paper-based materials.

9.   We last undertook a comprehensive survey of the use of technology in learning and teaching in HE in 1999[3]. The report commented: 'An initial analysis of teaching and learning strategies in English HE …suggests that only a relatively small number of institutions have identified the enhancement of the use of C&IT as a major part of their

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[3] 'Communications and information technology materials for learning and teaching in UK higher and further education', HEFCE 99/60 and 99/60a, CHEMS, HE Consultancy Group and FEDA.

teaching and learning strategy.' It concluded that e-learning activity was largely at the 'cottage industry' level pursued by enthusiasts in experimental mode.

10.   But the situation is changing rapidly and many more HEIs are developing activity on innovative modes of delivery, including e-learning. Around 70 English HEIs have submitted proposals to UK eUnviersities (UKeU) for e-learning programmes over the last three years. (Since these bids would have been focused on substantially internet-based forms, this probably underplays interest in the broader aspects of e-learning.) When we reviewed the learning and teaching strategies from higher education institutions (HEIs) in 2002, 112 institutions made mention of e-learning. Evidence from a forthcoming study[4] confirms that progress on the pure form of e-learning remains patchy, but suggests that HE will make significant investment in the technological infrastructure of e-learning in the next few years. That study looked narrowly at the extent of the pure form of e-learning. We will be following it up to consider how to get a better picture of blended learning and pervasive impacts.

HEFCE strategy to date

11.   HEFCE strategy to date has been focused on three areas:
- quality enhancement – encouraging the sector to explore new approaches to learning and teaching
- the Joint Information Systems Committee (JISC) – providing the network, digital resources and research and consultancy support to underpin use of new technologies
- the eUniversities project – encouraging the HE sector to explore wholly e-based learning.

12.   **Quality enhancement**. Our Teaching Quality Enhancement Fund has focused on rewards for excellence and investment in good practice at institutional, subject and individual levels. The submission of learning and teaching strategies has encouraged institution-level commitment to development in learning and teaching. The Learning and Teaching Support Network (LTSN) has provided a focus for subject communities of practice to explore new approaches to learning and teaching, including promoting use of new technologies, providing online and offline resources, and giving awards for distinguished practitioners in e-learning. Projects on good practice in e-learning have also been supported through our National Teaching Fellowships Scheme.

13.   **JISC**. The JISC network supports all HE activity and has increasingly focused on the support needed for learning and teaching. JISC has recently been extended to include the further education (FE) sector, and this has provided opportunities to expand ICT use in that sector, and to increase collaboration between HE and FE. JISC collects and disseminates digital resources, data and information that can contribute to both research and learning and teaching. As well enriching conventional learning and teaching, these resources can be used to encourage and support e-learning, and workplace, distance, blended and flexible learning. Working with practitioners from the HE and FE sectors, JISC identifies the types of research, consultancy and advice that can help support

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[4] 'The costs of alternative modes of delivery', JM Consulting. To be available on the HEFCE web-site.

innovation. It has recently embarked on a major programme on the technological infrastructure for e-learning, managed and virtual learning environments (MLEs and VLEs).

14. **The eUniversities project**. We started the eUniversities project in 2002 with the objectives of:

- expanding the UK's overall share in the global market for virtual HE
- providing new ways of delivering HE within the UK
- encouraging new thinking in UK HEIs about, and facilitating approaches to, use of e-learning
- creating new opportunities for HEIs to work with the private sector and other partners.

15. An operating company to take forward the project was incorporated in October 2001 as UK eUniversities Worldwide Ltd (UKeU). UKeU provides the central technological platform, services and support to underpin design and delivery of e-learning programmes from UK HEIs. UKeU's first pilot courses are now on-line and its full launch will be in the autumn. The UKeU's Committee for Academic Quality advises on quality and standards in e-learning. More information is at www.ukeu.com.

Section 3: Future strategy

16. The White Paper challenges us to build upon our activities to date, to identify and implement a coherent and sustainable strategy to embed e-learning in HE. We believe such a strategy needs to embrace all the three aspects outlined above: impact of the internet, innovation and blending in modes of learning, and wholly e-based learning. Above all, the strategy needs to be driven by the needs of learners, rather than by the technology.

17. We propose the following seven strands to our strategy:
- Strand 1 Research, evaluation and strategic review
- Strand 2 Strategic and change management and funding for sustainability
- Strand 3 Curriculum design, development and pedagogy, and human resources
- Strand 4 Learning resources
- Strand 5 Collaboration, progression and student support
- Strand 6 Quality
- Strand 7 Infrastructure and standards.

Strand 1 Research, evaluation and strategic review

18. We do not yet fully understand all the impacts that new technologies may have on learning and teaching; and we do not fully understand the needs of learners and employers in respect of technology-supported learning. HEFCE has supported many studies relevant to these topics, as have other bodies such as the DfES, JISC, Ufi Learndirect, and UKeU. There are also opportunities to share insights across HE, FE, schools, and employers. We believe therefore that a strand of our strategy must be analysing and building upon existing research evidence, to improve understanding of the issues that underlie future e-learning development. This will need to include evaluation of innovative practice, and its impact on the effectiveness of learning for learners and

employers, so that we move forward confidently, maintaining quality and standards of provision. We will therefore build reviews into our strategy, so that we can appreciate the growing evidence base and re-appraise our strategic direction.

19.   The table below sets out the objectives and proposed actions to develop this strand.

Strand 1 Research, evaluation and strategic review		
Objective	Timing	Proposed action
Contribute to understanding of issues posed by e-learning, evaluate good practice, disseminate this and reflect it in the review of the strategy and future strategic direction.	Autumn 2003	The eUniversities project already presents a significant investment in innovation in e-learning. We propose to support an e-learning programme in UKeU and partner HEIs to explore insights from that project and other aspects of e-learning. This programme may also support the work of UKeU's Committee for Academic Quality to provide insights on quality and standards in e-learning (see Strand 6). The HE Academy is being established, bringing together the functions of ILTHE, HESDA and LTSN. It will better support the enhancement needs and interests of higher education communities and will support the understanding of e-learning.
	Spring 2004	Collaborate with other partners (JISC, UkeU, the Academy), as part of the DfES e-learning strategy for all education sectors, on analysis of existing evidence on e-learning. Devise a future programme of research, evaluation and review. Links might also be made with Sector Skills Councils on employer interests in e-learning.
	On-going from spring 2004	Review strategy in light of research and evaluation.

Strand 2 Strategic and change management and funding for sustainability

20.   We believe we will need to help institutions take a more proactive approach to innovation in learning and teaching, and a more strategic approach to managing the consequential change and risk, including technological risk. We are also aware of the importance of scalability when it comes to planning and implementing e-learning within institutions. We would want to support institutions in making sure that they were able to sustain their plans. This might be achieved through the proposed Leadership Foundation and the HE Academy, linked with the work of JISC to support the handling of technological risk (for example, through investment in VLEs and MLEs).

21.   We could also use funding levers, such as changes in the main funding model for teaching, to support institutions in innovation by capturing costs of new modes and/or helping to manage risk. We could include support for the costs of managing partnerships (which tend to be an integral part of e-learning), and work with the HE sector on enhancing competencies for partnership working. We have already provided advice on handling intellectual property rights (IPRs) in e-learning[5] and we intend to extend this to international IPR issues. We could feature strategic management of learning and teaching in our major funding initiatives, such as the Teaching Quality Enhancement Fund and Centres for Excellence in Teaching and Learning (CETL). We could also build e-learning explicitly into our requests to HEIs for strategies for learning and teaching, widening participation, human resources, IT and infrastructure, and encourage institutions to join up their strategies.

22.   UKeU will prompt strategic change by providing an avenue to explore new delivery models (with international and private partners) and to expand into global markets. This might be linked with work with the HE sector supporting leadership in global and international partnerships and strategic alliance building.

23.   We believe though that we should avoid providing funding incentives for experimentation in e-learning that is not based on sustainable business models.

24.   The table below sets out our objectives and proposed actions to develop this strand.

Strand 2 Strategic and change management and funding for sustainability		
Objective	Timing	Proposed actions
Seek to promote change/risk management in the sector, potentially through a Leadership Foundation, working with UUK and SCOP.	Spring 2004	Encourage strategic alliances between the Leadership Foundation, the HE Academy, and JISC on leadership in innovation in learning and teaching and technological risk.
Establishing the Academy for learning and teaching (with the other HE funding bodies, UUK/SCOP, ILTHE, HESDA, LTSN).	January 2004	Ensure that the Academy is incorporated and active with funding and support for its role in promoting innovation in approaches to learning and teaching, including e-learning (linked to finalised HEFCE e-learning strategy).
Linking JISC services and support on technological risk/change management to the Leadership Foundation and the Academy (with JISC, other HE funding bodies, the Leadership Foundation and the Academy).	On-going Spring 2004	An operating plan for Infonet, the main JISC service to support this agenda, has already been developed with partners, and services were on stream from January 2003. We will support the JISC/Academy strategic alliance (built on existing LTSN/JISC joint activities).
Developing the eUniversities project to support the e-learning strategy (with UKeU).	Autumn 2003	Review of eUniversities project to determine the contribution it may make to strategy through: core business of delivering e-learning globally; contributing through provision of managed services to blended

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[5] 'Intellectual property rights in e-learning programmes', HEFCE 2003/08.

		learning; other activities for the public good, including research and quality – see Strand 6), and international collaboration (built on the current electronic links with China). Review to consider the need for international and private sector partnerships (investors, market channels, suppliers and customers) to develop e-learning.
	Spring 2004	Review to feed into final e-learning strategy.
Encouraging co-ordinated strategic management approaches to development of e-learning, through joining-up learning and teaching, human resources, IT, and estates strategies.	Autumn 2003	Review of institutions' corporate plans, annual monitoring statements and strategic processes to determine opportunities to increase co-ordinated approach to e-learning.
	Spring 2004	Results to feed into final e-learning strategy.
Encouraging strategic management of IPRs in HEIs in order to exploit e-learning (with UUK/SCOP, UKeU, and the Borderless Education Observatory).	Spring 2004	Review of advice on IPRs already provided by HEFCE and UUK/SCOP in early 2003. Extend this into international/private sector issues (which will draw upon legal counsel in UKeU).

Strand 3 Curriculum design, development and pedagogy, and human resources

25.   We believe we need to help institutions to explore innovative approaches to learning and teaching and to make appropriate investment strategies (for example in MLEs and VLEs).   We could achieve this through funding initiatives, by identifying and disseminating good practice through the CETLs, National Teaching Fellowships and the Academy. This needs to be linked with the research strand we describe above – and with stronger connections between educational research, pedagogy and learning and teaching practice more generally.

26.   We want to help with innovation in blended learning as much as, if not more than, pure e-learning. Strategies focused on specific approaches to learning and teaching are valuable to capture their distinctive aspects, and to make connections with activity outside HE. We propose to encourage HEIs to examine and describe their own distinctive approaches to learning and teaching through the CETL initiative. As well as this e-learning strategy, we are considering development of a workplace learning strategy, which will put a sharp focus on innovation related to the workplace. But any workplace learning strategy will need to be closely linked to this one since e-learning provides many features that appeal to employers, including ease of access, assessment methods linked to returns on business effectiveness, and inculcation of IT skills.

27.   The development and delivery of e-learning requires a mix of skills, including technological and administrative skills. It is likely to be team-based, and therefore the competencies of managing learning teams will be important. We will need to include a strand for innovative modes of e-learning in the action we take on initial staff training and continuing professional development, to respond to the Government's White Paper, which extends to all academic, administrative and technological staff, linked to the Academy. We believe that there may be gaps in the existing HE workforce to sustain embedded e-

learning (such as a shortage of learning technologists). We may also, therefore, need to consider explicit action to increase capacity, depending on the future growth planned for the sector.

28. The table below sets out our objectives and proposed actions to develop this strand.

Strand 3 Curriculum design, development and pedagogy, and human resources		
Objective	Timing	Proposed actions
Reward excellence in e-learning and produce models of good practice by making e-learning potential part of the case for a CETL (with the Academy).	Autumn 2003 By end of 2005	Consult on approach to CETLs. Identify and fund 70 CETLs and link dissemination to the Academy. (Will also help inform student choices about leading-edge exponents of e-learning delivery).
Expand the National Teaching Fellowship Scheme with opportunities for projects focused on e-learning (with the Academy).	Autumn 2003	Run expanded scheme, which includes some awards for all experts contributing to learning experience (such as learning technologists). Dissemination and management of the scheme by the Academy, to enable dissemination of good practice.
Address skills, knowledge and competencies for e-learning in drive on training and continuing professional development for learning and teaching staff (with UUK/SCOP, and the Academy).	Spring 2004	Build into the work of the Academy (on basis of existing ILTHE, HESDA, LTSN activity) This will also need to address activity for all types of staff involved in e-learning (linked to the JISC/Association of Learning Technologists work on professional standards and training in technology) and team work and management competencies.
Encourage innovative curriculum design that uses e-learning effectively for learners and employers (with the Academy and the Enhancing Student Employability Co-ordination Team – ESECT).	Spring 2004 Autumn 2003 Autumn 2003	Build work on e-learning curriculum design into the Academy (on basis of existing LTSN activity and the ESECT team). Concordat to be developed between the Academy, UUK/SCOP and Sector Skills Councils that may also assist in articulating employer perspectives on e-learning needs in the curriculum (both delivery options and e-skills). There is also a potential link between the Academy and Foundation Degree Forward (as proposed in the Government's White Paper) to enhance e-learning aspects of foundation degrees. Develop proposals on a workplace learning strategy.
Review the human capacity in the HE sector to deliver future e-learning growth as part of research strand (with the Academy and JISC).	See Strand 1	See Strand 1.

Strand 4 Learning resources

29. There is a range of materials to support e-learning – including teaching materials, learning objects (components of programmes), learning resources, and datasets. We have made considerable progress in describing a comprehensive and coherent strategy for

research information (the Research Libraries Network). We believe that we will need to do something similar for learning and teaching, building upon the JISC resources and resource discovery tools and LTSN work, including the proposed portal site on the web.

30. The table below sets out our objectives and proposed actions to develop this strand.

Strand 4 Learning resources		
Objective	Timing	Proposed actions
Develop a comprehensive and coherent approach to information for learning and teaching, including digital resources and discovery tools (with JISC and the Academy).	Spring 2004	Develop strategy for learning resources for learning and teaching (based on model of the Research Libraries Network). This should build upon JISC's role in digital information provision and discovery, and the research and observatory function of the Academy, including the web portal. Strategy will need to take account of activity in FE and schools sectors.
Enhance the level of digital resources provided by JISC as source for learning and teaching - and research.	On-going January 2004	Digitisation programme is on-going. Provide service.

Strand 5 Collaboration, progression and student support

31. The eUniversities project was based upon the premise that collaboration in the use of expensive materials and services is cost-effective and will help to encourage global partnerships. We believe we will need to do more to encourage greater collaborative effort, including re-use of materials, with implications for standards (technical, pedagogic and quality) and collaboration where appropriate across HE, FE and schools. The development of JISC's role and infrastructure across HE, FE and schools will provide a base to facilitate progression, including development of common standards across systems and content. We will also share approaches as part of the research and curriculum development strands of our strategy described above.

32. We have already invested in exemplars of e-based provision for widening access and promoting lifelong learning through UKeU, UfI Learndirect and funding of foundation degree prototypes. We will seek to scale up this activity, as appropriate, as part of the overall development of foundation degrees.

33. We believe we should explore the use of credits as part of innovative curriculum design in e-learning through the work of the Academy, and the use of electronic systems for recording student achievement.

34.   The table below sets out our objectives and proposed actions for developing this strand.

Strand 5 Collaboration, progression and student support		
Objective	Timing	Proposed actions
Develop integrated MLEs/VLEs (JISC).	Spring 2004	JISC to support work to encourage compatibility of standards to assist integration of VLEs/MLEs across schools, FE and HE. This work to inform capital investments in infrastructure through HEFCE, including CETLs, and project capital (see Strand 7).
Utilising e-learning to deliver foundation degrees (with the DfES, UKeU, NHSU[6], and Ufl Learndirect).	On-going	Link e-learning strategy with future plans for foundation degree development. Encourage delivery of foundation degrees through strategic alliances with UKeU, Ufl Learndirect, NHSU and others. Look at experience on e-based delivery as part of on-going evaluation of foundation degrees.
Explore the use of credit systems in e-learning delivery in order to enhance flexibility of provision (the Academy).	Spring 2004	Ask the Academy to consider use of credits within innovative e-learning curriculum design and delivery. (Also possible link with UKeU on building customised learning programmes for corporate and global customers which exploit accreditation of prior and prior experiential learning, and credit accumulation and transfer).
Encourage e-based systems of describing learning achievement (with UUK/SCOP and JISC).	Autumn 2003	Build JISC activity on e-assessment into the scoping review of student achievement to be conducted by UUK/SCOP/HEFCE group, led by Professor Bob Burgess.

Strand 6 Quality

35.   Innovation in learning approaches may increase quality and standards, but it can also pose challenges. HEIs have their own qualification awarding powers, which means they may have more freedom to innovate, but also gives them significant legal responsibilities to students. The Quality Assurance Agency (QAA) is considering a new code of practice in e-learning. Interaction between the QAA and the Academy could be very valuable to help articulate the particular challenges to quality and standards posed by e-learning (including partnership working), and to identify good practice. This activity could link with the research and quality activity in UKeU through its Committee for Academic Quality, to provide more assistance to HEIs in tackling compliance with the code.

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[6] A new 'corporate university' focusing solely on education and training for the NHS, see www.nhsu.nhs.uk

36.   The table below sets out our objectives and proposed actions for developing this strand.

Strand 6 Quality		
Objective	Timing	Proposed actions
Contribute to the understanding of quality and standards assurance and enhancement issues raised by e-learning (with the QAA, the Academy, UKeU, and UUK/SCOP).	Spring 2004	Strategic alliance between the Academy and QAA to include consideration of quality and standards in e-learning and good practice to support this. This can draw upon UKeU's research programme (from autumn 2003) which will provide quality monitoring and evaluation information, and the work of the UKeU Committee for Academic Quality.
Reflect results of the previous actions in a strategic review.	See Strand 1	See Strand 1.

Strand 7 Infrastructure and standards

37.   We can encourage better underpinning technology to support e-learning through JISC's development of the capacity of the network and its work on architecture and standards, through the use of the technology platform of UKeU, and capital funding initiatives. JISC already provides the high quality network that is a fundamental for e-learning. As a critical part of support for infrastructure development, we should encourage use of common standards, through the work of JISC, to enable inter-operability of materials and working. And we should encourage this through strategic links with bodies such as NHSU, UfI Learndirect and UKeU. Through JISC we could also encourage better understanding of innovative technologies and their applications, for example using e-tools to provide better learner support.

38.   On-going research on innovative modes suggests that most HEIs are likely to make significant strategic upgrades in VLEs/MLEs in the next three years, so the timing is good to make a significant difference now. We believe that the technology should follow the learning and teaching objectives and not the other way round, and hence we should support infrastructural development that is linked with pedagogic and other strategic objectives (such as those related to partnerships, progression or the market). JISC is providing an important bridge between pedagogic and technological issues through the work of its learning and teaching committee.

39. The table below sets out our objectives and proposed actions to develop this strand.

Strand 7 Infrastructure and standards		
Objective	Timing	Proposed actions
Increase capacity of the network to support high quality e-learning programmes and applications (JISC).	2005	JISC to invest in SuperJANET 5, an upgrade of the network.
Provide capital to sustain and develop VLE/MLEs (with JISC).	Autumn 2003	Submission of bids for project capital from 2004 for teaching infrastructure which includes supporting VLEs/MLEs. Potential investment in e-learning infrastructure in CETLs. JISC to advise on standards in competitions for project capital and CETLs. Review needs of sector in light of plans for future growth .
Increase opportunities for inter-operability of materials through common standards in order to promote sharing and progression (with JISC, UKeU, NHSU, Ufl Learndirect).	On-going Autumn 2003 On-going	JISC inter-operability programme under way. JISC e-learning architectures programme starting. Encourage joint working of UKeU, Ufl Learndirect and NHSU through strategic alliances.