

# JISC Design for Learning Programme

## Project Completion Report

### Project details

Project name: Evaluation of Design & Implementation Tools for Learning

Project acronym: EDIT4L

Project website: <http://www.edit4l.soton.ac.uk:8081/>

### Project team members at start of project

**Paul Riddy** - *Project Management, LAMS training and support, workshops, evaluation, dissemination.*  
Centre for Learning and Teaching, University of Southampton, Highfield, Southampton, SO17 1BJ  
Tel: 023 8059 4536 Email: [p.j.riddy@soton.ac.uk](mailto:p.j.riddy@soton.ac.uk) Fax: 023 8059 2651

**Karen Fill** – *Project Coordination, DPT training and support, workshops, evaluation, dissemination.*  
Centre for Learning and Teaching, University of Southampton, Highfield, Southampton, SO17 1BJ  
Tel: 023 8059 3784 Email: [k.e.fill@soton.ac.uk](mailto:k.e.fill@soton.ac.uk) Fax: 023 8059 2651

**Mark Childs** - *Workshops, evaluation, dissemination.*  
Centre for Academic Practice, University of Warwick, University House, Kirby Corner Road, Coventry CV4 8UW  
Tel: 024 7657 4057 Email: [M.Childs@warwick.ac.uk](mailto:M.Childs@warwick.ac.uk) Fax: 024 7657 2736

**Graham Lewis** - *Workshops, evaluation, dissemination.*  
Centre for Academic Practice, University of Warwick, University House, Kirby Corner Road, Coventry CV4 8UW  
Tel: 024 7657 2737 Email: [Graham.Lewis@warwick.ac.uk](mailto:Graham.Lewis@warwick.ac.uk) Fax: 024 7657 2736

#### Primary project themes:

- Evaluation of online toolkits for learning design
- Review of implementation of online toolkits for learning design within institutions (particularly in relation to professional development for initial entry staff)
- User needs analysis for future development of online toolkits for learning design
- Review of methodologies for achieving the above analyses.

#### Keywords

Online toolkits, learning design, professional development

The project explored the use of the DialogPlus toolkit (DPT) and the Learning Activity Management System (LAMS) individually and in tandem for designing, creating and delivering applications which support learning. It investigated the issues surrounding, and the viability of, these toolkits in teaching staff engaging in pedagogic design; the support needed to ensure successful implementation and use of the design tools; and teachers' evaluation of their effectiveness. It identified the success factors for embedding DPT and LAMS into staff development programmes and explored initial specifications for future developments of toolkits as requested by the participants in workshops.

### Acknowledgements

Part of the Design for Learning Programme, managed by Sarah Knight with Paul Bailey, and funded by JISC.

## Executive Summary

### Aims

The initial aims of the project were to:

- explore the use of the DialogPlus toolkit (DPT) and the Learning Activity Management System (LAMS) individually and in tandem for designing, creating and delivering applications which support learning.
- investigate the issues surrounding, and the viability of, teaching staff engaging in pedagogic design;
- the support needed to ensure successful implementation and use of the design tools;
- teachers' evaluation of their effectiveness.

### Objectives

The specific objectives were to

- Develop and deliver *design for learning workshops*, using DPT and LAMS, for academic and related staff at the Universities of Southampton and Warwick.
- Develop and deliver a module on *design for learning* using DPT and LAMS for a University of Southampton MSc distance learning course aimed at school teachers.
- Develop and deliver *design for learning workshops* using DPT and LAMS for the wider community of teachers and related staff in UK FE/HE.
- Evaluate the usability and effectiveness of DPT and LAMS for the staff who design and implement learning activities at these workshops.
- Identify success factors for embedding DPT and LAMS into staff development programmes.
- Report on the outcomes of the workshops, the MSc module and the evaluation.
- Disseminate the outcomes to the wider community.

### Approaches

These toolkits were evaluated through a series of workshops held at the two collaborating institutions, the University of Southampton and the University of Warwick, shown in table 1. Both of the departments involved in the project at the two separate institutions are staff development units, as well as (at the time the project ran) having a remit to research into new approaches in learning and teaching. The workshops were therefore located within the general professional development programmes delivered at the institutions. The approach was to use the toolkits as a means to introduce staff to the practice of learning design, and then ask them to reflect on the tools, the use to which they could be put within their departments, and the value of learning design in general. The workshops consisted of, therefore, an interactive presentation, followed by a focus group discussion (the standard model for staff development workshops at the institutions). The focus group discussions were recorded and these then doubled as a data-gathering process. Evaluation questionnaires, on the tools and on the workshops, were completed by the participants. Although the response to the tools themselves was mixed, the focus of the workshops on the more generic principles of learning design meant that the feedback about the workshops was mainly positive.

Although the original aims of the project were simply to evaluate the tools, after the pilot workshop in October 2006, it became apparent that participants had come to explore the tools rather than to produce learning designs and applications. The toolkits also fell far short of the participants' expectations of what a toolkit should provide, and so an additional aim of the project was introduced, that of identifying a set of design specifications for future development of the toolkits that took account of users' needs.

During the development of the project the following factors became evident, resulting in another revision:

- 1) LAMS and DPT have different roles and uses, and a full understanding of the distinction was necessary for a consistent user needs analysis which was not self-evident to the user groups
- 2) Different user groups have different requirements and data about the nature of the users needed to be captured and correlated with user needs, but in a simple and easily communicable manner
- 3) The introduction of the new pedagogical planner tools, such as the London Planner and Phoebe, was further complicating the picture being collated.

Our aims in the final months of the project were therefore expanded to encompass the need to develop a reporting methodology to effectively capture user opinions regarding the toolkits. This reporting methodology was trialled at an end-of-project focus group, and the results disseminated at the ALT-C conference in September, 2007.

## Findings

### *Implementation of toolkits*

Users responded well to the use of toolkits as a means to learn about learning design within professional development programmes. The glossary was felt to be helpful, as was the range of different options of learning activities presented by the drop down menus within the toolkits. The heavy pedagogical language was a barrier for the majority of users, although they appreciated the value of the tool as a jargon generator, they also wanted all of the terms translated into more familiar English.

The participants could not see the toolkits being used regularly. The time spent using them, and for most people the cumbersome nature of DPT in particular, was felt to be too onerous to make the use of the tools practical. The opinion was that they could be used as an exercise to when learning about learning design, but they were too impractical for normal use. The exceptions were in the instances of team teaching where the design needed to be shared with colleagues, and in the creation of module approval forms. The jargon generation was felt to be particularly useful in these situations, and considerable interest was shown in integrating DPT with the module approval process.

Many practitioners also expressed concern that the toolkits may be, or be perceived to be seen as a reproach for incorrect practice, rather than an opportunity for receiving support. This barrier may be overcome by disclosing the purposes of the tool and including these in the dissemination and use of the tool. These would include:

- Improving practice
- Enabling reusability of learning designs
- Ensuring quality
- Providing evidence of planning for standards assessment
- Increased productivity

There are larger cultural barriers that need to be addressed within the education sector around issues of quality assurance and the role of pedagogical training, before these tools will be accepted.

### *Integration with CPD programmes*

At both institutions there was considerable confusion about the nature of the workshops from the rest of the programme delivery team, which led to some reluctance to the courses being incorporated within the mainstream programme. Since the toolkits were online, this led to the course teams assuming that the designs were about the delivery of elearning. Typical responses were that there were already elearning workshops being run, and therefore these workshops could be integrated with the other elearning. The statement that these were about generic learning, and the toolkits were simply delivered online were accepted and the forgotten in follow-up discussions. This seemed to indicate an attitude that anything relating to technology was only of interest to elearning practitioners. This is often because the elearning advocates in institutions are those involved in the toolkits' dissemination. The participants attending the workshops also laboured under this misapprehension. By the end of the project, however, this confusion had been rectified and plans have been made to integrate the learning design toolkits into mainstream sessions about learning design.

Within the remit of a staff development workshop, there is also a limit to the extent to which toolkit evaluation can be carried out, rather than the delivery of content which the participants will find immediately useful. The blend established at the start of the project worked effectively, however, with the first half of the workshops being dedicated to discussing experience of, rationales for and issues concerning learning design in general, followed by a demonstration and experimentation with the toolkits, and discussion of their potential value and usability. In the experimentation part of the workshops, the creation of full learning designs was not justifiable, due to the difficulty of use of the toolkits, the lack of practical use of the final designs (since they were only being created as an exercise in the workshop) and the limited time spent on this part of the workshops as a whole. The feedback received from practitioners indicated that framing the workshop within the rationale of the project, i.e. that the workshop was being run as part of the EDIT4L project, and that they were supporting our research, was met with approval, and encouraged the participants' engagement with the evaluation.

At the final focus group, the point was raised that the implementation of toolkits cannot be successful if it is left within the responsibility of staff developers. Any change in practice that is widescale enough to constitute "embedding" can only occur if a member of senior management within the institution takes

ownership of the process. Persuasion of management at this level must be successfully completed as an early step.

Embedding of the software during this project did not take place for several reasons, and it would have been counterproductive for many users to be exposed to the software, and for the institution to take up the deployment of the software, when it didn't match their requirements. As a tool from a development project, DPT needs further refinement and development before it could be widely taken up. LAMS has been widely used for a limited range of learning approaches, and individuals need to have a matching requirement before it becomes viable for their institutions to invest in making it available. Previous research (c.f. the WM Share project) indicates that exposing staff members to unreliable or inappropriate technology not only slows down the take-up of that technology, but creates further resistance for *any* technology that may be introduced in the future.

#### *Usability of toolkits*

Reactions to the toolkits varied enormously. Most found DPT very difficult to use, issues were the lack of an overall conceptual understanding of the structure of the designs that DPT was building, lack of ability to jump from one part of the creation process to another, difficulties in identifying simply where one was in the overall creation process. Users that were very linear, and very text-orientated, found the system easy to use. These were the ones who took the steps of the manual one-by-one and were highly structured in the way they approached building their designs. Others who tried to develop their designs in a non-linear manner or needed visual representation of the development of the designs found the toolkit very frustrating, if not almost impossible, to use.

LAMS was felt to be a more intuitively obvious toolkit to use to create designs, however, users were frustrated by the constraints of the system. Because of lack of clarity about LAMS's place in the development cycle (see later) users expected to be able to use it for developing any learning design, so were disappointed that there was no inclusion of the range of activities that were available within DPT, such as classroom activities, or problem-based learning. The lack of branching was a limitation in the use of it as a design and delivery tool, and the prevention of learners from jumping ahead to read later exercises then returning to complete an earlier activity was particularly annoying.

#### *Disciplinary difference*

No discernable difference was detected between the reaction of different practitioners from differing subject disciplines to the usability of the tools, although the data are taken from a small sample size. The difference between the self-identified "linear" and "non-linear" users was significant, but there was no correlation between these types and the faculty they came from. Disciplinary difference in the attitudes to the usefulness of the tools was discernable, but this was because of factors within the departments, such as the Business School using team teaching, or (with the FE lecturers) the requirement to lodge lesson plans with a central (paper-based) repository.

#### *Project design and re-design*

The numbers of participants in workshops, and the number of workshops, was less than anticipated in the original project plan. Two national workshops (one at Southampton and one at Warwick) had to be cancelled due to low numbers. The original proposal overestimated the interest of the community as a whole. However a large amount of data was still gathered by conducting deeper and richer analyses with the participants who did take part.

As the data were analysed during the project, it became apparent that there was a lack of consistency in the answers (for example, lack of understanding of the role of LAMS as a design or delivery tool) and a developing realisation that the weaknesses and strengths of the tools were complementary. Mapping the role of the tools in order to see how they may be fitted together was therefore introduced as one of the research aims of the project. This also required a consideration of the production cycle for learning designs (originally referred to as a timeline, but changed in later version in acknowledgment that the process is reiterative in places). A series of preliminary maps were authored and these presented to a selected group of members of the D4L programme and a small number of additional experts. These maps then acted as a focus for a series of discussions. The versions of these maps as they stand at the project end date are included in appendix 2.

### *The further development of tools*

It was observed that the tools currently developed originated from different domains and used the principles of those domains (Phoebe from practitioners; London Planner from administrators; LAMS from schools; DPT from educationalists). What is required is a more integrated approach; but not the creation of an über-tool, rather the creation of separate interoperable tools which possess the following features:

- User-configurable – so that the different types of users can be catered for
- Progressive disclosure – so that new users aren't confronted with a large range of options. The tool possesses a kernel onto which users can add layers.
- Navigability – foregrounding the mental model that the tool uses
- Just-in-time instructions and wizards – to allow appropriate learning steps for using the tool
- Engagement – tools that have a larger take-up are those that are sufficiently engaging that they build a community of practice around them. This community can then provide support for new users, which then enable the community to grow further

Three tools are proposed:

#### **The Planning tool**

This could be a comprehensive planning tool with the potential to integrate appropriate aspects of course design with institutional planning and quality requirements, for example highlighting ways in which QA requirements are met. However any sense that the tool was creating opportunities for sanction of staff by management would lead to poor take-up and engagement.

The tool provides for the overall planning of a course, composed of sub units with well defined parameters or characteristics, necessary for course monitoring reporting e.g. time for completion of units/sub-units, credits etc. It will compile information from the other tools as required, such as aims, top-level learning outcomes, total times of courses, credits etc. On completion of a course it will collect information on course outputs and feedback, and bring them together with the design parameters recorded earlier. It could provide the facilities for translation of parameters from other tools into the format necessary for institutional reporting

The **Design** tool provides example of existing designs, and allows designs to be constructed from scratch, or to incorporate existing designs, in whole or in part. It includes a library of approaches to learning and teaching available through context sensitive help or an index. The Design tool can also be used stand-alone for offline courses, and includes a tutor system to allow self-paced development of pedagogic design skills.

The tool has a number of interfaces, which provide for both structured guidance through a development process, free access to the different stages, and for student design activity. Designs can be annotated during initial and post development. It incorporates a visual design environment in which tags can be incorporated to allow output into (a) tighter structure(s), as available through the structured development interface. Designs need to be able to output appropriate information in formats compatible with the Planning and Aggregator tools, and compatible with institutional administrative requirement or tools. Examples of the latter include Course specification documents, student PDP, PCAP portfolios.

The **Aggregator** has to be simple to use. It will take output from the Design tool and create a basic structure for development of a learning activity. If possible it will partially populate the activity structure, or provide examples of resources which may fulfil the needs of different phases of the activity. It will contain access to data banks of resources and tools which can be simply incorporated into the activity. For example integration of discussion forums with content so that access is transparent to the user. The Aggregator allows production of a complete learning activity which is ready to use. It does not provide specialist editing facilities for resources such as images, but does provide full editing facilities to change contextual information of imported resources.

## **Conclusions**

Overall, the community we spoke to were not ready for toolkits for learning design, since there were considerable normative values within the community against learning design *per se*. The practice is seen as onerous and prescriptive adding unnecessarily and unproductively to the workload by those who do not have a strong pedagogical background. Amongst more experienced teachers who do engage with

learning principles, the toolkits were felt to be too prescriptive, limiting descriptions of categories to too few choices, and not taking into account that an activity can bridge several categories. An opinion expressed by this group is that, although learning objectives and pedagogical rationales for activities were important, they were sufficiently experienced to hold these learning designs in their heads, they did not need a toolkit to help create them. Sociocultural changes are needed within the higher education sector before toolkits are taken up as means to develop learning designs on a daily basis. Indeed, the rationale for using toolkits needs to be considered in more depth. An implicit assumption in the programme is that toolkits will actually improve practice and this is not proven. There may, however, be alternative uses to which the toolkits can be put, as training tools, a means to share materials and information, or to fulfil administration functions such as module approvals.

The successful outcome of the project, despite the initial low response from the larger community regarding the toolkits, indicates the value of applying flexibility to the aims and methodology of research projects. Identifying a lack of clarity in the field, then creating a new methodology to address this enabled a previously unforeseen but, we anticipate, useful line of research to be investigated. The project drew opportunistically upon the emergent community of practice developing around the D4L programme as a source of expertise for this new line of research, with much success. Practising this form of “agile development” would be a worthwhile tactic for future projects to consider.

There is an expert community of practice that does have clear ideas about what it requires of planning tools. A more comprehensive review of users’ needs, mapped against the design cycle and the various user groups needs to be conducted in order to develop the correct tools.

## Project outputs

The project outputs are listed below, those marked with \* being in the original project plan.

Output	Location
Guides to using DPT and LAMS*	Available on website, under <i>Workshop resources</i>
Sample <i>designs for learning</i> * (produced by the Southampton team and available on the respective servers. One viable design produced by a course member)	<i>DPT nuggets</i> Peer review Introduction to DPT Design for elearning Creating a Category 5 patch lead <i>LAMS sequences</i> Peer review Design for elearning Cat5e cable tutorial and practical
Evaluation report on the usability and effectiveness of DPT and LAMS*	A summary of the feedback is given in the section <i>Usability of toolkits, and the last paragraph of Integration with CPD programmes</i> . The shift of project focus has been described. Low numbers of workshop participants, and their lack of engagement with design and instantiation didn’t realise sufficient data to produce a meaningful report of this nature.
Recommendations from the Evaluation Report for successful embedding of DPT and LAMS into SD programmes*	See <i>Integration with CPD programmes</i> above
Design and Instantiation evaluation criteria / questionnaire	Available on website, under <i>Workshop Feedback</i>
Case study: DPT with LAMS Design for Learning workshop (Warwick)	Available on website, under <i>Project Information</i>
JISC OnLine Workshop notes	Available on website, under <i>Workshop feedback</i>
Focus Group Report	Available on website, under <i>Workshop feedback</i>
Application Design cycle and mappings	Appendix 2 and website <i>Workshop resources</i>
EDIT4L poster	Available on website, under <i>Workshop resources</i>

As indicated above, outputs are available from the project website at [http://www.edit4l.soton.ac.uk:8081/prj\\_docs/](http://www.edit4l.soton.ac.uk:8081/prj_docs/).

All of these are the shared intellectual property of the Universities of Southampton and Warwick. No third party materials are included.

## Project outcomes

The use of online toolkits is now integrated into the initial entry workshops on learning design at the University of Warwick.

There is a general acknowledgment within the learning design community that the variety of learning design tools requires integration and clarity about their separate functions. There is also a foregrounding of the role of cultural change in the education sector with respect to learning design per se. That is, the debate within the online learning toolkits community of practice now recognises the need to overcome the barrier to the use of learning designs, before online tools can be introduced. Although the EDIT4L project is only one of the projects that has highlighted these two requirements for change, the work of the project has been at the centre of many of these debates, through the presentations at programme meetings, pedagogy expert meetings and conference presentations.

## Project team members at end of project

Note that half of the team have moved to different organisations, the other half of the team now work at departments that have changed their remit.

### **Paul Riddy** - *Educational Technology Advisor*

Learning and Teaching Enhancement Unit, University of Southampton, Highfield, Southampton, SO17 1BJ

Tel: 023 8059 4536

Email: [p.j.riddy@soton.ac.uk](mailto:p.j.riddy@soton.ac.uk)

Fax: 023 8059 2651

### **Karen Fill** – *ContactPoint Manager*

ContactPoint, Portsmouth City Council, Portsmouth

Email: [karen.fill@portsmouthcc.gov.uk](mailto:karen.fill@portsmouthcc.gov.uk)

### **Mark Childs** – *Learning Development Adviser*

Learning Development Centre, University of Warwick, University House, Kirby Corner Road, Coventry CV4 8JW

Tel: 024 7657 4057

Email: [M.Childs@warwick.ac.uk](mailto:M.Childs@warwick.ac.uk)

Fax: 024 7657 2736

### **Graham Lewis** - *CDSAP Coordinator*

Centre for the Development of Staff and Academic Practice, Cledwyn Building, Penglais Campus, Aberystwyth, Ceredigion, SY23 3DD

Tel: 01970 622117

E-mail: [gjl@aber.ac.uk](mailto:gjl@aber.ac.uk)

## Dissemination activity

Dissemination has occurred at the following events:

- Karen Fill, Mark Childs and Graham Lewis attended the programme start-up meeting, 23-24 May 2006 at Aston University.
- Graham attended the first Pedagogy Experts meeting, 27 June 2006 at Bristol.
- Graham and Mark attended the second meeting on 26 October 2006 at Aston.
- Graham and Mark attended the Design for Learning meeting on 23<sup>rd</sup> and 24<sup>th</sup> January 2007 at Aston.
- Paper presented and discussion moderated at JISC Online Conference, 11<sup>th</sup> to 12<sup>th</sup> June
- A paper on EDIT4L was presented at the ALT Conference on the 6<sup>th</sup> September, 2007
- Mark attended the Design Bash on 23<sup>rd</sup> October 2007
- Mark and Paul attended the Teaching and Learning Practice Experts Group Meeting on 24<sup>th</sup> October 2007, notes available on the website

A paper is being planned, based on the various reports submitted here.

## Synergies

The EDIT4L project linked to the national programmes detailed in the last section. It also provided an opportunity for other projects to share experience through the end of project focus group. Key projects that were part of this work were Liz Masterman from the Phoebe project and Sabine Little from Learning Design for Inquiry-based learning.

Parts of the technology glossary for the Phoebe Planner were contributed by members of the EDIT4L project as a result of the D4L programme.

The expertise gained through the EDIT4L project is being incorporated into a new JISC bid by appointing a member of EDIT4L to the advisory panel of the new project. The new project is to be submitted by the Coventry University and is developing a pattern language for learning designs.

## Sustainability

The use of the toolkits to develop staff on initial entry programmes will be incorporated into the PCAPP programme delivered at the University of Warwick. Riddy will be contributing to the review of the Southampton PCAP course, and will be raising the role of design for learning and associated tools as a priority.

The published reports, incorporating the findings of the project, will be available to the education sector through the project website.

The expertise gained through the project will be made available to the education community, particularly the JISC community, through the collaboration on future projects, through the recruitment to advisory groups and through the attendance of dissemination and programme events.

It is hoped that the findings of the project will be incorporated into future JISC strategies, particularly the key messages of the project.

## Key messages

Development of any software cannot be successfully carried out without reference to a range of stakeholders and a thorough user needs analysis being conducted. Any technology developed without reference to a range of users can only be said to be in the beta stage of development. LAMS and DPT are evidently still at that stage, according to the feedback from our users.

Embedding the use of online toolkits within an institution can only take place on a large scale when the following factors are in place:

- the toolkits developed to a stage where they are usable
- toolkits made interoperable and their separate roles in the design cycle made clear
- the inclusion of the toolkits in programmes that are not seen as specifically elearning in nature
- the backing of senior management.
- a cultural change within the education sector to accept the value of learning designs *per se*

It is this last point that will be the most difficult to overcome.

Research projects must expect to be flexible, and adopt additional aims, objectives and methodologies as information, or evidence of lack of clarity in the field, is uncovered during the project. An ability to adapt to the changing circumstances, and take advantage of developments (for example an emergent community of practice as a source of data) is paramount.

**Financial Statement**

Provide a final financial statement, accounting for any variance from the agreed budget.

<b>Section Eight: Financial Statement</b>				
<b>Total Grant</b>	<b>£44,050</b>	<b>Duration of project</b>	<b>16 months</b>	
<b>Reporting Period</b>	<b>20<sup>th</sup> April 2007 - 30 September 2007</b>			
<b>Budget Headings</b>	<b>Total budget allocated</b>	<b>Expenditure this reporting period</b>	<b>Total expenditure to date</b>	<b>Further information</b>
<b>Staff</b>				
Southampton	21,674	6770.81	23,219	Main overspend due to Paul R taking on the work of KF after she left.
Warwick	14,376	4461.96	14,420	
<b>Travel &amp; Subsistence</b>	1,800	349.15	1,006	One less f-to-f workshop, & one run online.
<b>Equipment</b>	0		0	
<b>Dissemination activities</b>	3000	1980	1,980	Further conference attendance is planned
<b>Evaluation activities</b>	1,500	985.33	985	Outstanding expense claims account for up to £500
<b>Other :</b>			0	
LAMS Server & software	1,500	0	1,345	
Consumables	200	150	180	
<b>Totals</b>	<b>£44,050</b>	<b>£14,697.25</b>	<b>£43,135</b>	

**Appendix 1 Table of workshops**

<b>Date</b>	<b>Location</b>	<b>Programme/Participants</b>	<b>Nature of participation</b>	<b>Number of participants (approx)</b>
5.10.06	Warwick	PCAPP (initial entry programme)	New academic staff members	5
14.12.06	Soton	CBLT M.Sc	Part time and full time masters students. LAMS as learning tool	9
31.01.07	Soton	PCAP (initial entry programme)	New academic staff members – Brief (30min) Introduction to LAMS and DPT	25
28.02.07	Soton	CBLT M.Sc	As CBLT above. Introduction and use of DPT.	10
28.02.07	Soton	CBLT M.Sc	As CBLT above. Use of design from DPT to create a LAMS sequence	5
7.3.07	Warwick	B.A. Post-Compulsory Education and Training	FE lecturers and middle managers attending a part-time undergraduate module	10
15.3.07	Warwick	Short course programme	Academic staff from across the University of Warwick	10
30.5.07	Warwick	National Workshop	Any interested member of the FE and HE community in the UK	18
11.06.07	JISC website	JISC online conference	Online workshop	12+
19.6.07	Warwick	Showcase event	Drop-in workshop at university-wide elearning showcase	5

CBLT – Computer Based Learning and Teaching

## Appendix 2: Application Design cycle and mappings

The steps in the design cycle were originally set out by the project members, then refined through reference with the discussion groups at the meeting of the focused discussion group, OUCS, 23rd August 2007. ( The Focus Group report is available from the website).

*Conception* is the stage at which a module is conceived by a member of academic staff based on his/her research, or by university strategy or employers' needs and at which questions such as "how does your concept fit within departmental and institutional constraints, meet with requirements such as accreditation, and match to your learner group?" are asked. The participants disagreed strongly about the stakeholders at this conceptual stage. Some saw local employers or university strategies as paramount, others thought that individual academics were the originators.

*Analysis* is the process by which the original idea is checked against resources, staffing, coherence with other provision, etc. Analysis and re-conceptualisation is a reiteration that may be repeated many times.

*Programme design* is also decided at the departmental level and it is after this stage that the responsibility is usually passed on to the person who will deliver the teaching. The transition between programme design and session design was therefore also seen as a possible boundary between one tool and the next, data from one being exported to the other.

*Session design*, content and production are all steps through which the individual lecturer goes through before the teaching session, delivery is the point at which the students see the materials. A session design will be quite different from the version a student sees, one would normally withhold the information about pedagogical rationales etc. but having software that can simply convert a learning design into something that can be delivered in a classroom was seen by participants as a valuable feature of online toolkits.

*Evaluation* refers to the means by which evaluation data is captured, from personal reflection on the event or institutionally driven performance indicators. Participants felt it was very important that this data should be captured in a form that can be usefully fed back into the design cycle.

The tables below were evolved out of discussions at the EDIT4L focus group.

### *Design cycle and scope of tools*

In **all** the tables, a *grey-shaded cell* indicates that the tool provides some support for the activity; a *dark-shaded cell* means the tool fully-supports that activity.

	Conception	Analysis	Programme Design	Session design	Content	Production	Delivery	Evaluation
DPT								
LAMS								
London Planner								
Phoebe								

<b>General</b>	All tools have the constraint that they need to be available. LAMS is the only tool which can be accessed through other providers, the others being in development phases.
<b>DPT</b>	DPT is a design tool, allowing for specification of tasks and content, but not for content building, or delivery.
<b>LAMS</b>	LAMS doesn't have the analysis and evaluation parameters built in. Activity sequences design and implementation can be tailored, to some degree, to fit with institutional requirements. LAMS(1) doesn't have a specific design tool embedded, where as this is included in LAMS(2), but is currently only viable for use within LAMS(2)
<b>London Planner</b>	Can be used to check some parameters, like course/module length, against institutional requirements. Learning outcomes may be included but there is no guidance for their development within PP. Information on delivery can be recorded but PP does not attempt to provide a delivery environment. PP can be used to inform the 3 phases of content, production and delivery. Once all the relevant information is entered then PP can be used to provide cross- checks of the scope of information present, but not for evaluation of effectiveness of the process based on other indicators, such as the results of summative evaluation.
<b>Phoebe</b>	With its free-text entry Phoebe can be used to enter any kind of information, but is intended for population of fields under pre-set categories. Phoebe is largely concerned with design, but allows for post delivery reflection, and provides access to learning resources and examples/case studies. Phoebe can help with content, but is not designed for content development or delivery..

*Analyses of user groups against design cycle*

	Conception	Analysis	Design	Content	Production	Delivery	Evaluation	Tools
<b>Administrators/ Management</b>								PP Phoebe
<b>Practitioners/ Academics</b>								All tools relevant
<b>Designers/ Developers</b>								All tools relevant
<b>Technical support</b>								
<b>Students</b>								All tools relevant

**Administrators/ Management**

Primary interest is that developments are fulfilling requirements, are on track to deliver on time, and that the results are of the required quality. Within the focus group there was much concern expressed about the potential for management to use the PP as a monitoring tool, and information being used against members of staff.

**Practitioners/ Academics**

There was some discussion in the focus group about the role of academics as designers, developers, and in content selection and production. Models vary widely between institutions, even between schools, but increasingly pedagogic specialists have a role in advising on approaches which can be used, especially where elearning is being used. Few institutions (in the UK) have individuals dedicated to development of learning modules, although development of specialist resources, such as animations or video production, may be commissioned. Academics are responsible for delivery, but where there is significant use of technology technical support staff may be involved.

**Designers/ Developers**

Within HE it is mainly academic staff who design their learning and teaching process and produce or collate the required resources. They would also collect evaluation information, usually in the form of student course evaluation questionnaires, and simple analysis of the results of formative and summative assessments.

#### Technical support

Outside of the specialist developments discussed, they are usually involved in assuring the technology being used is operational and available, and therefore should be consulted at the analysis and design stages, and on any content delivery issues.

#### Students

In many learning and teaching interventions students are on the receiving side of the process, so are not involved in the design and content aspects. Some more recent approaches to learning and teaching involve the students in the design of their learning. In their role as consumers students are increasingly concerned about the quality of the teaching they are receiving, and that the results from evaluations (e.g. course feedback questionnaires) are fed back into the development and review cycle.