FURTHER EDUCATION FUNDING COUNCIL

Networking Lifelong Learning

Making It Happen

An implementation plan

Presented by the FEILT committee
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October 1999

CONTENTS

Introduction

1   In April 1999 the Council's FEILT committee (FEILTC) published its proposal information learning technology (ILT) development strategy for the sector entitled *Networking Lifelong Learning*. The sector response was very positive.

2   In June 1999, FEILTC recommended to FEFC a high-level action plan to take the strategy forward. That plan was endorsed and two implementation task groups were set up with a remit to make detailed implementation proposals.

3   This report summarises the main recommendations of the two task groups to form an implementation plan. FEILTC formally advises the Council to accept this plan as an appropriate implementation route for the ILT development strategy.

ILT Development Strategy

Background

4   As part of the outcome of the government's comprehensive spending review in November 1998, the secretary of state announced additional funding 'to ensure that colleges are properly equipped for the computer age'.

5   In the DfEE's letter of guidance of 8 December 1998, some £74 million was earmarked over three years for IT infrastructure. A further letter of 14 December 1998 made a number of specific points regarding networking, access, learning materials and working more closely with the HE sector. *Networking Lifelong Learning* was produced with all these general and specific points in mind, and it has been widely welcomed.

6   The aims of that strategy document are to exploit ILT in order to:

- enrich the learning experience of students

- improve teaching methods and standards

- facilitate better management practices

- assist in the development of a more IT-literate society.

Strategy Aims and Objectives

7   The main purpose of this document is to show a clear and practical way forward for ILT development for FE in England which:

- reflects government wishes for the improvement of IT infrastructure in colleges

- embraces the sector's clearly stated wish to espouse the principles contained in *Networking Lifelong Learning*

- support the broader post-16 education and training/lifelong learning agenda.

8   The format of this plan is to make detailed proposals in respect of the following areas:

- a National Learning Network

- local learning (including the University for Industry (UfI))

- content and learning materials

- staff professional development

- management and governance issues.

Government Aims

9   ILT development for the sector is clearly aimed to support the main education aims of the government. These are:

- investing in learning to benefit everyone

- lifting barriers to learning

- putting people first

- sharing responsibility with employers, employees and the community

- achieving world class standards and value for money

- working together as the key to success.

FE Sector Goals

10   The development programme has particular regard to the following key priorities of the sector:

- widening participation

- ensuring sufficient provision for an expanded student population

- raising standards and achievement

- promoting partnership, collaboration and rationalisation

- developing an information and communications technology structure appropriate to the twenty-first century

- improving the management health of the sector.

Learning and Skills Council (LSC)

11   The initial timeframe for this strategy is for a three-year period to March 2002. It is expected that the role of the FEFC will cease in March 2001. It is thus anticipated that the obligations of FEFC under this ILT development strategy will transfer to the LSC. It will be necessary to re visit the strategy when the role of the LSC has been fully defined.

Linkages

12   The FE ILT committee recognised the importance of ensuring that the National Learning Network connects all further and higher education institutions. However, the need for network links does not end there. The full benefit to learners of the government's major investments in national ILT infrastructure, content and training will only be fully realised if, in establishing the National Learning Network, due regard is given to the whole range of complementary ICT initiatives. It will be vital to provide links to other substantial networking initiatives, including the National Grid for Learning, the UfI and the new public library network. The development of the National Learning Network should also take into account plans to create additional ICT learning centres through the capital modernisation fund, and through the new opportunity fund's *Community Access to Lifelong Learning* initiative.

Report of the Infrastructure Task Group

13   The infrastructure task group addressed issues connected with:

- the establishment of the National Learning Network

- the development of appropriate local learning infrastructures.

14   These two aspects of infrastructure development are closely related and for a considerable part of the time, the two subgroups that dealt with these matters worked together as a single task group.

National Learning Network

15   The brief of the subgroup addressing national networking was to explore the options available to procure and manage a wide area network capable of extending to all of the 433 colleges in England currently within the FE sector and linking to all HE institutions. It was also essential for the group to consider that the network would be required to expand in response to the government's initiatives outlined in the post-16 Learning to Succeed proposals.

16   The subgroup addressed the following issues:

- specifications for the FE sector within a National Learning Network

- support arrangements

- current network facilities

- procurement options

- financial considerations

- sustainability.

General

17   A statement of requirements is required to inform the procurement of the National Learning Network. An implementation plan will be required to ensure that all colleges are connected at the minimum bandwidth by the target date for the completion of the network in March 2001.

18   The minimum bandwidth for communications should be set at 2 megabits per second per college.

19   Colleges currently exceeding these minimum recommendations should not be disadvantaged in this process. Such colleges should have the opportunity to augment their current services beyond the current minimum baseline if required, at their own expense.

20   The most effective development of the network would result from the phasing of implementation to give priority to those colleges with underdeveloped communications in the first phase. Subsequent phases would see the roll out to full implementation among existing network subscribers who already have established and substantial bandwidth connections. Phasing arrangements would need to be sufficiently flexible to take into account the expiry dates of existing contracts for college Internet service provision throughout the sector.

21   Electronic communications and a general entitlement to adequate ILT facilities for staff and students are reflected in the FEFC's requirement for colleges to produce a satisfactory ILT strategy.

22   While the National Learning Network will be offered to all colleges as a national facility, if a college declines the offer of the facility it should be required to ensure that other network-based services of at least an equivalent standard are made available to students and staff.

Procurement and support arrangements

23   The installation and management costs of the network should be provided for from central funds.

24   Procurement of the National Learning Network should be undertaken by an established agency, with experience of delivering resilient managed network services within the education sector.

25   UKERNA is recommended, as a suitable agency capable of procuring the services required for the sector.

26   Supervision and monitoring of the procured services should be vested in the FEILT committee, initially. In due course, as the FEFC becomes an established member of JISC, monitoring would be vested in the Joint Committee for Networking (JCN).

27   The procurement and operation of the National Learning Network should allow for the possible inclusion at a future date of other bodies directly funded by the proposed Learning and Skills Councils, albeit with a commensurate level of additional resourcing to enable connections to be made to an increased range of institutions.

28   The good practice of support centres adopted by UKERNA for those FE colleges currently in receipt of direct HEFCE funding for HE students, should be built upon and developed for the National Learning Network. There should be one centre per FEFC region.

29   The proposed centres should be contracted through JISC by UKERNA against an agreed specification and provide a range of support and advice functions on a regional basis, each centre including, wherever possible, FE college involvement.

30   The task group noted some similarities with initiatives in the HE sector. It considered that additional start-up funding should be made available in the first two years of the current initiative to allow for the provision of college level consultancy and support for WAN and LAN developments.

Local and partnership arrangements

31   Procurement of the National Learning Network should pay particular regard to local connectivity and established metropolitan area networks (MANs). (For this report, the term MANs includes regional area networks.)

32   The task group recognises the diversity of existing network connections and partnerships, and that a limited number of colleges may not be able to enter fully into the arrangement until the cessation of existing contracts.

33   The procurement of this service should pay particular regard to government recommendations on regional structures and substructures for the delivery of education and training through the Learning and Skills Councils.

34   As future developments of the National Learning Network will be inextricably linked to the proposed upgrade to the SuperJANET network and the development of MANs, the task group recommends that representatives from the FE sector should be actively involved at the earliest opportunity in the planning and implementation of the new, considerably expanded MANs, and in the planning for SuperJanet4.

35   The task group recognises the need for strong collaboration between the FEILT committee and the JISC, particularly in the management and development of network services and content which are directly related to the needs of a National Learning Network.

36   The task group recognises that the above arrangements may well require to be developed over time to ensure that the needs of FE, HE and research communities are adequately addressed.

37   The task group also recognised the need to create an open framework that would facilitate discussions on genuine partnership with regard to other national initiatives including:

- the University for Industry

- the National Grid for Learning

- the building of public library network

- Excellence in Cities

- the creation of learning centres under the capital modernisation fund.

38   In practice this is likely to result in the definition of suitable arrangements for connections between the National Learning Network and other national networks.

39   For the National Learning Network to be sustainable, the medium- to long-term planning must take account of technology change, increase in demand and usage and the development of new services to meet changing learning requirements. A long-term, flexible funding strategy is required to ensure that individual colleges are not disadvantaged due to their size, specialist provision, geographical location or multi-site nature.

Funding

40   The task group considered the outline budget for national networking of £20.7 million of additional funding in the financial years 1999—02 to be broadly adequate at current prices. However, the rapidly changing commercial costs of telecommunications may well result in substantial cost savings being made year on year on certain aspects of the development. These changes should be reflected in better levels of provision, for example. increased bandwidth and services.

41   The task group also recognised that any under-utilised resources in the national networking budgetary heading should be transferred as appropriate to other budget heads in the light of demand.

42   The task group considered that, in addition to the sum allocated for the procurement of the National Learning Network, a further sum of £3 million would be needed to provide the additional sectoral services including:

- relevant data sets and database information

- technical support and help desk facilities

- security and filtering systems

- newsgroups and information groups.

43   The spending profile for procurement of these services would be £0.5 million in the first year of the initiative, with £1 million and £1.5 million in the second and third years respectively.

44   An additional £1.2 million is required for the enhancement and continuation of existing arrangements under the current Further Education Resources for Learning programme, bringing these totals to £0.7 million, £1.5 million and £2.0 million respectively.

45   The task group considered that funding provision of £3.2 million over three years for regional support centres would be required.

46   The task group's recommendations for the annualised allocations of funding for the National Learning Network and associated services are shown in table 1.

Local Learning Infrastructure

47   The brief of the subgroup considering local learning was to provide guidance for colleges on addressing student and staff entitlements to network-enabled PC access by 2002, thereby facilitating and supporting students' learning experiences. As detailed technological solutions for on-site and inter-site connectivity would date rapidly, the subgroup aimed to provide a framework to enable colleges to develop LAN connectivity strategies reflecting their evolving local needs.

48   The subgroup addressed the following issues:

- staff and student entitlements

- deployment and connection

- email systems

- widening participation and inclusive learning

- financial considerations

- sustainability.

General

49   All college networks and ILT devices connected to them should be capable of linking to the National Learning Network through industry standard protocols and connections.

50   College ILT facilities should be designed to facilitate the delivery of web-based intranet and Internet learning materials. Student tracking and management information systems should also form an integral part of college ILT facilities.

51   College ILT strategies should address the issues of the accessibility and security of systems for both college management information and individual student learning data.

52   Due to the increasing reliance on information technology and network infrastructures, college ILT strategies should address in detail disaster prevention and recovery strategies, with references to aspects of physical, environmental and data security, including:

- firewalls and virus protection

- filtering, mirroring and backup servers

- safeguards for power supply.

53   College ILT strategies should also detail administration and support arrangements including:

- backup and technical support/training

- monitoring and evaluation.

54   The FEILT committee, with the DfEE and other partners as appropriate, should commission further research into the possibility of creating unique identifiers for students to facilitate authentication and the tracking of individual learning as part of wider management information system design.

Entitlements

55   College ILT strategies should explicitly state what steps they will take in order to achieve the benchmark ratio of Internet-connected computer workstations to full-time equivalent students of at least 1:5 by 2002.

56   These strategies should also outline how colleges will provide differentiated access ratios of Internet-connected computer workstations to college staff. These ratios should be regularly reviewed in the college ILT strategy; however it is recommended that by 2002, the following categories of full-time staff should have permanent, personal access to an identified Internet-connected computer workstation or portable computer:

- permanent teaching staff

- administration and management staff

- staff directly supporting learning.

57   The task group recognised the key issue of providing such a level of entitlement to large numbers of part-time and sessional staff, and recommended that a more realistic benchmark of 1:5 for such staff would be achievable by 2002.

58   College ILT strategies should also deal explicitly with plans for accessibility and availability, including the provision of remote access where and when required.

59   College ILT strategies should clarify how the specification and purchase of ILT equipment and services will be systematically reviewed in order to ensure continuing fitness for purpose.

60   All colleges should require students and staff to agree to abide by a sector-wide minimum acceptable use policy with regard to networks, Internet and email services. The task group recommends that the task of developing such a policy statement should be given to a suitable sector organisation.

61   All students and staff should have entitlement to an email facility. College ILT strategies should indicate the type and style of email provision to be made available to students and staff.

62   College ILT strategies should explicitly address mechanisms for ensuring that the levels and types of local learning provision are suitable for *all* students, and demonstrate clear links with college policies on inclusiveness. Special provision is required for students with learning difficulties and/or disabilities. The task group recognised the role that technology could play in facilitating inclusivity and the effect of this in widening participation. The group considered the results of recent FEDA research into the level of technology and support available to students in terms of:

- core technology, which refers to technology generally available to all learners in their curriculum area

- assistive (or enabling) technology, which is used to assist learners to gain access to their programmes of study. This type of technology includes high-tech equipment that is often computer-based, for example screen enhancers

- technical support, by staff who support the provision of assistive technology. Support may include the production, modification, setting up, training for and on going use of technology.

63   In developing their ILT strategies, colleges should audit and monitor provision of enabling technology, and set clear targets for enabling those who require it to access it.

64   Quality assurance mechanisms for ensuring the effectiveness of ILT strategies should incorporate feedback from both students and staff end users.

65   The FEILT committee should commission further research into the possibility of developing a specific national email service for colleges, in conjunction with the private sector.

Standards

66   College networking strategies should include standards for communications both within and beyond college campus locations. To ensure the quality of delivery to the desktop, colleges should be moving in the immediate future towards local area networks operating at a minimum of 100 megabits per second (mps), with switched bandwidth of at least 10 mps to the desktop.

67   As a result of its deliberations on likely future standards, the task group noted the need to maintain a regular watch on emerging technologies that may affect the development and procurement of the National Learning Network. In the short term UKERNA has been asked to prepare a brief risk assessment and commentary on the following items, particularly in the context of proposals for SuperJANET 4:

- differentiation of network services

- the emergence of Internet Protocol (IP) version 6

- broadband video conferencing

- developments in voice and data integration

- resilience

- virtual private networks.

68   The task group noted the usefulness of the research studies on sector ILT developments in preparing its conclusions. The task group recommends that the FEILT committee consider arranging for these surveys to be repeated annually to ensure the continued availability of up-to-date information to assist in planning the implementation of the National Learning Network

69   Colleges should state clearly within their ILT strategies how interconnectivity between campus locations will be achieved and have the technical capability of interfacing with the National Learning Network from a designated connection point. Standards for these connections will be determined by the procurement agent.

Funding

70   As all sector colleges are expected to take advantage of the new 2 megabit per second connections to the National Learning Network, the task group considered that all colleges should share equally in the allocation of the £6.3 million available in 1999-2000 for local area networking and associated support.

71   The task group considers that the allocations in subsequent years require further analysis and research which takes into account new purchase, replacement and upgrade strategies of all sector colleges. Recommended funding allocations for these years are therefore rather more tentative, though the task group suggests significant funding for workstation replacement in the third year.

72   The task group considered that the invaluable research into the state of local college infrastructures that had been undertaken to inform national strategy should be continued, and provide an annual baseline to inform decision-making for these funding allocations.

73   The task group further considered that a sum of £0.5 million over three years should be set aside for continuing research into innovative uses of ILT in widening participation.

Report of the Support Task Group

74   The support task group addressed in particular:

- management issues

- staff development

- learning materials development.

75   The task group was concerned to ensure that its work was driven by a shared sense of direction and purpose. Accordingly, it determined at the outset a visualisation of ILT in FE to guide and unify the separate strands. This condenses the expansive and profound vision of *Networking Lifelong Learning* into a simple framework of assumptions about the form and impact of ILT, namely that :

- ILT will be a standard tool for all FE tutors

- a significant and growing proportion of learning will be delivered by ILT within a managed learning environment (MLE)

- managers will use ILT to run the college

- there will be an integrated infrastructure which extends beyond the college boundary.

76   The proposals of the task group aim to facilitate the fundamental paradigm shift that will move the sector towards this longer-term position.

77   The task group's recommendations assume a set of interlocking activities to underpin the clear inter-relationship between the various support activities in relation to materials development, staff development and institutional management in order to ensure the effective implementation of an ILT strategy at both sector and college level. This will be essential in order to create a basis for the efficient use of the developing infrastructure and the increasingly fluent use of ILT by FE tutors as an essential element of a truly interactive and learner-centred pedagogy.

Management Issues

78   The task group considered a range of management-related issues in the context of developing the National Learning Network. It noted that a documented ILT strategy is a requirement of each college's response to *Networking Lifelong Learning*.

79   The task group has arranged for draft guidelines for production of a college's ILT strategy, together with examples, to be published for comment in the first instance on the sector's FERL website, http://ferl.becta.org.uk and updated as appropriate. The task group recommends that a hard copy version should be finalised and distributed to all colleges once the FEILT committee's report has been formally accepted by the FEFC.

80   Particular attention should be paid to the need to provide ILT support materials for governors. The task group noted FEDA's work in this area through the QUILT programme. The task group recommends that arrangements should be made for FEDA's materials to be widely circulated within the sector.

81   The task group further recommends that FEFC commissions a project to provide guidance for college managers on the total capital and recurrent cost of making available suitable ILT facilities for students and staff in the light of the FEILT committee's detailed proposals for implementing the strategy. Such guidance should include all relevant aspects of financial planning and accounting, including the appropriate treatment of depreciation. The task group recommends that £30,000 is provided for this work in the first year.

Tariff Review

82   The task group recognises that in the future learners will increasingly seek more flexible, episodic, delivery of learning. The task group considers that a significant change in the present funding methodology is essential if the full benefits of flexibility of study are to be made available to independent learners.

83   The proposals of the tariff advisory committee (TAC) for funding learning accessed through ILT have implications both for the revenue streams associated with networked infrastructure and for the viability of sharing of resources and development costs between colleges that may impact significantly upon the question of sustainability.

84   The distributed and open distance learning (DODL) subgroup of the TAC is currently reviewing the funding of distance learning and will report separately to the Council. The outcomes of this review are fundamental to the achievement of the FEILTC vision for ILT as posited by the task group. The task group noted that, in effect, distance learning is only one subset of intermittent learning with varied modes, all of which must be covered by the funding methodology.

85   DODL is only one aspect of e-learning activities. As ILT becomes more embedded in the curriculum, students may take more responsibility themselves for their own tuition, at least in part. Students will though require more guidance in the use of learning materials. There are significant costs arising from the provision of such support. The costs of developing and tailoring of such materials are considerable and are not reflected in the current tariff. Such costs may need to be met outside present tariff arrangements. A revised funding calculation may be required where e-learning forms a substantial part of the delivery programme to the student. Proposed UfI models of delivery give added urgency to this matter.

86   The development of universal student tracking and the funding methodology to which it relates will need to take into account the fact that learners enrolled at one college may draw upon resources supplied by another.

87   The task group recommends that all these matters are considered in depth by the TAC and a report provided to the Council at the earliest possible opportunity, with a view to implementing the necessary changes by August 2000 if at all possible. Such early consideration could be particularly beneficial to the wider remit of the LSC.

Managed Learning Environments

88   Managed learning environments (MLE) are systems and software packages that support online learning. What they offer is at the heart of the new FE pedagogy: management of learning, reporting and exchanging data with external bodies and partners in strategic alliances.

89   The key functions and possibilities are:

- mapping of the curriculum into elements that can be assessed and recorded

- tracking of student activity and achievement against these elements

- support of online learning, including access to learning resources, assessment and guidance

- online tutor support

- communications media, including email and web access

- links to other systems, both in-house and externally.

90   The task group considers that student tracking is essential to underpin the paradigm shift in approaches to learning. Any system that is developed must be capable of sharing data with other colleges to enable a student to engage in learning and record achievement of different parts of a programme of study at several institutions. This will be true even if the normal mode of study continues with enrolment at a single college for the immediate future.

91   The task group proposes that a project is conducted to define a set of user specifications for MLEs and their interface with other systems. Particular attention should be paid to the importance of open standards, which will allow different systems to communicate freely with one another. The task group recommends that this project is carried out by a small team of staff drawn from colleges and appropriate sector organisations.

92   The task group further recommends that these user specifications form the basis for technical specification of an MEL to be commissioned by the FEFC on behalf of the sector and made available to colleges and software suppliers, together with appropriate training and support by or before 2002.

93   The task group recommends that £30,000 is set aside in the first year of the initiative for the FEFC to commission an investigation into the specification and functional aspects of the UfI learning environment with a view to publishing guidance for colleges on its likely impact. Such guidance should prepare colleges for their work with UfI and its learners and, moreover, provide a focus for intra-college staff development.

Budgetary Proposals

94   The recommendations concerning the specification, development and implementation of a managed learning environment for the sector require a substantial investment to be made. The task group estimates that in addition to the sums indicated above, £140,000 will be required in year 1 for the specification phase. Completion of the specification, development costs and roll out to the sector, have been estimated at £2.0m and £3.7m respectively for years 2 and 3, based upon the licence costs of existing products.

Staff Development and Technician Training

95   The task group considered issues of continuing professional development (CPD) and of possible mechanisms for the delivery of programmes to support both staff development and technician training. It was of the view that it will prove to be vital to the success of the National Learning Network initiative to make suitable provision for these, and that failure to provide training would seriously jeopardise the success of the entire initiative.

96   Having considered the criteria for successful staff development activities, the task group concluded that:

- programmes should wherever possible be developed and delivered locally

- the interventions that most motivate staff to use ILT are action-orientated, project-based activities.

97   The task group considered that any programmes of staff development associated with the National Learning Network must be related to the developing FENTO standards. Inclusion in the framework is an assertion of the pivotal position of ILT at the heart of curriculum and business practice. Moreover it offers colleges a single coherent conceptual structure for CPD, within which ILT skills are embedded rather than seen as an optional add-on for enthusiasts.

98   The task group recommends that FENTO be asked to work jointly with appropriate sector organisations to develop such a programme, and pilot it within volunteer colleges with a view to implementation by September 2000 if possible. A research programme mapping the standards against the ILT skills required of colleges should be conducted as a precursor to this activity.

99   In the meantime, the task group recognises that the development and piloting of such a major programme cannot be brought about quickly. It therefore recommends that a programme be immediately developed by appropriate sector organisations for the initial training of ILT champions within each college, together with supporting materials to support the cascading of ILT awareness and skills to other staff.

100   The task group recognised that, while some sections of this training programme would genuinely be continuing professional development, other sections would focus on the specifics of preparing cross-college teams to create effective ILT materials. These multi-disciplinary teams, led by ILT champions, would need access to subject specialists, technical expertise and graphics designers. As it was considered likely that these aspects of the training would be specific to key items of software, the task group was of the view that these parts of the initial programme would fall within the definition of capital-related funding.

101   For the remaining parts of the programme, the task group recommends that the FEFC should immediately seek mechanisms to enable funding of the ILT champions programme and other accredited CPD activities. As well as attendance at courses, these may take the form of:

- visits to best practice colleges

- one-to-one in-house, on-the-job training

- online training

- action research

- completion of course modules.

102   The task group recommends that FEFC should commission on behalf of the sector from appropriate suppliers a programme of online learning covering the core IT/ICT skills that will be required by staff to achieve the agreed ILT programmes.

103   Given the future role of UfI, it is further recommended that the FEFC consult with UfI over the development and delivery of this programme.

Training for Technical Support Staff

104   The task group recognises the central role of ICT technical support in delivering the National Learning Network and ensuring that its facilities can be used within colleges to raise educational standards, reduce the skills gap and widen participation. The task group therefore recommends that central funding be made available for the purchase of vendor-specific training for technical staff, particularly in the area of networking support skills.

105   The task group recommends that funding for such training is made available to colleges on a matched-funding basis through a programme of disbursed grants, but suggests that its availability to colleges be made dependent on commitments by colleges to ensure appropriate agreed, quantifiable service levels for IT networks and services.

Financial Implications

106   The task group noted the levels of expenditure elsewhere on ILT related training that the government had enabled. The new opportunities fund will provide £230 million for the training of 450,000 schoolteachers, and a further £20 million to train 23,000 full time equivalent public library staff. The task group considers it desirable that a corresponding level of investment in staff development should be made in support of the FE sector's ILT strategy.

107   The proposals presented above imply a considerable investment by colleges in ILT-related staff development over and above the on-going development of existing CPD programmes.

108   The task group recommends therefore that FEFC immediately seek additional funding to support its proposals concerning staff development. In particular, it recommends that the FEFC seek to introduce an explicit ICT dimension to strand 3 of the standards fund (staff development).

Budgetary Proposals

109   The ILT champions programme, to foster the development of cross-college teams, is an essential venture for moving the strategy forward quickly and requires a substantial budget. The task group proposes that £100,000 be made available to develop the programme and supporting materials this financial year.

110   The task group further recommends that £200,000 be allocated for research and mapping of the FENTO-validated programmes, spread equally between years 1 and 2.

111   The task group estimates that a programme of research into benchmarking to enable colleges to set service levels for networks and services will require a budget of £50,000. Initial scoping of the proposed online learning programme has been estimated at £50,000. Both projects should be completed within year 1.

112   The task group recommends that a total of £0.8 million be set aside during the first two years of the initiative for a range of vendor-specific technician training on a matched funding basis, £0.2 million in the first year, and £0.6 million in the second.

113   The task group recommends that the supervision and monitoring of these programmes should be vested in the FEILT committee.

Further Budgetary Considerations

114   The task group recognises that no funding allocation has been made specifically for staff development in the initial planning of the sector's ILT strategy for reasons cited above. It is the view of the task group that funding must be sought in the first instance for the specific recommendations made by the task group, particularly those that, by their nature, are central rather than local expenditures.

115   The task group estimates that delivery and support for colleges to enable the full ILT champions programme to go ahead would require a further £0.6m in year 1 and £1.5m in year 2. This calculation is based on an assumption that £3,000 would be required by each college to fund supporting activities.

116   The eventual costs of delivery of the full FENTO-validated staff development programme for all college staff may be realistically estimated by comparison with spending elsewhere on similar programmes in schools and public libraries. *Pro rata* to these initiatives, the costs of such a programme for the sector would be in excess of £50 million over three years.

117   The task group strongly recommends that to protect its investment in the National Learning Network and local college infrastructure, the FEFC seek possible sources of funding for such a staff development programme with all possible haste.

Learning Materials Exploitation

118   The task group addressed the following issues:

- the systematic auditing and mapping of materials

- the possible sector-wide procurement of suitable ILT materials

- approaches to commissioning the production of high-quality learning materials.

119   In formulating its recommendations, the task group acknowledged the need to ensure that the FEILT materials development initiative can both:

- ensure that sufficient product, in the form of material specifically purchased or commissioned to meet the needs of large numbers of FE learners, can be made readily available to the sector

- stimulate a process to build up the capability of staff in a range of FE colleges to make fluent use of new and emerging technologies to create or adapt learning resources for diverse groups of learners.

120   The task group considers that the latter approach will ensure that staff also become better equipped to empower learners to utilise these technologies for themselves in their own original work.

Materials audit

121   The task group recommends that the curriculum-led audit of ILT materials be conducted at sector level by a small team of staff drawn from appropriate sector organisations with research experience and expertise in auditing on a sector-wide basis. This team would disseminate the results of the curriculum-led audit, cataloguing existing ILT resources and assessing them against common quality standards.

122   The task group considers that this work would provide a firm foundation for commissioning new materials development and the associated staff training to support this identified as part of the ILT champions programme.

123   The task group noted that this research needed to be considered in conjunction with the findings of the recent review of the C&IT materials for teaching and learning in further and higher education conducted by the CHEMS consortium, which included FEDA.

124   The task group further recommends that audit and mapping work should also be conducted at college level from April 2000 in order both to supplement the work at national level and to enhance its specific application in colleges, for example by considering the needs of specific target groups of learners.

Centrally purchased or discounted materials

125   The task group recommends that based on the findings of the audit and mapping exercise, sector-wide purchase of materials should be carried out as a central exercise from December 1999, by an appropriate body acting as a purchasing and/or negotiating organisation on behalf of the sector colleges. This might perhaps be done using the higher education community's CHEST arrangements or an equivalent.

126   The task group recommends an investigation of the feasibility of developing a centrally held bank of materials at sector level, with due regard to the attendant issues of copyright and intellectual property. These options should be explored with relevant sector

organisations in order to secure a sound return on the investment of public funds.

127   The task group recommends that, if practicable, centrally purchased ILT materials should be made available to colleges through a 'virtual repository', free at the point of use or through specially negotiated sector-specific discounts.

Materials procurement

128   The task group recognised that, while some high-quality ILT materials already exist to supply the identified needs of the sector, in many instances there are no appropriate materials. The task group therefore recognised that it will be essential to commission some material, both course specific and generic, from new. The task group recommends that this should be carried out as a central exercise on behalf of the sector, working closely with sector bodies and the UfI.

129   The task group noted that a commonly agreed technical specification and set of quality standards would need to be developed against which to commission material and recommends that this development work be undertaken by an appropriate sector organisation, building upon the work already carried out by the UfI.

130   The task group recommends that a substantial budget should be set aside for commissioning ILT materials that are deemed likely to receive volume use throughout the sector. It further recommends that such materials should be purchased through a tendering process, and against a clear, detailed specification including identified project milestones and deliverables.

131   The task group recommends that the criteria for the award of tenders should include the requirement for organisations or consortia to provide evidence of:

- a track record of successful materials development

- an understanding of the further education curriculum

- a clear pedagogical approach

- a good understanding of issues associated with the human—computer interface

- successful application of ILT

- experience of multimedia developments.

College level materials development

132   The task group considered that a pedagogically based materials development initiative at college level would be an essential element to engage college staff and to secure valuable college-based ILT learning resources.

133   The task group recommends that provision for this activity should be made from Year 2 onwards, in those colleges or consortia of colleges that can evince that they have specifically:

- produced an ILT Strategy which takes account of guidance issued by FEILT in Year 1

- implemented an appropriate training programme to prepare a multidisciplinary team

- developed in this team sound pedagogical principles to the production of ILT materials.

134   The task group recognised that while many of these resources will find application in the colleges where they were created, a number will be worthy of development as national resources. It therefore recommends that a review be conducted during the second year of the initiative, to identify those materials that show potential for enhancement.

135   After suitable discussion with colleges concerning copyright and intellectual property rights, the enhancement of those ILT materials that are considered suitable should be undertaken, using funding specifically reserved for such activity through this initiative. Such materials should be added to the central bank in order for them to be readily available throughout the sector.

Budgetary Proposals

136   The task group proposes that £200,000 be allocated to facilitate audit and mapping of existing ILT materials, divided equally between years 1 and 3 of the initiative.

137   The task group further recommends that £70,000 be set aside for the development of standards, and for research into the feasibility of a centralised resource bank.

138   The task group recommends that £130,000 should be allocated to materials purchase and development in year 1. Further expenditures of £2.0m and £3.5m are recommended for purchase and commissioning of new materials in years 2 and 3.

139   The task group recommends that £1.0 million is made available to colleges for college-level materials and content development in year 2 and £2.0m in year 3.

Financial Arrangements

140   The FEILT committee's recommendations, based on the work of its two implementation task groups, suggest that there are two distinct aspects of funding the National Learning Network initiative:

- central procurement through suitable bodies of sector-wide services, such as the network itself and appropriate ILT materials

- college level activities, such as the purchase of ILT equipment and services, and the provision of vendor-specific technician training.

141   The committee noted during the consultation on *Networking Lifelong Learning* the clear call for the avoidance wherever possible of competitive bidding to secure funds for ILT development in support of the National Learning Network. The committee recognises the desirability of this approach, but recognises too that the funding secured for establishing the National Learning Network and associated facilities must demonstrate additionality. College accountability for the use of the funding provided, and a clear audit trail, must be maintained.

142   The FEILT committee therefore recommends that, while all colleges shall have an agreed allocation of resource from central funds for the purchase of certain ILT equipment and services, these funds should only be released under certain conditions.

The Key Role of College ILT Strategic Plans

143   The FEILT committee recommends that funding should be released to colleges when they have provided evidence of well-considered college ILT strategic planning, approved by college management and appropriately resourced by a combination of college and specific National Learning Network funding.

144   To that end, the committee recommends that FEFC put in hand the necessary arrangements to receive and assess college ILT strategic plans as part of the management of the National Learning Network initiative.

145   In its recommendations, detailed above, the FEILT committee has made provision for increased advice and guidance to be made available to college management teams to support the effective development of college ILT strategic plans. Support proposals include the dissemination of materials designed to enable an exploration of ILT-related issues – including sustainability – by college governing bodies.

Additionality

146   It is estimated that the sector currently spends in excess of £100 million a year. on ILT related expenditure. It is vital that the £74 million is spent in a way which produces additionality and not substitution. Where central funds will in future pay for ILT activity which currently is paid for directly by the college, there is a need to demonstrate that these ILT 'savings' are being applied elsewhere within the college's ILT budget. There will be instances in the allocation of local funds where it may be appropriate for colleges to demonstrate that matched funding has been provided.

Management Arrangements

147   The committee recognises that the Council will need to use a number of different approaches to managing the National Learning Network initiative. While some funding will, after suitable checks have been observed, go directly to colleges for local area network related purchases and for college-based learning materials development; a sizeable portion of the total available will be used for central procurement of the network itself and for funding the support centres in the regions.

148   In addition, the FEILT committee's recommendations assume the availability of mechanisms to manage quite protracted processes, such as the project management of substantial ILT materials development activity as well as more modest research and development tasks. Finally, FE specific services, including information and advice on the development and implementation of college ILT strategies will require management. Table 1 summarises the full range of funding proposals.

149   While there is every possibility that a significant proportion of the work identified for projects might be undertaken by organisations such as AoC, Becta, FEDA, FENC, JISC, LDN and NILTA, or consortia of colleges, the overhead of managing this diversity of activity will be considerable.

150   The committee notes that the Council will either need to take on this management role itself, or to make arrangements to delegate it.

151   The FEILT committee notes that the management roles required to deliver the initiative will include:

- vetting of college ILT strategic plans for quality and technical suitability

- technical consultancy and advice

- specification, and tendering for services and ILT materials development

- contract management for projects, products and services

- project management for research and development projects

- reporting on project-related finances, progress and achievements

- overall co-ordination of the initiative

- communication and dissemination of good ILT practice

- monitoring and evaluation of the initiative.

152   Allowance has been made within the budget for central administrative costs.

153   The committee recommends that the Council consider how procurements and project co-ordination and management would best be managed throughout the life of the initiative.

154   It is recommended that, in the event of the Council's choosing to delegate these roles, the work would be overseen by the FEILT committee with, subgroups of the committee acting directly as steering groups for discrete parts of the initiative.

Recommendations

155   The FEILT committee recommends to FEFC that:

- this report be accepted as the appropriate way forward for ILT development in the sector

- that a Council circular be produced, informing the sector of the committee's main recommendations and timescales

- the FEILT committee be charged with oversight of the implementation of the recommendations.

Table 1. Proposed expenditure (£ millions)

Infrastructure	1999-00	2000-01	2001-02	**Total**
National level				
National Learning Network procurement	3.7	7.5	9.5	**20.7**
Regional support centres	0.6	1.3	1.3	**3.2**
Information and advice services	0.7	1.5	2.0	**4.2**
Research/innovative projects	0.1	0.2	0.2	**0.5**
College level				
Local area networking initiative	5.8	3.5	7.6	**16.9**
College IT equipment renewal			11.8	**11.8**
Support				
National level				
MLE research, development and licensing	0.2	2.0	3.7	**5.9**
Auditing/mapping content & materials	0.1		0.1	**0.2**
National learning materials procurement	0.2	2.0	3.5	**5.7**
ILT Champion training programme	0.1			**0.1**
Research	0.2	0.1		**0.3**
Management and evaluation	0.1	0.3	0.3	**0.7**
College level				
College-level materials development		1.0	2.0	**3.0**
Technician training programme	0.2	0.6		**0.8**
Total	**12.0**	**20.0**	**42.0**	**74.0**