

1996 - 97 Report of the Learning Technology Dissemination Initiative

August 1997

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LTDI LEARNING
TECHNOLOGY
DISSEMINATION
INITIATIVE



Scottish Higher Education
Funding Council

Third report of the SHEFC
Learning Technology Dissemination Initiative

August 1997

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Report of the SHEFC Learning Technology Dissemination Initiative

Executive Summary

The SHEFC Learning Technology Dissemination Initiative was established in August 1994. Reports were published in November 1995 and November 1996 describing respectively the activities of the first and the second years of the programme. Subject areas that were targeted during the first two years of the initiative included biological & health sciences, business & management, economics, mathematics & statistics, modern languages.

This report summarises the activities of the third year of the Learning Technology Dissemination Initiative and its work to encourage the effective use of learning technology throughout higher education in Scotland.

During the third year of the initiative, increased emphasis has been placed on support for generic areas, especially assessment, and working in close collaboration with institutions and staff development units. Subject specific support has been available for physics & chemistry and art & design.

All the targets established for 1996/97 were attained or surpassed.

- Three major conferences have been held attracting 203 delegates from all except one of the SHEFC funded institutions.
- 28 Institutional workshops / seminars have been held, attracting over 540 delegates. Events have been arranged for 20 of the 21 SHEFC funded institutions.
- 12 Cross-institutional workshops / seminars have been held, attracting over 260 delegates.
- Implementation Support visits have been made to staff in 18 of the SHEFC funded institutions.
- Collaborative working with projects and initiatives such as TALiSMAN, TLTSN, SEDA, UCoSDA, COSHEP's Teaching & Learning subcommittee, and eLib has formed an increasing part of the work of LTDI.
- 5 new publications have been released, and existing publications updated. The World Wide Web site has been revised and updated. The LTDI resource collection has been maintained and expanded and is now accessible via the World Wide Web site.

1. Introduction

The Learning Technology Dissemination Initiative (LTDI) was established in August 1994 with support from the Scottish Higher Education Funding Council. LTDI operates to support academic staff throughout Scotland in the integration of technology with their teaching.

Reports were published in November 1995 and November 1996 describing the activities in each of the first two years of the initiative.

This report summarises the activities of the third year of the LTDI, from 1 August 1996 to 31 July 1997.

2. Targets and Outcomes

This section describes the objectives for the initiative, as specified in the third year proposal.

2.1 Aims and Objectives

The general aims for the third year of the project were to continue to disseminate information about the availability of learning technology related resources and to offer support for the effective implementation of those resources.

Specific targets were identified and agreed for the third year of the initiative:

- To hold two one day conferences, each expected to attract at least 100 delegates.
- To hold a minimum of twenty smaller workshops, designed to meet departmental or institutional needs, involving all SHEFC funded institutions, with approximately ten staff at each.
- To offer implementation support, particularly targeting departments rather than individuals, particularly in the areas of assessment, physics & chemistry, and art & design.
- To offer all SHEFC funded institutions the opportunity to receive guidance and training from LTDI on how best to support implementations.
- To promote collaborative activities, where these are complementary to other LTDI activity.
- To continue to develop and extend the resource collection.
- To maintain and expand the LTDI World Wide Web site and other information services.
- To carry out a study into the feasibility of possible follow up activities and funding mechanisms.

2.2 General Outcome

The objectives listed in section 2.1 have all been achieved, and in many cases target numbers have been exceeded. LTDI staff have delivered more than 40 seminars and workshops, offering staff development or support to more than 800 participants. All SHEFC funded institutions have participated in some way with LTDI activities.

The real impact of, or outcome from, contact with LTDI is not always readily measured, but there are examples of real institutional change following contact with the initiative. Appendix A4 lists specific outcomes from institutional events held during 1996-97.

3. Project Activities and Deliverables

This section reports events and activities that LTDI staff have engaged in during 1996/97. It does attempt to comment on those events.

3.1 Conferences

Details of the conference programmes, attendance figures and summary of feedback are provided in Appendices A1, A2 & A3.

Three one day national conferences have been held during 1996/97. Two of the conferences had a subject focus - Physics & Chemistry and Art & Design, and one was of a generic nature - Implementations in Practice.

The total number of delegates attending these three events was 203, including representatives from all but one of the SHEFC funded institutions. This figure does not include LTDI staff.

The programme of the subject based conferences included a mixture of presentations, discussion and hands on evaluation of software, with a focus on how learning technology can be used to best effect in that subject area. The conference 'Implementations in Practice' was targeted at staff with a general interest in the use of learning technology, or those with a specific support role. The presentations at this conference explored a wide range of different examples of the implementations of learning technology covering many different aspects of the curriculum from course design and assessment to subject specific concerns.

3.2 Seminars and Institutional Workshops

Details of workshop/seminar topics, dates, venues and attendance figures are provided in Appendices A4 & A5. Some feedback comments are provided in Appendix A6.

During August and September 1996, all LTDI contacts were invited to identify any areas where they felt that support from LTDI could be particularly valuable. This resulted in LTDI staff devising and presenting some workshops or seminars tailored to the specific needs identified by an institution. These events are detailed in Appendix A4.

In other cases LTDI organised workshops or seminars following direct approaches from staff development teams, or individual departments. These events are listed in Appendix A5.

The two groups of events included in this section did not have a single consistent structure, however most were highly participative, involving evaluation of software, discussion, or other group activities. All workshops and seminars were individually tailored to address the specific aims and objectives that had been identified in collaboration with institutional staff.

3.3 Implementation Support

Implementation Support is the phrase used by LTDI staff to describe the individually tailored support service that is offered, usually to departments or individuals. Since LTDI was established, specialist implementation support has been provided in the following subject areas: Mathematics & Statistics; Economics; Management & Accounting; Modern Languages; Biological and Health Sciences and Psychology. During 1996/97 subject specific implementation support was provided in two main areas - Physics & Chemistry and Art & Design. Activities under the heading of implementation support can vary enormously, but generally fall into one of the three broad groupings described in the LTDI Year 2 Report:

- Seminars where departmental staff can discuss specific issues relating to the integration of technology into courses, and have the opportunity to spend some time in hands-on evaluation of software.
- Detailed discussion with course teams about course structure, and whether learning technology can usefully be integrated into particular courses.

- Support for individual staff, in the identification of suitable courseware, and assistance with its integration and subsequent evaluation of effectiveness.

3.3.1 Implementation Support for Art & Design

Within Art & Design, implementation support has included a significant amount of general awareness raising and training in techniques such as image manipulation that are necessary pre-requisite skills to the effective use of learning technology in this cognate area.

The Art & Design conference was held on 18 December 1996 at the University of Dundee. Additional subject based workshops/seminars were:

- 9 October Printmakers and TVI at the University of Dundee (7)
- 10 October Teaching & Learning Colour Theory at Glasgow School of Art (5)
- 4 April Built Environment Workshop at Glasgow Caledonian University (15)
- 12 May IT in Art History held at the Edinburgh College of Art (8)
- 23 May IT in Architectural Education held at the Robert Gordon University (7)
- 28 May IT in postgraduate Art & Design taught courses at RGU (10)
- 12 June IT in Art History Teaching at Glasgow School of Art (7)

3.3.2 Implementation Support for Physics & Chemistry

In general staff within departments of Physics and Chemistry are fairly computer literate, with many already using computers routinely, particularly as a tool to support complex calculations. General awareness raising activities were not felt to be appropriate.

Implementation support activities have been undertaken in 6 physics and 4 chemistry departments. In addition to the major conference held at the University of Edinburgh on 16 December 1996 (see section 3.1 and appendix A1) the following subject based workshops/seminars were held:

- University of Glasgow physics dept (20 staff)
- SToMP Workshop held at Heriot-Watt University (2 July 1997) (7 staff).

In the physics departments there already existed a great deal of interest in the TLTP package SToMP, which was encouraged. As a result at least two departments will be using SToMP next year as a major part of their teaching [HW & Glasgow], and two others [Strath. & Edin.] will probably be using SToMP to some extent.

The Chemistry departments were much more varied in the help that they wanted: e.g.

- in one case a dept which had a large amount of CAL material sought advice on how to encourage students to make use of it;
- in another they wanted to identify a few packages that could be used for lecture demonstrations.

As has been mentioned in both LTDI's previous reports, the time needed to establish appropriate and effective contacts is significant. It is only after many months of activity that LTDI staff are in a strong position to act as catalysts for change. In some departments a useful post-doctoral position has been observed with responsibility for helping staff identify learning technology resources (as was the case in Aberdeen and St Andrews Physics departments). At least one other department is now exploring this option seriously, following contacts with LTDI.

3.3.3 Other Implementation Support activities

Implementation support has continued to be available for implementation projects established in previous years where this has been both possible and appropriate. In at least two cases, this has resulted in papers describing and reflecting on the implementation being submitted for publication.

3.4 Dissemination of Information on Strategies for Supporting Implementations

The importance of encouraging and supporting institutions in taking over responsibility for providing direct support for implementations was recognised and led to a number of activities targeted at staff in general support roles.

The LTDI Case Studies were distributed in Spring 1997 containing information and detailed descriptions of a range of different LTDI implementations from years 1 and 2.

Each institution was invited to identify particular areas where support from LTDI would be beneficial, and LTDI staff then aimed to respond with flexible and practical suggestions for addressing the issues identified. As part of the response a number of seminars & workshops were held within institutions. (Details in Appendix A4) Wherever possible these workshops were organised in close collaboration with institutional staff to facilitate dissemination of any relevant experience from the LTDI staff.

In addition to the conference held at the University of Stirling entitled 'Implementations in Practice', where a range of implementations were described, an afternoon event was organised by LTDI with the support of COSHEP's teaching and learning subcommittee. This event is described in section 3.4.1 .

3.4.1 Facilitating LT Implementations : The successful strategies

This half day event, described as a working seminar, was held in the Old College of The University of Edinburgh on Tuesday 6 May 1997. 30 staff from 14 institutions were present and listened to a number of short presentations, including comments from the external LTDI evaluation group, before splitting into discussion groups. Discussion was directed towards the drafting of guidelines and practical suggestions with the intention that these should be published and distributed as a resource and general source of support and ideas for staff who find themselves asked to provide some kind of implementation support.

3.4.2 LT-Implementation-forum

A closed e-mail discussion group has been established through mailbase for the participants at the meeting described above, but also including a few individuals who were unable to attend on that occasion. This discussion group provides a forum where staff involved in supporting the uptake of learning technology in one institution can share ideas and experiences with those in a similar position in another institution. Initially the forum has been administered and supported by LTDI, but in the longer term it might be appropriate for this responsibility to be transferred to a member of the group.

3.5 Collaborative Activities

3.5.1 Life Sciences Assessment Group

The Life Sciences Assessment Group was established during the academic year 1995 - '96. The group provides both a cross institutional forum for discussions relating to assessment issues and a support

network for Life Sciences staff who wish to use technology to support assessment. During 1996 - '97, discussion topics have included negative marking and testing higher level cognitive skills. A meeting of the group was held at the University of Abertay, Dundee in May, with representatives from nine different Scottish universities as well as the CTI Centre for Biology. The aim of the meeting was to update the group on some of the members' ongoing assessment projects. These included projects from Liz Leonard (Glasgow University), Sue Heard (Aberdeen University), Kevan Gartland (Abertay University), Andrew Ryle (Edinburgh University) and Phil Hammond (St Andrews University). It is hoped that this group will expand to include other subject areas and that responsibility for moderating the group move to one of the group members.

3.5.2 Nud*ist Group

The group was set up in August 1996 following a training session in the use the NUD*IST Qualitative data analysis software which was led by Ann Lewins from the CAQDAS project, Surrey University. The group now has 35 members from 9 institutions and has organised two further training workshops in Queen Margaret College and Napier University. It is planned to have another workshop in the Autumn of 1997 which would include several case studies taken from different research projects which have made use of NUD*IST. The associated email support group has been used by members to discuss issues relating to the application of the software.

3.5.3 EduLib Workshop

EduLib is a JISC project funded under the Electronic Libraries Programme. EduLib aims to provide a nationally recognised and accredited network of library and support workers. The EduLib team invited LTDI to devise and deliver a one day workshop 'Technology in Learning and Teaching'. This was held at The University of Dundee on 28 May 1997. The workshop was built round a case study and looked at the whole process of identifying the opportunity to use technology, evaluating software, planning for implementation and possible evaluation strategies. Some feedback comments are included in Appendix A6.

3.5.4 CTI and TLTP

LTDI has continued to foster close links with CTI and TLTP, both at an organisational level and between individuals involved in these initiatives. CTI and TLTP are both represented on the LTDI consultative group.

A closer understanding of CTI has been facilitated through the secondment of Phil Barker from the CTI centre for Physics to LTDI for part of this year. The LTDI team would like to acknowledge support from CTI in promoting this arrangement. Staff from 5 CTI centres have made visits to LTDI during the year. In general LTDI staff maintain close contact with most CTI centres, drawing on the expertise of CTI staff, and working to complement each other's services.

LTDI are represented on the TLTSN consultative group, and have collaborated with TLTSN in the organisation of and participation in events, as well as a general exchange of information. Where appropriate, enquiries are redirected to TLTSN or to individual TLTP projects.

3.5.5 TALiSMAN

During year 2 of LTDI, part of the initiative addressed the Metropolitan Area Networks, and in particular, hosted four MAN awareness days. Since then the TALiSMAN project has been established and has taken over responsibility for such events. LTDI staff have been fully supportive of the emergence of TALiSMAN, providing their team with information and ideas where these could be helpful. LTDI staff have collaborated closely with TALiSMAN, contributing to 2 TALiSMAN seminars and inviting

collaboration from TALiSMAN for a planned video conferencing workshop. LTDI are also assisting with the evaluation of TALiSMAN's on-line course for using the World Wide Web in Teaching and Learning. Continued close collaboration with TALiSMAN is anticipated.

3.5.6 SHEFC Evaluation of LTDI

During 1996-97, a full independent evaluation of the LTDI programme was conducted by The University of Edinburgh. LTDI staff were happy to co-operate with this review, and made records and papers freely available to the evaluation team.

3.5.7 COSHEP Teaching & Learning Subcommittee

The LTDI Co-ordinator was invited to join this sub-committee in November 1996. This has provided an opportunity for increased liaison with institutional staff development teams, in the context of a broad overview of the work of this and the other COSHEP staff development committees.

LTDI has participated in a number of sub-committee activities, and had the committee's support in organising the seminar described in section 3.4.1.

3.5.8 SEDA

The LTDI Co-ordinator is collaborating with staff from a variety of institutions across Britain in the organisation of the SEDA learning technologies conference to be held in Southampton in Spring 1998.

3.5.9 UCoSDA

Following recommendation(s), UCoSDA have included LTDI (as an organisation) and individual members of staff in their database of trainers.

3.5.10 Proposed book on evaluation

Following the inclusion of various sections on evaluation strategies in 'Implementing Learning Technology', LTDI was asked to contribute to a book entitled 'Experiences in evaluating CAL in HE'. Fourteen contributors, from different UK institutions, with experience in evaluating CAL were invited to write chapters in the book. Sections include the nature of evaluation, case studies from TLTP CAL evaluations, lessons learned and issues beyond the evaluation of learning outcomes. Regional workshops were held to discuss each of the chapters and it is planned to publish the book to coincide with the Phase 3 of the TLTP projects.

3.6 Resource Collection

The resource collection established during the first two years of LTDI has continued to expand, with the addition of new software packages, particularly in the areas of physics and art & design. The collection also now includes a wide range of packages that can be used to support the assessment of learning.

The database holding information about the resource collection has been upgraded and redesigned so that information about materials held in the collection is now accessible via the LTDI World Wide Web site.

3.7 WWW and Information Services

3.7.1 World Wide Web site

Access and Usage statistics for the LTDI World Wide Web site are available in appendix A7. LTDI Publications are available from the web site, as well as information about LTDI staff, activities and links to other relevant sites.

Feedback on the web site is not received often, but here is an example:

*Thank you very much. I think your work there is excellent,
and I expect that the document will be very much of use to us. Thanks again. -
- Clark*

*Dr Clark N. Quinn
Director of Development
Access Australia Cooperative Multimedia Centre
Australia Technology Park
Eveleigh NSW 1430*

3.7.2 LTDI Publications

During the previous two years LTDI publications have been very well received in Scotland and beyond. In addition to updating the Information Directory and continuing to distribute Implementing Learning Technology a number of new publications have been added to the LTDI portfolio. LTDI has been recognised as a publisher by The British Library and issued with a series of ISBN numbers. Copies of LTDI publications are lodged with the Library, according to their standard requirements.

The new publications released during 1996-97 include LTDI Case Studies, AssessIT, and BrITe Ideas. The Case Studies describe in detail eight very different types of implementation projects drawn from the experiences of the first two years of the LTDI. AssessIT is a four sided leaflet describing different uses of technology to support assessment and presenting descriptions of the experiences of two institutions who have elected to move towards an institutional policy on the use of technology in assessment. BrITe Ideas is a source book for ideas on different strategies for using learning technology in a range of different learning and teaching situations.

LTDI publications are distributed free of charge to staff from SHEFC funded institutions. Each LTDI contact is sent multiple copies of publications for circulation within their institution, and additionally publications are available at LTDI workshops and seminars. Further copies are made available when requested. Publications are also distributed to all CTI centres and TLTSN centres.

There has also been demand for LTDI publications outwith Scotland. UseIT has been reprinted in the newsletters of CTI Chemistry and CTI Library and Information Studies. Extracts from Update (the LTDI Newsletter) have been reprinted in the newsletter of CTI Physics, and AssessIT has been reprinted by CTI Library and Information Studies. The University of Brighton and The University of Coventry both requested multiple copies of Implementing Learning Technology and were supplied with electronic

masters and permission to reprint for internal distribution. Other non-SHEFC funded organisations who have requested copies of *Implementing Learning Technology* are listed in appendix A8.

Table 1 indicates the number of copies of publications that have been printed and distributed.

UseIT (reprint)	2500
Implementing Learning Technology	1200
Update (Nov)	1500
Update (Mar)	1500
Case Studies	600
AssessIT	2500
BrITe Ideas	1500
Information Directory (new edition)	600

Table 1

3.7.3 Conferences

LTDI staff participated in the conferences listed below. Conferences listed in italics indicate that LTDI staff gave a presentation, or led a workshop at this event.

Interactive Learning '96 15-17 August 1996
The Northumbria Assessment Conference 4-6 September
Association for Learning Technology Conference 16-18 September
CTI Art & Design 20 November
Architecture Schools Computing Association 25-27 March 1997
 Teaching and Learning in the Information Age, 15-16 April
New Dimensions in Technology Based Learning, 22 April
Shaping our Future, 19 June
 Copyright and the Web, 23 June
 IT & Dearing : The Implications for HE, 31 July

Conferences after 31 July 1997 where LTDI participation is confirmed:

The 2nd Northumbria Assessment Conference, 3-5 Sept
 European Computer Aided Architectural Design Education Conference, Lund 11-15 Sept
 ALT '97, 15-17 Sept

3.7.4 External Publications

Maths & Stats (Newsletter of CTI Statistics) Review of Statistics for the Terrified V3.0

TLTP Newsletter 8 (Autumn 1996) LT Directions. Short update on forthcoming LTDI activities.

TLTP Newsletter 9 (Summer 1997) Towards a Hypertext Campus. Lighthearted story with the moral that learning technology needs to be fully embedded into courses.

Active Learning 6 (July 1997) LTDI: Supporting successful implementations of learning technology. Practical suggestions for initiating and sustaining change.

ALT-J (In preparation) Book Review - Technology Based Training

3.8 Feasibility Study

A telephone survey was conducted of all LTDI institutional contacts, seeking opinions on LTDI activity, whether a central support provision is seen as being important and exploring the likely acceptability of different funding models. From this information, and from the experiences of LTDI staff, a draft Feasibility study was prepared and presented to the consultative group for discussion. The study, which remains confidential, has been made available to SHEFC for comment and guidance about any further action which would be appropriate

4. Comments and Experiences of Interest

This section makes some general comments about LTDI and its role in supporting the uptake of learning technology in Scotland.

Time to establish a profile of experience

In the three years since LTDI was established a great deal of knowledge has been fostered in the staff of the initiative. It takes time for staff to build up a bank of knowledge about the availability of packages and an awareness of the most effective sources of information. But beyond this, LTDI staff have been making contacts across Scotland, and have developed a familiarity with the interests and experiences of a very diverse cross section of the academic community. Such knowledge is very difficult to synthesise or condense into a form in which it can readily be communicated to other individuals or projects, but is invaluable in enabling LTDI to promote collaboration and networking across Scotland.

Recognition should also be given to the time necessary for any new service to establish its identity within the academic community. LTDI staff are now well known throughout Scotland and indeed more widely in the UK, and increasingly are becoming the first point to which individuals with a query turn in their search for advice. An established reputation as a service which is able and willing to respond quickly with practical suggestions or information is a very valuable asset.

The LTDI staffing model

The staffing model that has been used by LTDI has retained a core of staff from year to year with new staff being seconded on an annual basis, sometimes part time. Maintaining a core of staff from year to year, is considered to be critical to the success of a project such as LTDI, but funding on an annual basis can act as an impediment to attracting and retaining quality staff. It has been useful to recall some staff from previous years on an occasional consultancy basis. This model has been helpful in maintaining staff experience while still allowing new ideas to be developed and integrated.

Another benefit of the secondment model has been that when staff return to their own institutions they become a focus for activity there. The experience developed with LTDI is generally recognised as being of benefit to the 'home' institution. Upon their return, staff who formerly worked with LTDI have been delegated specific responsibility for aspects of learning technology support.

Working constantly in different academic institutions places LTDI staff in an unusual and privileged position. A strategy that has been demonstrated to work in one department can frequently be adapted for successful deployment in a totally different department, in another institution. A strength of LTDI has been its ability to mix subject specific and generic observations, adapting techniques and ideas and working them to fit a wide range of situations. LTDI staff are able to identify situations where ideas may be successfully transferred, and have an understanding of key factors likely to influence the success of an implementation project.

As in previous LTDI reports it is again important to stress the high time commitment required to support substantive change. Even a small implementation project can require a lot of time to prepare and plan effectively. Where an implementation has been initiated largely through contact with LTDI staff, it is helpful for institutional staff to be able to plan in the knowledge that continued support from LTDI will be available, should it be needed. Where implementations are being discussed towards the end of a funding year, the lack of assurance about continuing support can act as an impediment to the progress of the implementation.

Support needs identified by LTDI

There is undoubtedly interest throughout Scottish Higher Education in the uses of learning technology, but the motivation for that interest can vary greatly. Financial considerations, teaching quality, increasing student numbers, and moves towards flexible and distance learning all feature prominently as drivers for exploring the opportunity offered by learning technology. The Scottish institutions differ in their individual positions and needs, some having considerable direct experience in the implementation of learning technology, others having as yet only taken limited steps in this direction. It is hard to define a single need that is reflected in equal proportions across the sector. However a general set of needs that have been identified by current LTDI staff follows:

- General support for internal staff development teams, supporting, supplementing and complementing internal institutional provision.
- One-stop advice and information service accessible by phone or e-mail for quick advice and suggestions of further contacts.
- Implementation support - in a wide range of subject areas, different in different institutions, but including generic areas such as evaluation of implementations and applications of learning technology to assessment.
- Ongoing support for developing implementation projects.
- Identification of areas of common interest and the facilitation, creation and support of special interest groups.
- Publications related to uses of learning technology.
- Access to software and software demonstrations for evaluation purposes.

5. Recommendations

The feasibility study described in section 3.8, included a series of recommendations which are quoted below. These are the recommendations of the LTDI team, based on feedback from, and wide discussions with, a range of individuals including LTDI institutional contacts, members of the LTDI evaluation team, and the LTDI consultative group.

The LTDI team believe that support for the effective integration of learning technology can best be provided by an initiative which would:

“

- Work closely with institutional support teams
 - General support to complement and supplement institutional expertise
 - Support with design and delivery of institutional workshops
 - Implementation support as requested and subject to resources
- Encourage and support cross-institutional collaboration
 - Identification of areas of common interest
 - Facilitation, creation and support for special interest groups
 - Cross-institutional workshops
- Act as a central information service and resource centre
 - Publications related to the uses of learning technology
 - Offer access to software and other resources for demonstration and evaluation
 - Provide advice and information by e-mail or telephone
- Close collaboration with other Scottish and UK initiatives
- Be based in one central location, for the benefit of all SHEFC funded institutions
- Build on the knowledge and experience of current LTDI staff
- Be funded on a basis which ensures a core of staff can be retained for periods of at least 3 years. „

Appendices

- A1 Details of Conferences
- A2 Attendance at Conferences
- A3 Summary of Feedback from Conferences
- A4 Institutional Workshops & Seminars organised in response to comments from LTDI contacts
- A5 Other Workshops & Seminars
- A6 Some feedback comments
- A7 World Wide Web site usage statistics
- A8 Non SHEFC funded institutions which have requested copies of Implementing Learning Technology
- A9 LTDI Project Staff
- A10 LTDI Consultative Group

A1 Details of Conferences

Topic : LT in Physics & Chemistry

Venue : University of Edinburgh, Appleton Tower

Attendance: 59

Date : Monday 16 December 1996

Presentations:

Effective Implementation of CAL as a Lecture Replacement	Dick Bacon, University of Surrey
Examples of Use of CAL in Physics Teaching	Bruce Sinclair, University of St Andrews
The sweet smell of a successful substitution	Susan Snaith, Glasgow Caledonian Uni.
Motivating Students	Douglas Quinney, University of Keele

Parallel Sessions:

Hands on Physics Evaluation
Assessment Tools for Chemistry
Hands on Chemistry Evaluation
Assessment Tools for Physics

Software Demonstrated:

Albert , Contemporary Laboratory exercises in Astronomy, Consortium for Upper level physics software, Matter (TLTP 69), Statistics for the Terrified, C3 (TLTP 27), Dynamic Chemistry, PCCAL (TLTP 28)

Topic : LT in Art & Design

Venue : University of Dundee, West Park Centre

Attendance : 53

Date : Wednesday 18 December 1996

Presentations:

Transaction at a distance: collaborative work on the internet	Sue Gollifer, CTI Art & Design
Multimedia in Art & Design	Ian Burt, Grays School of Art
Teaching Colour Theory	Ian Johnston & Alison Hurley, Glasgow School of Art
Acrobatic Course Notes	Derek Green, Edinburgh College of Art

Software demonstrated:

CATEEC (TLTP 57), Quick Time, Pagemaker, Photoshop, Scanning software, Colour, 3DStudio

Topic : Implementations in Practice

Venue : University of Stirling, Pathfoot Building

Attendance : 84

Date : Thursday 16 January 1997

Presentations:

LT: past, present and future

Taster Sessions

Leslie Mapp, Open Learning Foundation

Liz Leonard, University of Glasgow

Paul Maharg, Glasgow Caledonian University

Andrew Tolmie, University of Strathclyde

Henry Brzeski, University of Strathclyde

Sue Hewer, LTDI

The Ed-Tech model for implementations

Jeff Haywood, University of Edinburgh

Motivation and Assessment

Doug Hamilton, University of St Andrews

Introducing a departmental strategy

Alex Arthur, University of Aberdeen

Using the web to support teaching

Paul Skett, University of Glasgow

Integrating Computer Based Materials

Phil Crompton, University of Stirling

Evaluation Strategies

Learning Technology and the University of the Highlands and Islands Prof Sir Graham Hills, UHI

A2 Attendance at conferences**Delegates (not including speakers) at LTDI Conferences, by Institution**

<i>Institution</i>	<i>P & C</i>		<i>A & D</i>	<i>Imp in P</i>	<i>Total</i>
	Edin	Dundee			
University of Abertay, Dundee	4			2	6
University of Aberdeen	1			2	3
University of Dundee	6	8		5	19
Edinburgh College of Art	1	14		2	17
University of Edinburgh	14			3	17
Glasgow Caledonian University	1			4	5
Glasgow School of Art		11			11
University of Glasgow	1			7	8
Heriot-Watt University	6			2	8
Moray House		3		2	5
Napier University	3	3		5	11
Northern College				4	4
University of Paisley	1			2	3
Queen Margaret College	3	1		5	9
RSAMD					0
Robert Gordon University	5	6		1	12
St Andrews College	1	5			6
University of St Andrews	3			7	10
University of Stirling	1			17	18
University of Strathclyde	1			9	10
Scottish College of Textiles	1	1			2
TOTAL	59	53		84	196

A3 Summary of Feedback from LTDI Conferences

Attendance

Attendance Figures		P&C	A&D	I in P
Total delegates (demonstrators)	59 (7)		54 (5)	90 (12)

Total 203

This figure is not adjusted for the actual attendances - it is the database prior-to-event figures. It does NOT include LTDI staff and those who attended on the day without pre-booking. The figures are in some cases higher than those given in appendix A2 because some delegates were from outside Scotland.

Summary of Feedback

A total of 118 feedback forms were received

Workshop	Returns	% of attendance
Art & Design	23	43
Implementations in Practice	52	56
Physics & Chemistry	43	73
Total	118	57

The great majority of delegates described themselves as teachers

Main part of job	Total
Teaching	64
Research	13
Management	3
Staff development	3
Computer support	5
Other	7
Total	95

Most delegates found out about the event through information distributed within their institution - this probably includes LTDI generated publicity sent to contacts for onward distribution.

How did you find out about the event	Total
Word of Mouth	17
E Mail	25
Institution	59

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WWW	3
Other ways	2
Total	106

Delegates were asked how frequently they used technology for five application areas. The modal response from each institution has been recorded (N.B. Sample sizes from some institutions are VERY small). Items marked * are where this was the unanimous response of the delegates from that institution.

The data shows that in general staff are familiar with and frequent users of basic applications packages (word processors, spreadsheets, etc.) and most are also frequent users of e-mail. It is noticeable that in the two colleges of art use of e-mail appears to be very restricted. (The Art colleges in Aberdeen and Dundee are not listed separately, so no information is known about the situations there.)

Use of E-Mail

Frequent	Regular	Never
University of Aberdeen University of Abertay, Dundee Glasgow Caledonian University University of Dundee University of Edinburgh * University of Glasgow * Heriot Watt University * Moray House Napier University Northern College * University of Paisley * The Robert Gordon University St Andrews College University of St Andrews * University of Strathclyde * Scottish College of Textiles University of Stirling	Queen Margaret College	Edinburgh College of Art Glasgow School of Art

Use of Standard Applications - Word Processing, Spreadsheets, Databases etc.

Frequent	Regular	Occasional
University of Aberdeen University of Abertay, Dundee University of Dundee Edinburgh College of Art University of Edinburgh University of Glasgow Glasgow School of Art Heriot Watt University Moray House * Napier University Northern College University of Paisley * Queen Margaret College	The Robert Gordon University	Glasgow Caledonian University

St Andrews College
University of St Andrews *
University of Strathclyde
Scottish College of Textiles
University of Stirling

Use of Computer Aided Learning materials

The data suggest that CAL is used less often, but also that there is much more diversity in the use of CAL within an institution than in the use of e-mail or the standard applications (there are very few entries are marked *).

Frequent	Occasional	Never
University of Aberdeen	University of Abertay, Dundee	University of Dundee
University of Glasgow	Glasgow Caledonian University	Edinburgh College of Art
University of St Andrews	University of Edinburgh	Glasgow School of Art
University of Strathclyde	Heriot Watt University	Scottish College of Textiles
	Moray House *	
	Napier University	
	Northern College *	
	University of Paisley	
	Queen Margaret College	
	The Robert Gordon University	
	St Andrews College	
	University of Stirling	

Use of the World Wide Web

This section shows the most variation between institutions. Perhaps it should also be mentioned that delegates at LTDI workshops are arguably more likely than staff in general to be active in using the Web.

Frequent	Regular	Occasional
University of Aberdeen *	University of Dundee	Edinburgh College of Art
University of Abertay, Dundee	University of Paisley *	University of Edinburgh
Glasgow Caledonian University		Glasgow School of Art
University of Glasgow		Napier University
Heriot Watt University		Northern College
Moray House *		Queen Margaret College
University of St Andrews *		The Robert Gordon University
University of Strathclyde		St Andrews College
Scottish College of Textiles		
University of Stirling		

Use of technology to support assessment

A clear picture emerges that active use of technology to support assessment is very limited across the whole sector.

Occasional
University of Aberdeen
University of Glasgow

Never
University of Abertay, Dundee
Glasgow Caledonian University *
University of Dundee *
Edinburgh College of Art *
University of Edinburgh *
Glasgow School of Art *
Heriot Watt University *
Moray House *
Napier University
Northern College
University of Paisley
Queen Margaret College
The Robert Gordon University *
St Andrews College
University of St Andrews
University of Strathclyde
Scottish College of Textiles *
University of Stirling

Note: The above data is based on the feedback responses received at the three conferences organised by LTDI during 1996/97, and is not necessarily presenting an accurate picture of the current use of technology in these institutions.

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The following tables show whether delegates felt that time allocated to different activities in the workshops was right or not. A bar chart summarising these tables appears on the next page. Together the tables and bar chart indicate that generally time allocated to activities is felt to be about right, except that more time is usually requested for software demonstrations. Group activities show the greatest diversity of response.

Interpretation of data from activities and parallel sessions are harder to decipher partly because of the form of data collected.

1. Software Demonstrations

	None	Less	Same	More
A&D	0	0	4	14
I in P	1	1	20	27
P&C	0	4	16	19
Total	1	5	40	60

2. Group Activities

	None	Less	Same	More
A&D	5	3	2	5
I in P	3	4	18	18
Total	8	7	20	23

3. Case Studies

	Less	Same	More
A&D	2	13	1
I in P	9	21	16
Total	11	34	17

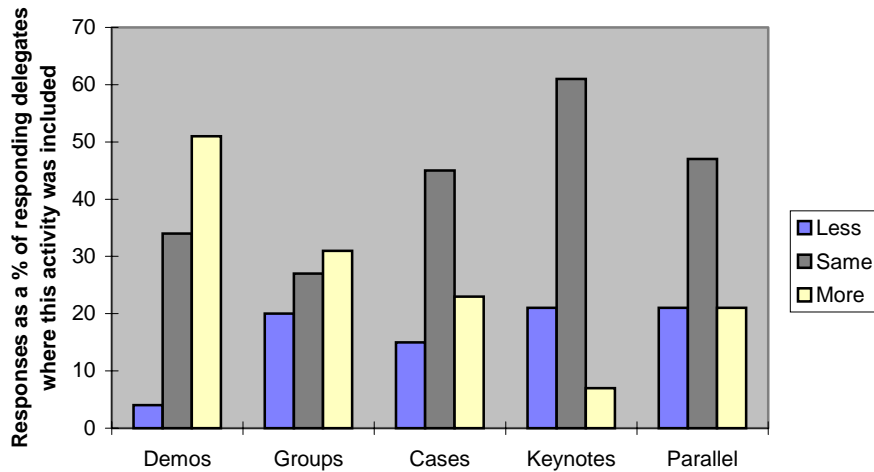
4. Keynote presentations

	None	Less	Same	More
P & C	1	5	30	3
I in P	2	12	28	4
Total	3	17	58	7

5. Parallel Sessions

	None	Less	Same	More
P & C	2	7	20	9

Bar chart showing delegates preferences for amount of time spent on different activities



Follow ups to the workshops

Would you come to another LTDI workshop?

88 % of delegates said that they would be happy to attend another LTDI workshop. One delegate commented specifically that they would recommend LTDI workshops to colleagues but would not attend another themselves, because they now felt confident enough to try things on their own.

Workshop	No	Yes	Total
A&D	8	9	17
I in P	3	47	50
P&C	2	36	38
Total	13	92	105

How would you like to follow up the workshop?

	Departmental Seminar	Obtain Software	Maintain contact	Visit from LTDI staff
A & D	5	6	9	6
I in P	14	20	23	9
P & C	9	30	9	8
Total	28	56	41	23

A4 Institutional Workshops / Seminars Organised following meetings with LTDI contacts

Total attendance at these workshops is about 350

St. Andrews College

5 November 1996

No. of institutional staff 8

Using Learning Technology to support assessment

Aims : Explore possible role for technology in supporting assessment

Outcomes : Development of computer based Multiple Choice questions for Environmental Studies Course.

Considering institutional purchase of Question Mark.

Heriot-Watt University

11 December 1996

No. of institutional staff 21

Uses of computers in teaching - for probationary lecturers

Aims : General introduction to learning technology for new lecturers - what is available and some of the issues that need to be considered.

Outcomes : LTDI has been invited to present further workshops on behalf of the institutional teaching and learning technology service, and to participate in the probationers training during 1997-98.

Queen Margaret College

13 January 1997

No of institutional staff 16

Uses of technology to support assessment

Aims : Consideration of how technology can support assessment - with a focus on those packages that are already available within Queen Margaret College.

Outcomes : Promoted internal discussion about general assessment strategies.

The Robert Gordon University

15 January 1997

No of institutional staff approx 80

Technology and Assessment day conference

Aim : To provide a platform for the discussion of issues around using technology to support assessment, particularly aimed towards management, and senior policy makers.

Outcomes : The university has made a policy decision to move towards widespread use of computer based assessment, and has purchased an institutional licence for the necessary software.

The University of Strathclyde

14 February 1997

No. of institutional staff 20

Conducting an evaluation into CAL in HE

Aim : To raise awareness of issues to be considered when selecting software for use in learning and teaching.

Outcomes : The evaluation techniques presented have been used by some of the participating staff within their own subject areas.

The University of Abertay, Dundee

19 March 1997

No. of institutional staff 12

Technology in Teaching

Aim : To promote awareness and discussion of some of the possible roles for learning technology in the support of student assessment.

Outcomes : Feedback indicated that a practical workshop on the design of objective tests would be welcome. A research project "Development of Biotechnology Computer Aided Learning Materials" has been funded by the University. Continued staff development activities in the area of technology in assessment to be available.

The University of Edinburgh

9 April 1997

No. of institutional staff approx. 40

Computer Based Learning materials

Aim: General awareness raising about learning technology as part of Edinburgh University's induction course.

Outcomes : Distribution of LTDI publications to all new lecturing staff. Invitation to participate in 1997-98 induction programme. Proposed review of how the University follows up generally on its internal training courses.

The University of St. Andrews

11 April 1997

No. of institutional staff approx. 20

Conducting an Evaluation into CAL in HE

Aim : To promote awareness of the importance of evaluating the effectiveness of learning technology as part of a course, not in isolation.

Outcome : The institution has identified this as an area of particular interest and is supporting staff in the evaluation of learning technology; this will involve participation and comments from students as well as staff.

The University of Paisley

12 May 1997

No. of institutional staff at main presentation 140

No. of institutional staff at workshop session 43

Staff conference on teaching & learning

Aim : To highlight examples of good practice in the use of LT

Outcome : Comments made at the conference contributed to the university's strategic plan. A review of university policy on teaching and learning is being undertaken and a number of key issues have been identified.

Edinburgh College of Art

18 March 1997

No. of institutional staff 13

Image Manipulation workshop

Aim : To enable staff to obtain digital images from paper copy through scanning, from digital libraries and from the web, and to manipulate those images for conversion into other formats or into documents.

Outcomes : Another similar workshop is proposed during the 1997-98 session at ECA, and perhaps also at Dundee.

Napier University

Various dates in Spring 1997

No. of institutional staff about 30

Workshops for each faculty on Evaluation of Learning Technology

Aim : To provide general overview of learning technology and its potential to support learning.

Outcomes : Invitation to visit one of the departments which participated to discuss how their use of technology could be effectively evaluated.

The University of Aberdeen

21 May 1997

No. of institutional staff 30

Use of LT in Engineering

Aim : To promote discussion within the department about the potential and possible role for learning technology

Outcomes : The department has evaluated a number of CBL packages. LTDI has been approached to facilitate further discussion during 1997-98.

The University of Dundee

Planned for 20 June 1997 but postponed until November due to some technical concerns at Dundee.

Video Conferencing

Northern College

27 June 1997

No. of institutional staff 14

Learning Technology in Teacher Education

Aim : A broad introduction to the variety of learning technology tools currently available and exploration of their use within teacher education.

Outcomes : A technology group has been established to help raise awareness within the college, and to explore and highlight the most relevant applications. It is planned that this group will meet monthly, LTDI has been invited to participate in some of these meetings.

A5 Other workshops & seminars

These workshops were arranged in response to direct requests received by LTDI, or where LTDI staff identified a topic or a need which could appropriately be addressed through a workshop or a seminar.

Total attendance at these workshops is about 475

University of Dundee

9 October 1996

No. of institutional staff 7

Printmakers and TVI

Glasgow School of Art

10 October 1996

No. of institutional staff 5

Teaching and Learning Colour Theory

Glasgow Caledonian University

8 November 1996

No. of institutional staff 8

Using technology to support assessment in Podiatry

The University of Glasgow

28 November 1996

No. of institutional staff 15

Using technology in Psychiatry education

Napier University

22 January 1997

No. of institutional staff 20

Distance & Flexible learning for Biologists

Heriot-Watt University

5 February 1997

No. of institutional staff 10

Changing assessment strategies

Moray House Institute of Education

5 February 1997

No. of institutional staff 9

Arts & Humanities Curriculum Delivery of IT

Four Universities Induction Programme (St Andrews, Heriot-Watt, Stirling, Dundee)

8 April 1997

No. of staff approx. 90

Technology Treasure Hunt

The Robert Gordon University

23 May 1997

No. of institutional staff 7

IT in Architectural Education

The Robert Gordon University

28 May 1997

No. of institutional staff 10

IT in postgraduate Art & Design taught courses

Heriot-Watt University

11 June 1997

No of institutional staff 4

Assessment - follow up

Nud*ist Group

27 August 1996 (13) Held at Glasgow Caledonian

15 May 1997 (20) Held at Napier University

3 July 1997 (15) Held at Queen Margaret College

Life Sciences Assessment Group

23 May 1997 (15) Held at Abertay

British Microbiology Group

24 March 1997 (50) Held at Heriot-Watt

Facilitating LT Implementations : The successful strategies

With support of COSHEP teaching & learning subcommittee

6 May 1997 (30) Held at The University of Edinburgh

EduLib Workshop

28 May 1997 (20) Held at The University of Abertay, Dundee

Input to TALiSMAN events

2 July 1997 (55) Web course design

9 July 1997 (15) Building interactivity into your web site

SToMP Workshop

2 July 1997 (7) Held at Heriot-Watt University

Table Summarising LTDI Implementation Support Activities

Including dates (and numbers) participating in workshops/seminars

And identification of institutions where implementation support activities were undertaken during 1996/97.

Over 800 workshop/seminar places are recorded on this page

	<u>Seminars / Workshops</u>	<u>Visits</u>
University of Abertay, Dundee	19/3/97 (12)	✓
University of Aberdeen	21/5/97 (30)	✓
University of Dundee	8/4/97 (23)* 9/10/96 (7)	✓
Edinburgh College of Art	6/6/97 (12) 18/3/97 (13)	✓
University of Edinburgh	9/4/97 (40)	✓
Glasgow Caledonian University	8/11/96 (8)	✓
Glasgow School of Art	10/10/97 (5) 12/6/97 (7)	✓
University of Glasgow	28/11/96 (15) 16/12/96 (20)	✓
Heriot-Watt University	11/12/96 (21) 5/2/97 (10) 8/4/97 (23)* 11/6/97 (4)	✓
Moray House	5/2/97 (9)	✓
Napier University	22/1/97 (20) Spring (3 x 10)	✓
Northern College	27/6/97 (14)	✓
University of Paisley	12/5/97 (43)	
Queen Margaret College	13/1/97 (16)	
RSAMD		✓
Robert Gordon University	15/1/97 (80) 23/5/97 (7) 28/5/97 (10)	✓
St. Andrews College	5/11/96 (8)	✓
St. Andrews University	8/4/97 (23) * 11/4/97 (20)	✓
University of Stirling	8/4/97 (23)*	
University of Strathclyde	14/2/97 (20)	✓
Scottish College of Textiles	1/7/97 (6)	✓

*Four institutions collaborate on a training course for new lecturers, the total attendance at this course was just under 100. For the purpose of this table it is assumed that these were spread roughly equally between the four participating institutions.

Cross Institutional Workshops

Nudist Group 27/8/96 (13) 15/5/97 (20) 3/7/97 (15)
 Life Sciences Assessment Group 23/5/97 (15)
 Microbiology Group 24/3/97 (50)
 EduLib 28/5/97 (20)
 Facilitating LT Implementations 6/5/97 (30)
 TALiSMAN events 2/7/97 (55) 9/7/97 (15)
 StoMP 2/7/97 (7)
 Built Environment 4/4/97 (15)
 IT in Art History 12/5/97 (8)

A6 Some Feedback Comments

*“About two years ago, I was at a workshop that you ran....
.... It completely changed my life”*

Dr Ian Kill, University of Dundee

As a rule LTDI staff seek feedback from workshop delegates, and where possible try to respond to this appropriately, and use it to inform the planning of future workshops. The seminars and workshops this year varied enormously in nature, and a variety of feedback mechanisms were used, sometimes based on institutional models. This appendix records some qualitative comments made in response to open questions.

Queen Margaret College

I really enjoyed the course and will do my best to implement what I've learned
Well organised. I have learned a lot.
Very clear and enthusiastic
Very clear and informative.
Lots of hints and information.
Varied and interesting.
Good response to questions.
Good to have a chance to see new software.
Very relevant in our assessment of students.

Northern College

Presentation was very good, well planned, delivered.
Excellent.
A most interesting day with lots of ideas to ponder and develop.
All aspects of this workshop were useful.
All stimulating - I will follow this up.
The whole day was useful and will take some digesting. A good mix of information and activity

EduLib

Each session progressed from the other and built onto it.
Excellent and useful materials provided.
Morning session extremely interesting.
Excellent handouts.
I'll recommend it to my colleagues.
I liked the opportunity to get some hands-on experience.
I liked the way that technology was not rammed down our throats as the answer.
A thought provoking workshop - I will certainly think about this subject.

University of Abertay, Dundee

All the respondents stated that they had enjoyed the seminar, that it was useful and that the format was appropriate.

Heriot-Watt University

Lots of ideas for the use of CAL. Overall really stimulating.
Contact addresses for more details are useful.
Would have liked more on packages in my area.

Useful suggestions for different roles/uses of CAL.
Helpful to have pointers to what sort of things to look for in packages.
Good discussion.

Napier University

Nice to hear colleagues points of view.
Very useful - generally good to discuss the issues.
Thanks very much!
Useful discussion, particularly input from workshop leader.
Useful to pool ideas from people of different backgrounds
Useful ideas on how to integrate material into course and how to assess it.

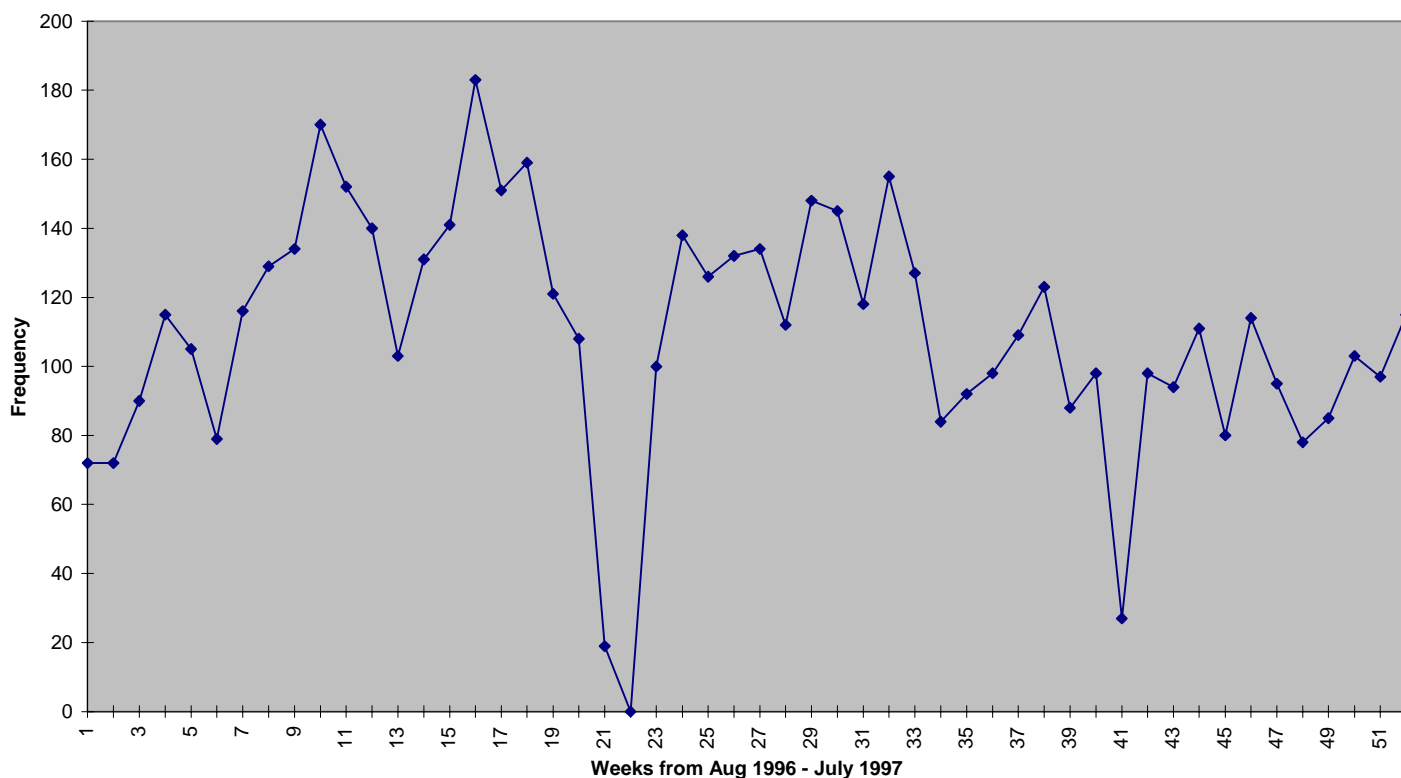
Strathclyde University

Could have done with more time
Well organised. Useful to get hands-on experience on a computer programme not related to my subject.
Good.
I've learned about how much support is available from other organisations.
OK, except for the time limit.
Good - but we needed an extra hour.

SToMP

Well run meeting
Extremely useful meeting - clarified ideas greatly
Hands on was useful but more time needed - a subject for private study
Practical demos & detailed explanations of technical issues were useful.

A7 World Wide Web site usage information



The LTDI World Wide Web site usage statistics show remarkable consistency with those for the last part of 1995/96, when records started. The two major troughs on the chart coincide with known technical problems with our server and have therefore been excluded from the table below.

	1996/97	1995/96
Mean	109.88	110.2
Minimum	72	60
Maximum	183	188

The majority of accesses to the web site are from locations in the UK. The publications section is the most frequently accessed part of the site.

The LTDI site is registered with a number of major search engines, and these are known to generate a number of more unusual hits. The web site also generates some general enquiries from overseas.

A8 Non SHEFC funded institutions who have requested copies of Implementing Learning Technology

Copies of all LTDI publications are freely available to staff in SHEFC funded institutions and additionally they are available electronically via the World Wide Web. Where an institution is interested in circulating large numbers of copies, LTDI will supply a paper master. This can be particularly useful for non-SHEFC funded institutions where in general only a single copy of any publication will be provided directly by LTDI.

University of Brighton
University of Coventry
Royal College of Surgeons of England
University of Northumbria at Newcastle
University of Hull
UMIST
Kirkdale College
University of Warwick
University of Loughborough
MEDC
Queen Elizabeth Medical Centre, Birmingham
University of North London
University of Reading
Loughry College
University of Oxford
University of Huddersfield
University of Cambridge
University of Wolverhampton

A9 LTDI Project Staff

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Dr Jen Harvey, Implementation Support Consultant (Assessment)

Dr Phil Barker, Implementation Support Consultant (Physics & Chemistry 0.5 FTE)

Mrs Alison Murison, Implementation Support Consultant (Art & Design 0.5 FTE)

Miss Wilma Brown, Secretary (0.5 FTE)

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Ms Nora Mogey (LTDI Project Co-ordinator)

Dr Kate Morss (Queen Margaret College)

Dr Roger Rist (LTDI Project Director) (chair)

Prof. David Ross (University of Abertay, Dundee)

Prof. Rick Trainor (University of Glasgow)

Ms Su White (TLTSN)

Mr Norman Wiseman (JISC)