

JISC Design for Learning Programme Project Completion Report

Project details

Sharing the LOAD: Learning Objectives, Activities and Designs
<http://www.ucel.ac.uk/load/>

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Project description

“Sharing the LOAD” set out to synthesise a number of JISC-funded project outputs, tools and other national initiatives in learning content design and reuse to create practitioner-centred templates in order to capture holistic learning designs containing learning activities to support defined learning objectives. These designs incorporated components from the large pre-existing collection of mature reusable learning objects (RLOs) created and shared by the UCeL¹, SONET² and RLO-CETL³ communities. Practitioners and students were facilitated in engaging hands-on workshops to experiment with learning design tools and templates and collaboratively create shareable learning designs. Exemplars of the designs were evaluated for pedagogical effectiveness across a range of subjects by the RLO-CETL community of students and tutors using elements of the RLO-CETL Evaluation toolkit. RELOAD⁴ and the WCKER⁵ extension tools have been assessed for their effectiveness in packaging and managing the resulting content and further work with the RELOAD team is planned. The project outputs were widely disseminated through workshops, the UCeL and RLO-CETL communities, at national conferences and internationally through conferences and workshops. The outputs also fed into the RLO-CETL common structured framework for the production of quality assured RLOs

¹ Universities' Collaboration in e-Learning <http://www.ucel.ac.uk>

² School of Nursing Educational Technology Group <http://www.nottingham.ac.uk/nursing/sonet/>

³ Centre for Excellence in Teaching & Learning in Reusable learning Objects <http://www.rlo-cetl.ac.uk/>

⁴ Reusable eLearning Object authoring & Delivery <http://www.reload.ac.uk/>

⁵ Wizard Construction Kit Extension for Reload <http://wcker.conted.ox.ac.uk/>

compliant with international standards ensuring long-term sustainability and have become embedded through the ongoing programme of GLO tool development in RLO-CETL.

1.0 Acknowledgements

Sharing the LOAD was an 18-month project (May 2006 – October 2007) funded by JISC as part of the Design for Learning theme (Circular 01/06) under the e-Learning Pedagogy Programme. The project acknowledges the help and collaborative effort of the Subject Centre for History, Classics and Archaeology, the Subject Centre for Social Work and Policy and the Social Care Institute for Excellence plus all 109 academics, developers and students who participated in the workshops and contributed to their valuable outputs. The project is grateful for the support of the whole RLO-CETL team led by Tom Boyle and with particular thanks to the GLO tool developers: Dejan Ljubojevic at London Metropolitan, Alan Leeder at Cambridge and Mitesh Patel at Nottingham. The excellent support and advice from the JISC Programme Managers and team, the CETIS support project and Glenaffric's formative evaluation project are also gratefully acknowledged.

2.0 Executive Summary

Sharing the LOAD set out to explore the 'soft' interface between practitioners and the tools to help them enhance teaching and learning by examining how effective learning designs can be reused in different educational contexts and how closely these real-world designs map on to theoretical models and technical specifications of learning design. Building on the creative workshop model devised and deployed by RLO-CETL to productive effect, multidisciplinary groups of practitioners and students engaged in four hands-on, creative workshops in order to distil and extend their learning design knowledge, to raise their awareness of the JISC and to enhance their IT skills. These workshops responded to the need that practitioners have for more effective pedagogical guidance and they allowed the team to identify and capture the "real-world" learning designs that emerge through facilitated group work. The resulting learning designs, hand-drawn onto specially developed templates in the form of laminated A0 posters, have been captured digitally and archived to the project website. Four designs were then selected for their "generalise-ability" to be developed as reusable pedagogical patterns and these were, in turn, developed as prototype generative learning objects (GLOs). Two of those designs, "Evaluating Multiple Interpretations"⁶ and "Win a Million Quiz-maker"⁷ have proved to be of particular interest to a wider audience and further work and showcases are planned in 2008.

Additional project outputs include the range of templates, documents and forms that provide the resources underpinning a successful hands-on workshop, plus a poster illustrating all the (many) stages of planning, publicity and preparation. A practitioner questionnaire, also available for download, was completed by workshop participants revealing some interesting variations in attitudes to pedagogical design issues between the different participating groups (academics, students, developers, support staff) and these differences are analysed in a short report. An unintended but particularly valuable output was the Learning Object Attribute Metric (LOAM)⁸ tool, which exists in both printable and fully interactive online formats. The tool allows analysis of learning designs implicit within learning objects and has been developed by the team to analyse their own large (+100) mature collection of learning objects, but has much wider uses (for instance, it has provided a graphical display of the practitioner questionnaire results making it easier to spot key differences). It has been presented and has attracted much interest both at home and abroad, making it a key project output.

Project outputs, in the forms of learning objects, embedded activities and the learning designs themselves, plus evaluations of the effectiveness of existing tool support, will inform the next generation of learning design tools and templates. The project team has also acted as change

⁶ <http://www.ucel.ac.uk/load/emi>

⁷ <http://www.ucel.ac.uk/load/million>

⁸ <http://www.ucel.ac.uk/load/loam>

agents, facilitating and encouraging academics to engage with ICT in new and appropriate ways and in a supportive, non-threatening environment.

3.0 Project outputs

3.1 Learning Design Workshops

Four one-day workshops were held in November and December 2006 at London, Cambridge, Nottingham and Oxford. There were 109 attendees in total, comprising 81 participants, 22 students, 5 facilitators and 1 visiting artist. The workshops were free of charge to colleagues in UK HE and FE. Reasonable travel expenses were reimbursed and students received a £50 bursary. The workshops comprised a mix of short presentations and small group work designed to engage participants directly with the principles and practicalities of learning objects and real-world learning designs. A practitioner questionnaire was completed by all participants to provide baseline information on their current use of learning technology (see below for details).

In addition to RLO-CETL, staff from 9 other CETLs and 1 Subject Centre attended. Participants came from many regions of the UK, including Northern Ireland, Wales and Scotland, showing that the workshops had been widely advertised. The range of disciplines represented was very broad with a good cross section of sciences and humanities. Participants had a range of roles including academic, administrative and learning technology/development. Students were undergraduates, masters and doctoral students.

20 learning designs were created, encompassing a broad range of topics from medical diagnostics through copyright to language learning. Up to 3 of these designs will be taken forward and exemplified in more than one subject. A number of participants have expressed an interest in continuing this work.

Evaluations showed that the workshops were well received. Using the standard RLO-CETL workshop evaluation form, participants were asked to score 5 questions on a range of 1 – 5 (1 = “poor”, 5 = “excellent”). Overall, three workshops scored an average of 4.1 and one 4.5, the latter higher score largely achieved through the standards of refreshments and lunch being scored more highly than the others. Typical comments were: “Very enjoyable pace and interesting group of people”, “Excellent workshop - working with other practitioners on a specific task was vastly useful”, “Useful day, amazing how much we did in a day!”, “Very well structured and delivered. Appreciated practical element”. Suggestions for topics for future workshops included: IMS Design (reload); Technical aspects of creating RLOs; Using different RLO generating tools; Digital rights and RLOs; Accessibility; Online assessments; Sharing good practice; Editing and updating LOs; Reusable learning designs for online courses. Full evaluation results are in Appendices 3 (London & Cambridge) and 4 (Nottingham & Oxford) and a summary in Appendix 5.

Conclusion: The workshops have fulfilled their objective of introducing participants to the principles of learning objects and have given them first-hand experience of creating learning designs. They have attracted the requisite number of participants and students and have been delivered on time and within budget. They have been highly evaluated and sufficient (20) designs have been created such that several may be selected for future development into exemplars. Full workshop outputs can be found at <http://www.ucel.ac.uk/load/workshops.html>

3.2 Templates and design sheets

Poster templates with guidelines were developed to express pedagogical attributes of learning objects and to capture the learning designs in the workshops. These were:

- Pedagogical Design Sheet (A3) – provides a number of prompts to inform the design http://www.ucel.ac.uk/load/docs/ped_design_sheet.pdf
- Design Guidelines (A4) – notes to complete the Pedagogical Design Sheet http://www.ucel.ac.uk/load/docs/design_guidelines.pdf
- Storyboard Sheet (A0) – a blow-up poster-sized storyboard to facilitate group-work on learning designs <http://www.ucel.ac.uk/load/docs/storyboardA0.pdf>

- LO Attributes Scoring Criteria (A4) – lists the scoring criteria for 12 pedagogical attributes of LOs http://www.ucel.ac.uk/load/docs/att_scoring_criteria.pdf
- Peer Review Diagrams (A3) – provides a pair of blank spider diagrams for attributes of LOs to be scored http://www.ucel.ac.uk/load/docs/peer_review_diagrams.pdf

The A4 guideline documents are paper-based. The A3 sheets and A0 storyboards are laminated and reusable. Outputs from each workshop were captured digitally and archived to the project website (see below) and the laminated sheets were then wiped clean and reused.

3.3 Learning Designs

20 designs captured in the workshops were:

1. Generating Ideas
2. Introduction to Basic Heat Transfer
3. To do and remember a specific process in the correct sequence
4. Resource Investigation
5. Virtual Patient
6. Copyright
7. Critical Serendipity
8. Health Skills
9. Are you meant to be a mentor?
10. Toolkit for resource evaluation
11. Converting handouts for web delivery
12. Designing for i/EBL
13. Develop recognition of personal development
14. Identify basic components of good academic writing
15. Exploring loss, grief and bereavement
16. The Nociceptive pathway
17. Demonstrate and justify decision making pathway for venue design
18. The great grammar challenge
19. MMR - yes or no?
20. Convince students of value of PDP

(1 – 5) http://www.ucel.ac.uk/load/images/workshop_london/designs/

(6 – 10) http://www.ucel.ac.uk/load/images/workshop_camb/designs/

(11 – 16) http://www.ucel.ac.uk/load/images/workshop_nott/designs/

(17 – 20) http://www.ucel.ac.uk/load/images/workshop_oxford/designs/

These designs represent a broad spectrum from the very generic (“Generating Ideas”, “Critical Serendipity”) to the highly specific (“Introduction to Basic Heat Transfer”, “The Nociceptive Pathway”). Participants were encouraged to produce specific designs, as it is easier to generalise from the particular rather than vice versa, but more experienced participants understand the added value of creating generic shareable designs, so a number of these were also expressed.

From these, four designs were then taken forward to be developed as GLO⁹ patterns, as per the project plan. The main criterion for selection was that they should be widely reusable across disciplines and even when designs were highly specific certain elements could be seen to be widely generalisable. These designs have evolved and matured as the project progressed and these processes are fully documented on the project website.

⁹ Generative Learning Object (GLO): a learning object that can be adapted by tutors and/or students for local use

3.4 GLO patterns

3.4.1 *Artefact with multidisciplinary views (developed at London Metropolitan University) Now entitled: "Evaluating Multiple Interpretations (eMI)"* <http://www.ucel.ac.uk/load/emi/>

Originally developed in the workshop as "Critical Serendipity", this is now known as "Evaluating Multiple Interpretations (eMI)". The prototype tool is downloadable (for PC only at present) and a demonstrator is available online without full functionality. This pattern has been developed in conjunction with the Subject Centre for Archaeology, History & Classics. The GLO-maker tool itself is an RLO-CETL development and contains a number of pedagogical patterns which are selected from a drop down menu; the eMI pattern is one of these. This pattern allows users to upload an image of an artefact and then to add a number of experts along with their views in audio and transcript. The eMI pattern is the first from Sharing the LOAD to be instantiated in the GLO-maker tool and the intention is to add the other patterns to the GLO-maker tool library. (See Appendix 7 for a screen-shot). Background information can be found at <http://www.ucel.ac.uk/load/artefact.html>

3.4.2 *Visual Interactive (multimedia sectioned) (developed at Nottingham University)*

This design is highly generic; an interactive diagram with roll-over hotspots and labels. It was originally instantiated in anatomy and physiology as "Nociceptive (pain) pathway" but could equally be applied to any area that requires a diagram to be labelled. GLO tool work is being carried out using the XERTE¹⁰ tool, developed at the University of Nottingham, that makes it easy for developers to create and adapt learning objects. A "stripped-down" version of XERTE will allow tutors to adapt the GLO pattern.

Originally this design began as "Multimedia sectioned" reflecting the early work on learning objects carried out by UCeL and SONET resulting in the now "traditional" design of multimedia sectioned learning objects consisting of a number of screens with "presentation, activity, assessment" as the underlying pattern. Although this was not developed further during the course of this project, this pattern is currently being added to the GLO-maker tool. Background information can be found at http://www.ucel.ac.uk/load/mm_sectioned.html

3.4.3 *Comparing learner reflections (developed at Nottingham University)*

<http://www.nottingham.ac.uk/%7Entzmp1/Mentoring/Menu.html>.

Originally "Are you meant to be a mentor?", this GLO is currently instantiated as "Mentoring: shaping practice" and is available from the website It presents a number of prompts and opportunities for learner reflection and contains different media types such as texts, still images and video clips. Work is continuing with the XERTE tool (see above) on the adaptable interface for this learning design, using its underlying "inform, reflect, review" pattern, and the resulting GLO tool will be added to the website in due course. (See Appendix 9 for a screen-shot) Background information can be found at <http://www.ucel.ac.uk/load/mentor.html>

n.b. work on both GLO tools developed at Nottingham has been set back by the developer, Mitesh Patel's, involvement and serious injury in a car crash. Significant progress had been made prior to this and it is anticipated that work will continue to completion on his return.

3.4.4 *Scenario-based (decision-making tree) (developed at Cambridge University)*

Win a Million Quiz-maker <http://www.ucel.ac.uk/load/million/>

This GLO tool has been developed in collaboration with the Social Care Institute for Excellence (SCIE). The original decision tree design expressed as "MMR – yes or no?" had similarities with an existing GLO tool "Ethical Decision Making¹¹", so a different design, that of the "Millionaire"

¹⁰ XERTE - an xml editor and run time engine <http://www.nottingham.ac.uk/xerte/>

¹¹ Ethical Decision Making GLO http://www.ucel.ac.uk/glos/decision_making/

quiz format was selected; this had been developed successfully by SCIE as an assessment tool to test knowledge of legal issues in social work and it offered great potential as a GLO tool. An early prototype was unveiled at ALT-C 2007 and a functional prototype launched at the SWAP/SCIE/RLO-CETL workshop in October 2007. This pattern is currently being added to the GLO-maker tool. (See Appendix 8 for a screen-shot) Background information can be found here: http://www.ucel.ac.uk/load/decision_tree.html

3.4.5 The Learning Object Attribute Metric (LOAM) tool

A key output, although initially unanticipated, that has generated significant interest, both from the JISC community and beyond, is the **Learning Object Attribute Metric or LOAM tool** (<http://www.ucel.ac.uk/load/loam>). This arose from the review of existing mature reusable content that led to the construction of a learning object learning design taxonomy. Whilst it was felt important that any such scheme should be compatible with the IMS LD framework, the team soon came to realise that the IMS LD was simply operating at too high a level to describe the learning designs implicit within the “micro-context for learning” within the learning object itself. Twelve pedagogical attributes were identified and mapped to the environment roles and activities of the IMS LD framework. The tool has allowed comparisons of existing series of learning objects and clear patterns have emerged. The development of the LOAM tool has been documented in a paper “Analysis of the Pedagogical Attributes of Learning Objects” (Windle et al, 2007 <http://www.ucel.ac.uk/load/docs/edmedia-final.doc>) which describes the development and deployment of the tool and how it allows analysis and differentiation of a collection of mature reusable learning objects through their pedagogical attributes. The results show that a great degree of variability exists in the pedagogical attributes of learning objects. Similarly the tool allowed the relationships between attributes to be determined. This paper was presented at Ed-Media 2007 in Vancouver and a further paper “Sharing the LOAD: the future of learning object designs?” documenting progress with the LOAM tool will be presented at Online Educa 2007, Berlin (see details of both under “Dissemination activity” below).

The LOAM tool has been implemented as an online interactive tool in Flash/XML and can be accessed from the project website (<http://www.ucel.ac.uk/load/loam>). The “footprint” of the learning object is built up graphically in real time as the values for each of the pedagogical attributes are added. Users can also add their own attributes to the scheme making it totally customisable. It was also presented in poster form at the JISC Programme Meeting/Design Bash, Birmingham in October 2007 (see under “Dissemination”). At the time of writing a bug prevents uploading of previously saved data but this will be rectified and does not affect the tool’s online functionality.

The tool is made freely available online under a Creative Commons 2.5 Licence and users must agree to be bound by the terms of use before proceeding. Firstly the tool can be set up by selecting attributes from a drop down menu or adding new ones (see screen-shot in Appendix 10). Then RLOs can be scored and compared and a printable “footprint” generated (see screen-shot in Appendix 11).

The LOAM tool itself has had an unexpected outputs; it has been used to analyse responses to the practitioner questionnaire and has provided graphical and illuminating results showing clear differences between the four different groups of participants who completed the questionnaire in the learning design workshops. (See below)

3.5 Practitioner questionnaire and results

The Practitioner Questionnaire (Appendix 2) aimed to capture practitioner knowledge about learning design. Baseline data was collected with attendees completing the questionnaire at the start of each workshop; 74 questionnaires were returned. 31% were lecturers, 20% media developers and 26% were students. The other 23% of respondents were librarians, e-learning advisors, researchers, IT or CETL managers/directors and a government officer and this group was classified as “support staff”. There were interesting differences in learning design preferences and drivers between the lecturers, support staff and students, for example, assessment criteria was rated very important as a driver for learning design by many of the

lecturers whereas learning theory was more important for the respondents who were not lecturers.

About 30% of the lecturers had never designed an on-line activity. Audio commentary, linear navigation and use of multimedia were considered the least important attributes in learning design by 25-30% of respondents (although students rated audio more highly overall).

Alignment of content to learning goal, clarity of the learning objective and role of the student within the online learning activity were considered the most important attributes (by over 60% of respondents).

Analysis using the LOAM tool revealed further interesting similarities and variations. All groups of respondents placed high importance on the clarity of the learning objective (this is encouraging as RLO-CETL stresses the importance of this and the message appears to have been clearly received). Students tended to emphasize the importance of all attributes whilst developers under-emphasized them compared with the mode scores. (Students are the recipients, whilst the burden of development is largely on the developers).

Further analysis can be found in Appendix 1 with conclusions and plans for future work.

4.0 Project outcomes

Project activities have had a wide impact on changes in state or behaviour as evidenced by a number of indicators: workshop evaluations and follow-ups; Subject Centre engagement, particularly in the Arts & Humanities which tends to be an under-represented group in engagement with educational technologies; wide interest and sharing of the LOAM tool and the evaluation toolkit; a number of GLO-tool enquiries as a result of workshop and dissemination activities; and requests for showcases and workshops in the future.

4.1 Workshops, evaluations and follow-ups

The four learning design workshops held at the beginning of the project (Nov/Dec 2006) were very well attended (all were full to capacity) and evaluated very highly (See 3.1 above for full details and Appendix 5 for a summary of results). Typical comments were: "Excellent workshop - working with other practitioners on a specific task was vastly useful"; "Very informative & friendly - feel I can now understand RLOs"; "Useful day, amazing how much we did in a day!"; "Very well structured and delivered. Appreciated practical element".

Subsequently a number of participants expressed an interest in trialling the GLO tools: "would love to be considered as one of the lucky ones to get to use the GLO tool"; "would be interested in a GLO event in the Faculty of Health and Wellbeing and potentially would be interested in trying out the GLO tool when it becomes available"; "I respond to your request to ask if I would be able to pilot the Win a Million GLO tool. Looks very useful".

A workshop: "Engaging students and staff as peers in unlocking content", was held at The Higher Education Academy Conference, 3 – 5 July 2007, Harrogate. A poster was produced for this event which illustrated all the steps required to hold and facilitate a hands-on practical workshop and participants engaged in the activities. A comment: "To me, this was easily the best of all at the Harrogate conf. I have been so enthused and motivated that I have been reading up about RLO's, who uses it, how it can be adapted etc and I stumbled upon lots of articles by you and also by the RLO-Cetl."

GLO-tools were also demonstrated at a pre-conference workshop "Generative Learning Objects in the Making" at ALT-C 2007 in Nottingham where they were received very positively, here is a typical response: "*I would love to pilot your "Win a Million" game with my students*". Full evaluation results can be found in Appendix 6.

4.2 Working with Subject Centres

The Subject centre for History, Archaeology and Classics has been very active in providing the design and content for the "Evaluating Multiple interpretations" GLO pattern and this has led to a) a further DEL-funded project to continue refinement of the tool over the next six months to March 2008 and b) a new project for the QIA in collaboration with the Centre for Educational Studies, University of Hull, to use the model to encourage FE teachers to reuse materials

created through the JISC digitisation programme. Project outputs, including the adapted eMI tool will be showcased in the QIA's Excellence Gateway in 2008.

A joint paper “*Making Seen the Unseen: exteriorising pedagogy and subverting technology in learning object development for the historical disciplines*” (MacMahon & Leeder, 2007) was presented at ALT-C 2007 (see “Dissemination activity” below).

A further workshop was held in conjunction with the Subject Centre for Social Work and Practice (SWAP) and the Social Care Institute for Excellence (SCIE) to introduce practitioners to GLO tools and much interest was generated. A future workshop is planned in Scotland in May together with SWAP and the Learning Exchange.

The fact these Subject Centres have chosen a high level of engagement with the project is most encouraging as the subjects they represent do not have a typical “high-tech” profile and the extent to which their communities have embraced the GLO model is also a key indicator of the transformative power of these highly adaptive resources.

4.3 Sharing the LOAM tool and evaluation toolkit

The evaluation toolkit and LOAM tool have been shared with the Centre for Interprofessional eLearning (CIPeL). CIPeL are also engaged in the production of high quality learning objects. The LOAM tool will be disseminated through workshops and showcases (see 4.4 below).

4.4 Showcase requests and future work

A showcase event will take place on 17 March 2008 at Sheffield Hallam University. This is a requested showcase, resulting from contacts made at the ALT-C pre-conference and SWAP/SCIE workshops. A health-practitioner oriented workshop is planned at Nottingham in Spring 2008. GLO tools and the LOAM tool will be demonstrated and practitioners will have hands-on experience of setting up their own instances.

4.5 Professional Development

The Principal Investigator became a Certified Member of the Association for Learning Technology during the course of this project and used her reflections on Sharing the LOAD as part of the evidence for accreditation. She was awarded the certificate in September 2007. At the time of writing, three developers who worked on this project are undergoing CMALT certification and will use their experience of the work on this project as evidence.

5.0 Project team members

(n.b. this is the core team; the project would not have been possible without the direct input and support of the entire RLO-CETL team; collaborations with other HE institutions, CETLs and Subject Centres)

5.1 Principal Investigator

Dawn Leeder (DSR, BSc, CMALT) is Reward & Development Manager and Local Academic Co-ordinator for RLO-CETL at Cambridge University with special responsibility for staff development programmes, international dissemination and long-term sustainability. She is currently planning ways to extend and deepen the Wolfson Reward Programme, RLO-CETL's central reward mechanism for its staff and students, and to offer this as a premium programme to international as well as national colleagues.

5.2 Project Evaluator

Dr Raquel Morales (MSc, PhD) is RLO-CETL Evaluator, University of Cambridge where she coordinates the evaluation efforts across the three RLO-CETL institutions. She designed and uses the RLO-CETL evaluation framework and toolkit to ensure consistency across the partners and ultimately, sector-wide.

5.3 Project Manager (Nottingham)

Dr Heather Wharrad (BSc, PhD) is Reader and Associate Professor in Education and Health Informatics in the School of Nursing and Local Academic Co-ordinator for RLO-CETL at the

University of Nottingham. She is Head of the Education & Technology for Health Research group, which is concerned with the education and preparation of nurses and the use of information technology to support and enhance that learning alongside the use of information technology in the healthcare environment. Heather leads e-learning developments within the School of Nursing and is principal investigator on a number of externally funded projects.

5.4 Project Research Coordinator (Nottingham)

Dr Richard Windle (BSc, PhD) is Senior Lecturer in e-learning in the School of Nursing at the University of Nottingham. Richard is currently the Local Academic Coordinator for the RLO-CETL at Nottingham with responsibility for project management, evaluation and research. He is also RLO repository manager for the RLO-CETL.

6.0 Dissemination activity

Sharing the LOAD and its findings have been and continue to be disseminated widely, both nationally and internationally. The project commenced with a series of high profile, capacity national workshops attended by over 100 participants, including 20+ students, where 20 learning designs were created. Papers, presentations and invited workshops and talks have followed, presented throughout the UK and at three major international conferences. The table below sets out dissemination outputs to date with URLs where appropriate.

Date	Output
2006	
23-24 May	JISC D4L Start-up Meeting, Birmingham Presentation: http://www.ucel.ac.uk/load/docs/jisc_d4L_startup_LOAD.ppt
5-7 September	ALT-C 2006, Edinburgh, D4L Symposium "Design for Learning: a new paradigm?" Presentation: http://www.ucel.ac.uk/load/docs/ALT-C_symposium_DCL.ppt
16-17 October	RLO-CETL Developers' Meeting, Cambridge
9 November	Learning Design Workshop – Goldsmith's, University of London Learning Designs: http://www.ucel.ac.uk/load/images/workshop_london/designs/
15 November	Learning Design Workshop – University of Cambridge Learning Designs: http://www.ucel.ac.uk/load/images/workshop_camb/designs/
21 November	Learning Design Workshop – University of Nottingham Learning Designs: http://www.ucel.ac.uk/load/images/workshop_nott/designs/
6 December	Learning Design Workshop – University of Oxford Learning Designs: http://www.ucel.ac.uk/load/images/workshop_oxford/designs/
2007	
23-24 January	JISC D4L Programme Meeting, Birmingham Presentation: http://www.ucel.ac.uk/load/docs/jisc_d4l_meeting_01_07.ppt
29 January	"E-learning in the Workplace: taking learning to the learner" Glasgow Science Centre, Keynote and Workshop Podcast: http://www.sieswe.org/node/249 Learning designs: http://www.ucel.ac.uk/load/images/glasgow_sc/index.html
22 March	SFC eLearning Transformation Programme Meeting, Glasgow Event: http://www.jisc.ac.uk/whatwedo/programmes/elearning_sfc/sfc_march07.aspx Learning designs: http://www.ucel.ac.uk/load/images/glasgow/index.html
27 April	"E-merging Ideas for Enhancing the Curriculum", The Centre for Inter-Professional e-Learning Conference, Sheffield Hallam University Event: http://www.cipel.ac.uk/events/270407-event.htm Learning designs: http://www.ucel.ac.uk/load/images/workshop_sheff/designs/
26-30 June	Ed-Media 2007, Vancouver, "The Pedagogical Attributes of Learning Objects" Richard Windle, Heather Wharrad, Dawn Leeder, Raquel Morales Paper: http://www.ucel.ac.uk/load/docs/edmedia-final.doc Presentation: http://www.ucel.ac.uk/load/docs/emedial_RW.ppt

3-5 July	<p>Higher Education Academy Annual Conference, Harrogate Workshop: <i>"Engaging students and staff as peers in 'unlocking content'"</i> Presentation: http://www.ucel.ac.uk/load/docs/HEA2007_workshop.ppt Students' presentation: http://www.ucel.ac.uk/load/docs/students_RLO-CETL.ppt Learning Designs: http://www.ucel.ac.uk/images/workshop/hea_conference/designs/ Poster: http://www.ucel.ac.uk/load/docs/poster10_A0.pdf</p>
4-6 September	<p>ALT-C 2007, Nottingham Pre-conference workshop: Presentation: http://www.ucel.ac.uk/load/docs/ Learning Designs: http://www.ucel.ac.uk/images/workshop/alt07/designs/ Paper: <i>"Making Seen the Unseen: exteriorising pedagogy and subverting technology in learning object development for the historical disciplines"</i> Cary MacMahon & Dawn Leeder Abstract: http://www.alt.ac.uk/altc2007/timetable/abstract.php?abstract_id=1337</p>
18 October	<p><i>"Finding, using and adapting reusable learning objects"</i> SWAP/SCIE/RLO-CETL workshop, London Metropolitan University Programme: http://www.swap.ac.uk/events/workshop.asp?ref=1615&section=4 Report: http://www.swap.ac.uk/docs/events/report_18.10.07.doc</p>
23-24 October	<p>JISC Programme Meeting/Design Bash, Birmingham Presentation: http://www.ucel.ac.uk/load/docs/stl_design_bash.ppt Poster: http://www.ucel.ac.uk/load/docs/LOAM_tool_A0_outlines.pdf</p>
2 November	<p>Joint CIPeL/RLO-CETL workshop, Sheffield</p>
28-30 November	<p>Online Educa 2007, Berlin <i>"Sharing the LOAD: the future of learning object designs?"</i> Richard Windle, Heather Wharrad, Dawn Leeder, Raquel Morales Paper presented Abstract: http://www.ucel.ac.uk/load/docs/WindleOLE.doc</p>

7.0 Synergies

During the course of the project, Sharing the LOAD has established deep links with a number of other Design for Learning Projects, Higher Education Academy Subject Centres and CETLs. These synergies are active and ongoing. They are tabulated below (D4L projects in bold):

Project/programme	Nature of synergy
Clinical & Communication Skills CETL	Representative(s) participated in Sharing the LOAD London workshop
Creative Writing CETL	Representative(s) participated in Sharing the LOAD London workshop
Crucible CETL	Representative(s) participated in Sharing the LOAD London workshop
CETL in Interprofessional Learning	Representative(s) participated in Sharing the LOAD Cambridge workshop
Subject Centre, History, Classics, Archaeology	Representative(s) participated in Sharing the LOAD Cambridge workshop
Centre for Inquiry-based Learning in the Arts and Social Sciences (CILASS CETL)	Representative(s) participated in Sharing the LOAD Nottingham workshop
Centre for Interprofessional eLearning (CIPeL CETL)	Representative(s) participated in Sharing the LOAD Nottingham workshop
engCETL	Representative(s) participated in Sharing the LOAD Nottingham workshop
Centre for Excellence in Enquiry-Based Learning	Representative(s) participated in Sharing the LOAD Oxford workshop
Centre for Excellence in	Representative(s) participated in Sharing the LOAD Oxford

Preparing Academic Practice	workshop
Social Care Institute for Excellence	Representative(s) participated in Sharing the LOAD Oxford workshop
Centre for Interprofessional eLearning (CIPeL CETL)	Joint workshops, sharing of resources, use of evaluation tools
ALED (Authoring using Learning Design)	Representative(s) participated in Sharing the LOAD Oxford workshop
Desila	Representative(s) participated in Sharing the LOAD Nottingham workshop
Phoebe	Representative(s) participated in Sharing the LOAD Oxford workshop
Pedagogic planner (IOE)	Negotiated development of “layered learning design” approach
CETIS support project	Ongoing dialogue and support
Formative evaluation project	Ongoing reflective dialogue and support
Subject Centre Social Work and Policy (SWAP)	Joint workshops, sharing of resources
Subject Centre, History, Classics, Archaeology	Development of GLO pattern – “Evaluating Multiple Interpretations”
Social Care Institute for Excellence	Development of GLO pattern – “Millionaire”
Education Department, University of Northampton	Development of GLO pattern – “Comparing Learner Reflections”
Faculty of Health & Wellbeing Sheffield Hallam University	GLOs in practice - showcase, 17 March 2008

8.0 Sustainability

The outputs and outcomes of the project are considerable and wide-ranging and will be taken forward through active embedding in RLO-CETL practices. For example, the learning designs have been permanently archived to the CETL website and those selected have already been (or will shortly be) incorporated into the CETL’s suite of GLO tools. These tools are currently being shared with colleagues in other CETLs, Subject Centres and HE institutions throughout the UK and abroad. Close work with Subject Centres has resulted in additional funding being secured, in particular for the Evaluating Multiple Interpretations (eMI) tool and a further DEL-funded project will see continued refinement of the tool over the next six months. A new project for the QIA in collaboration with the Centre for Educational Studies, University of Hull, will use the model to encourage FE teachers to reuse materials created through the JISC digitisation programme and the adapted eMI tool will be showcased in the QIA’s Excellence Gateway in 2008.

RLO-CETL places a high strategic importance on the promotion of its GLO tools to encourage uptake and is putting significant resource (both human and financial) into achieving this aim over the forthcoming two years.

9.0 Key messages

9.1 Future projects

The GLO tool work has been so successful and the tools themselves so productive that RLO-CETL is now firmly committed to producing all future learning objects in GLO format. The ‘next generation’ workshops currently being planned will showcase the tools and encourage uptake.

9.2 JISC

It’s important not to underestimate the value of community involvement in ensuring uptake and use of valuable resources (not to mention their creation in the first place!) but the support activities that this approach requires are extremely time consuming and expensive.

In the field of generative learning objects especially, all work is work in progress so it's difficult to determine a specific project end date as the outputs of this project form a continuum with all other strands of CETL activity. It would be useful if this could be acknowledged in future bid structures.

The input and advice of the support project and evaluators (CETIS and Glenaffric) have been highly valued by the team and it is hoped that similar support mechanisms will be in place for future projects. Independent evaluation of key project outputs, negotiated with the team and timetabled at critical points, would also be highly desirable.

9.3 The further and higher education sectors

There has been a groundswell of support for key project outputs evidenced by a willingness to use the GLO tools throughout the sector and this will be followed up with a series of showcases in 2008. Pro-active and prolonged championship of resources is vital to raise awareness and maximise uptake; it is **not** sufficient to host materials in a VLE or repository in the hope that they will be used.

10.0 Financial Statement

The budget allocation since the last interim report (April 2007) has been broadly adhered to and there is no significant variance from the agreed budget to report.

Balance as of 8/11/07	Total JISC (budget re-allocated)	Total Inst. Contrib.	Total Expenditure	Balance
Staff				
<i>Project Manager (Cambridge) (0.2 FTE)</i>		18,438.00		
<i>Project Manager (Nottingham) (0.2 FTE)</i>		22,316.00		
<i>Project Evaluator (Cambridge) (0.1 FTE)</i>		13,104.00		
<i>Project Researcher (Nottingham) (0.1 FTE)</i>		11,158.00		
<i>Developer (Cambridge) (0.25 FTE)</i>	26,913.00		26,713.09	199.91
<i>Developer (Nottingham) (0.2 FTE)</i>	19,545.00		19,545.00	0.00
Travel - Project team (inc prog meeting attendance)	1,630.00		1,826.20	-196.20
Workshops (x 4) includes participants' attendance costs	6,158.00		6,124.00	34.00
<i>Workshop packs (x 120)</i>			0.00	0.00
<i>Room hire (x 4)</i>	555.00		555.00	0.00
<i>Student bursary (x 20)</i>	1,000.00		1,034.00	-34.00
<i>Student evaluation (x 10)</i>	200.00		200.50	-0.50
Distribution of final report	500.00		500.00	0.00
Dissemination (includes 2 conference attendances)	1,250.00		1,250.00	0.00
Total institutional contributions		65,016.00	0.00	0.00
Total requested from JISC	57,751.00		57,747.79	3.21

Any enquiries regarding the detail of this statement should be addressed to Sara Brandao, Business Manager (sara.brandao@caret.cam.ac.uk).

Appendix 1

Further analysis of Practitioner Data and future work

The following questions were addressed:

1. Are there any differences in the perceived importance of different learning object attributes (classified using IMS based categories) between lecturers, learning support groups, media developers and students?
2. Are there any differences in the perceived importance of different learning object attributes between those practitioners who had and had not previously developed online materials?
3. Using the LOAM tool identify the footprints for different practitioners

Methods

Practitioner Groupings

74 workshop attendees returned the practitioner questionnaires. 31% were lecturers, 20% media developers and 26% were students. The other 23% of respondents (for the purposes of this analysis these were classified as 'learning support' practitioners) were librarians, e-learning advisors, researchers, IT or CETL managers/directors and a government officer.

Questionnaire

Respondents were asked to rate the importance of a list of potential learning object attributes on a 5 point ordinal scale (not important to most important). The attributes had been selected on the basis of a literature search, previously used questionnaires and on their relationship with IMS classification system (Appendix 2). The attributes were added to the LOAM diagram via the LOAM tool and classified according to Role, Environment and Activities.

Analysis

Descriptive analyses were discussed in an earlier report. Further inferential analyses were carried out to compare different subgroup responses. Responses on the five point ordinal scale were collapsed down to two nominal classifications 'Important' and 'Not Important'. Neutral responses were excluded on the basis since this could be interpreted as meaning no preference. Chi squared was applied to the 4 x 2 contingency tables. A LOAM footprint was also produced for each practitioner group using the LOAM tool using the modes for each category (Figure2).

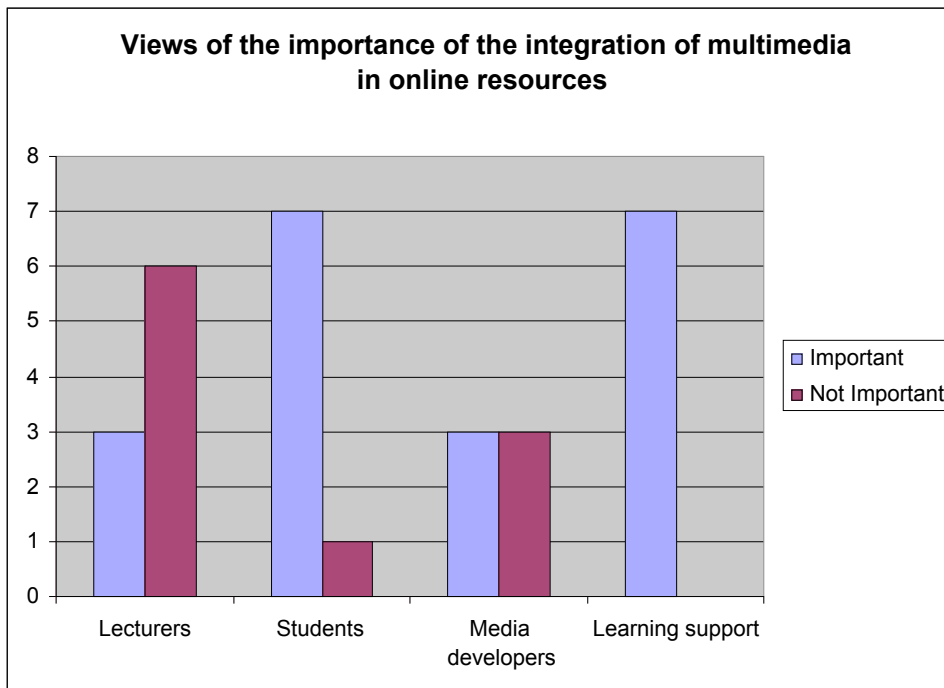
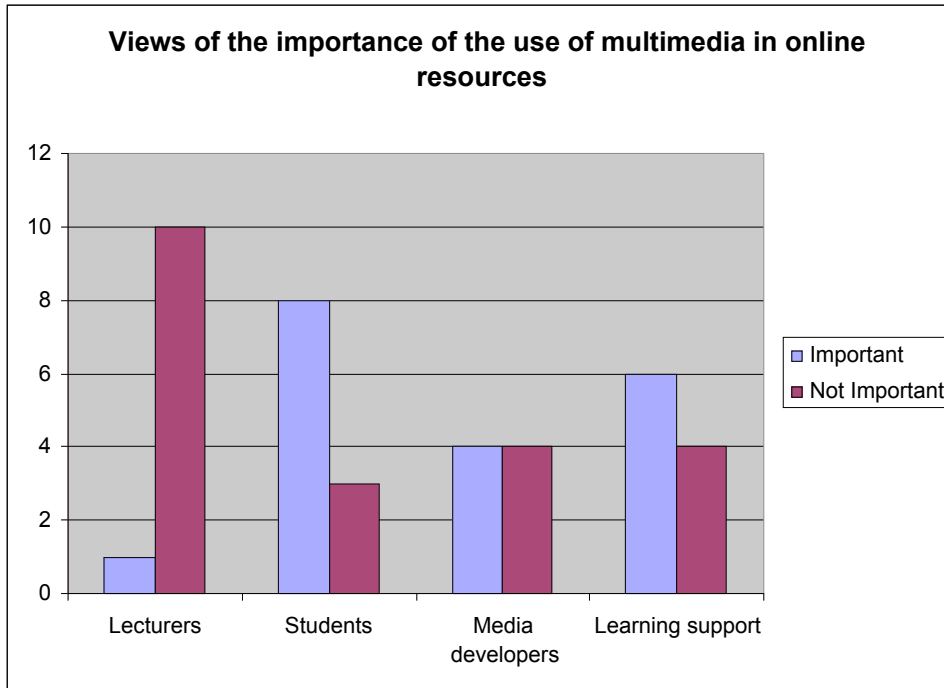
Results

There were differences in the ratings of importance of some of the learning object attributes between practitioner groups. These were use of multimedia ($p < 0.02$), integration of multimedia ($p < 0.02$), audio commentary ($p < 0.09$), linear navigation ($p < 0.09$), student navigation ($p < 0.05$) and learning style ($p < 0.05$). Use and integration of multimedia, student navigation and learning style showed statistically significant differences between the groups. Lecturers and student groups in particular showed very different views on the use of multimedia in online resources (Figure 1). The only significant difference in attribute ratings between those who had and those who had not developed online activities before was for the importance of scaffolding in the online activity. ($p < 0.03$).

Conclusions and further work

The observation that students value multimedia representations in online activities has been reported before, Benson et al (2007) reported that students rated multimedia three times more highly than text in its learning effectiveness. Further work is required to establish whether the lecturers' views of the use of multimedia in this small study is more generalisable and why this view is held. Practitioners who took part in this study are to be contacted and asked to review the RLOs developed as part of the Sharing the LOAD project and rate the attributes using the LOAM tool. This will also be an opportunity to follow up some of the responses from the questionnaire.

Figure 1



Support Practitioners

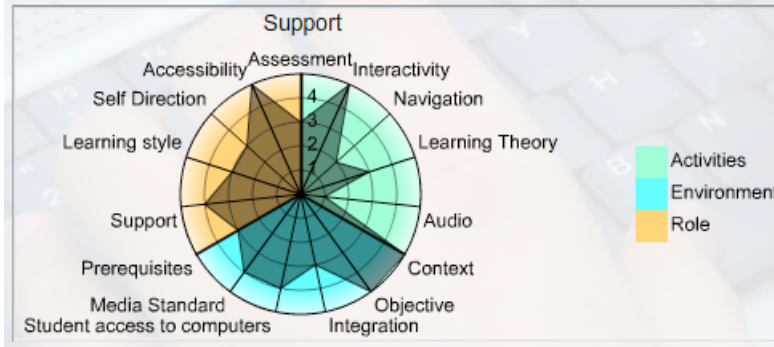
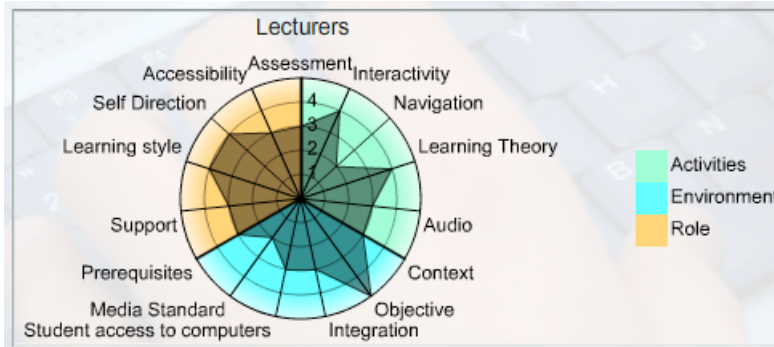
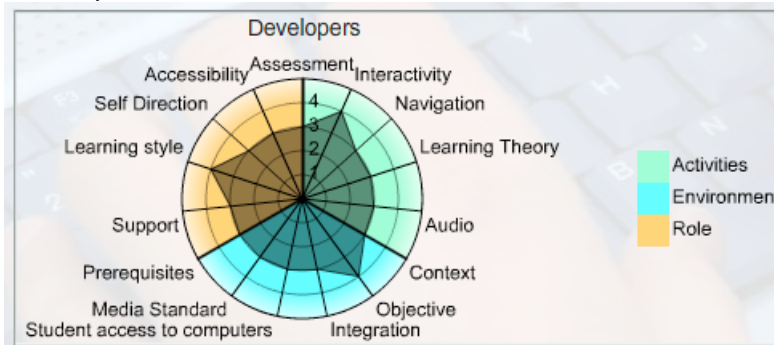


Figure 2 Footprints showing distributions of the importance of attributes for online learning activities by different practitioner groups and students

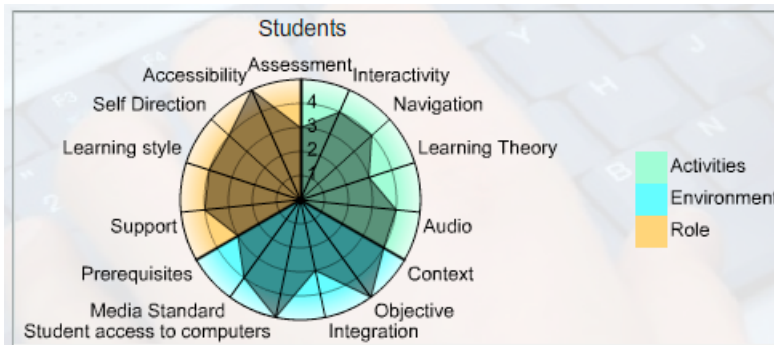
Lecturers



Developers



Students



Appendix 2

Out of these potential factors to be considered when designing online learning activities which do you consider to be important? Tick the appropriate box.

	Not important	Least important	Important	Very important	Most important
Assessment incorporated into the online activity					
Use of multimedia eg video or Flash animations					
Integration of the media components					
Sequencing of the media components					
Choice of media for particular tasks					
Audio commentary					
Linear navigation					
Activities and exercises					
Accessibility eg for disabled students					
Student directed navigation					
Learning theory to support design eg associative, constructive, situative etc					
Learning styles of the students					
IT skills of the students					
Student access to computers					
Bandwidth considerations					
Alignment of content to learning goal or objective					
Pre-requisite knowledge of the student					
Clarity of the learning objective					
Specificity of the learning objective					
Scaffolding eg context sensitive help					
Subject or context specific					
Role of the student within the online material eg recipient of content, problem solver, contributor					

Appendix 3

London & Cambridge workshop evaluations

Sharing the LOAD LD workshops		
Goldsmiths College, University of London, 9 November 2006		
n= 14 responses		Ave
1. Were the registration instructions clear and timely?	5 5 5 5 4 5 5 4 4 3 5 5 5 5	4.6
2. Was the workshop relevant to your needs?	5 5 2 5 4 4 4 4 4 5 3 2 5	4.0
3. Were the programme notes sufficient?	5 5 4 3 3 4 5 2 4 4 5 4 2 5	3.9
4. How would you rate:		
a) The balance of presentation and practical work	5 5 4 4 4 5 5 3 4 4 4 4 2 5	4.1
b) The standard of refreshments and lunch	3 5 3 4 4 4 5 3 4 3 5 5 3 5	4.0
c) The convenience of location	4 5 3 2 4 3 4 5 5 5 5 3 5 5	4.1
5. Would you like to suggest any topics for future workshops		4.1
<i>#6 More on pedagogical models I.e. Gagne, Merrill</i>		
<i>#7 Discipline-specific e-learning designs</i>		
<i>#8 How to adapt a generic RLO for specific purposes</i>		
<i>#11 How to access designers to work with lecturers on developing models - a workshop bringing both together</i>		
6. Any other comments		
<i>#1 Very good and useful workshop</i>		
<i>#7 Would love to learn more about repositories of free video clips, pictures, graphic, etcfor different topics & disciplines</i>		
<i>#8 Early morning presentations were too fast. Know audience.</i>		
<i>#10 Developing real, on-going learningobjects & objectives with technical information & help</i>		
<i>#11 Very enjoyable pace and interesting group of people</i>		
<i>#12 Thank you - good team</i>		
<i>#14 Background on the project and how the sheets were designed</i>		
RLO-CETL, University of Cambridge, 15 November 2006		
n= 21 responses		Ave
1. Were the registration instructions clear and timely?	5 4 4 5 5 5 5 4 4 5 5 5 5 5 5 5 5 3 5 5 5	4.7
2. Was the workshop relevant to your needs?	5 4 5 4 5 4 5 4 5 5 4 4 5 5 5 3 4 4 5 4 3	4.4
3. Were the programme notes sufficient?	5 4 5 4 5 4 5 5 4 5 5 4 5 5 4 4 4 4 5 5 3	4.5
4. How would you rate:		
a) The balance of presentation and practical work	5 4 4 5 3 5 5 4 5 4 5 5 3 4 5 4 5 4 5 5 3	4.4
b) The standard of refreshments and lunch	4 4 4 5 5 5 4 5 4 4 5 5 4 4 5 5 4 4 5 4 5 4	4.5
c) The convenience of location	3 4 4 4 5 3 5 4 4 4 5 5 5 5 3 5 5 4 4 5 5	4.3
5. Would you like to suggest any topics for future workshops		4.5
<i>#2 IMS Design (reload)</i>		
<i>#5 Technical aspects of actually programming/writing an RLO</i>		
<i>#16 Technical aspects of creating RLOs</i>		
<i>#17 Using different RLO generating tools</i>		
<i>#19 Digital rights and RLOs</i>		
6. Any other comments		
<i>#3 Assisting students with learning is a spectacular idea</i>		
<i>#5 Would have liked more presentation on RLOs and their design</i>		
<i>#19 Excellent workshop - working with other practitioners on a specific task was vastly useful</i>		

Appendix 4

Nottingham & Oxford workshop evaluations

RLO-CETL, University of Nottingham, 21 November 2006		
n= 14 responses		Ave
1. Were the registration instructions clear and timely?	5 3 4 5 4 1 2 3 1 5 4 5 5 5	3.7
2. Was the workshop relevant to your needs?	4 5 4 4 3 5 5 4 5 5 5 5 4 5	4.5
3. Were the programme notes sufficient?	2 4 3 5 3 5 4 5 4 5 4 5 4 4	4.1
4. How would you rate:		
a) The balance of presentation and practical work	3 4 4 5 3 5 4 5 5 5 5 5 4 2	4.2
b) The standard of refreshments and lunch	4 5 5 4 3 4 5 4 5 5 5 5 2 2	4.1
c) The convenience of location	3 5 5 4 3 3 5 4 5 5 3 5 5 3	4.1
5. Would you like to suggest any topics for future workshops		4.1
<i>#1 Accessibility</i> <i>#7 Having facility to see an RLO in use & how it is developed</i> <i>#8 I need some more general training on online learning</i> <i>#9 Interested in seeing further examples used to develop better understanding of what's possible</i> <i>#12 Evaluation of LOs, more on attributes, pedagogy of LOs</i> 6. Any other comments <i>#4 Enjoyed the day</i> <i>#6 Thank you for an enjoyable day, very interesting & stimulating. Good for networking</i> <i>#7 Very informative & friendly - feel I can now understand RLOs</i> <i>#8 Window problem unfortunate - it was so cold!</i> <i>#10 Useful day, amazing how much we did in a day!</i> <i>#12 Excellent day, thank you</i>		
OUCS, University of Oxford, 6 December 2006		
n= 25 responses		Ave
1. Were the registration instructions clear and timely?	5 5 5 4 4 4 5 4 4 5 4 4 1 4 4 3 5 5 5 5 4 5 4 5	4.3
2. Was the workshop relevant to your needs?	3 5 4 3 3 3 4 5 3 3 4 4 3 3 4 3 5 5 4 4 5 4 4 5 4	3.9
3. Were the programme notes sufficient?	2 5 4 4 3 4 5 4 5 1 4 4 5 3 2 3 5 5 4 5 5 4 4 4 5	4.0
4. How would you rate:		
a) The balance of presentation and practical work	4 4 4 4 4 5 4 4 4 5 4 4 4 4 5 4 5 5 5 4 5 3 5 5	4.3
b) The standard of refreshments and lunch	3 5 4 4 3 3 5 4 5 4 4 4 5 3 4 4 5 4 3 5 5 4 4 4 4	4.1
c) The convenience of location	5 3 3 4 3 5 5 4 5 5 4 4 5 5 4 4 5 4 3 4 5 4 3 3 4	4.2
5. Would you like to suggest any topics for future workshops		4.1
<i>#1 Online assessments</i> <i>#2 Sharing good practice</i> <i>#9 A more specific topic would suit people from more backgrounds because I think the activities are very open-ended - sometimes you just don't know how to start</i> <i>#12 Editing and updating LOs</i> <i>#20 Reusable learning designs for online courses</i> <i>#24 Workshop to identify effective observation of learner engagement to evaluate effectiveness of e-learning</i> <i>#25 Workshop where practitioners share their observation of student engagement & experience of e-learning eg. LAMS, LOs, e-portfolios</i> 6. Any other comments <i>#2 V. Good mix of experiences/people</i> <i>#8 Very well structured and delivered. Appreciated practical element</i> <i>#12 The process of selecting learning designs was a bit stilted. Maybe it would be better to suggest some ideas in advance</i> <i>#16 Would appreciate a cleaner introduction to what learning design really is</i> <i>#19 Well-organised and kept to time</i> <i>#21 Very useful and informative</i>		

Appendix 5

Workshop evaluations summary


LD Workshops Summary

	lon	cam	nott	ox	Ave
1. Were the registration instructions clear and timely?	4.6	4.7	3.7	4.3	4.3
2. Was the workshop relevant to your needs?	4.0	4.4	4.5	3.9	4.2
3. Were the programme notes sufficient?	3.9	4.5	4.1	4.0	4.1
4. How would you rate:					
a) The balance of presentation and practical work	4.1	4.4	4.2	4.3	4.3
b) The standard of refreshments and lunch	4.0	4.5	4.1	4.1	4.2
c) The convenience of location	4.1	4.3	4.1	4.2	4.2
Average scores	4.1	4.5	4.1	4.1	4.2

Appendix 7 Evaluating Multiple Interpretations screen

Evaluating Multiple Interpretations

eMI GLO



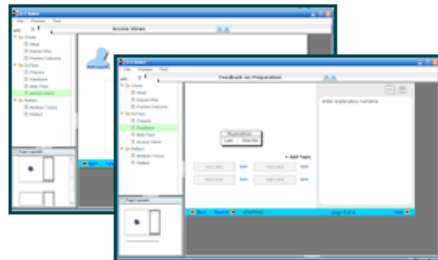
The *evaluating Multiple Interpretations* GLO (eMI-GLO) is intended to demonstrate that complexities can be captured within a learning object, and that this format can be useful in tackling a difficult pedagogical problem: teaching students to become critical interpreters who are aware of a multiplicity of methodologies and disciplinary approaches, and able to differentiate between them.

There are two versions of the eMI GLO available:

- [View eMI core version](#)
- [View eMI full version](#)

To find out more about the eMI project please email: [Dawn Leeder](mailto:Dawn.Leeder@ucel.ac.uk)

GLO Maker




eMI GLO was developed using the GLO (Generative Learning Objects) Maker authoring tool.

GLO Maker provides wider opportunities for tutors to create, re-purpose and customise learning objects that are pedagogically sound.


- [Download GLO maker](#)

(currently only available for PC)


To find out more about the GLO Maker please email: [Dejan Ljubojevic](mailto:Dejan.Ljubojevic@ucel.ac.uk)



CETL
Reusable Learning Objects



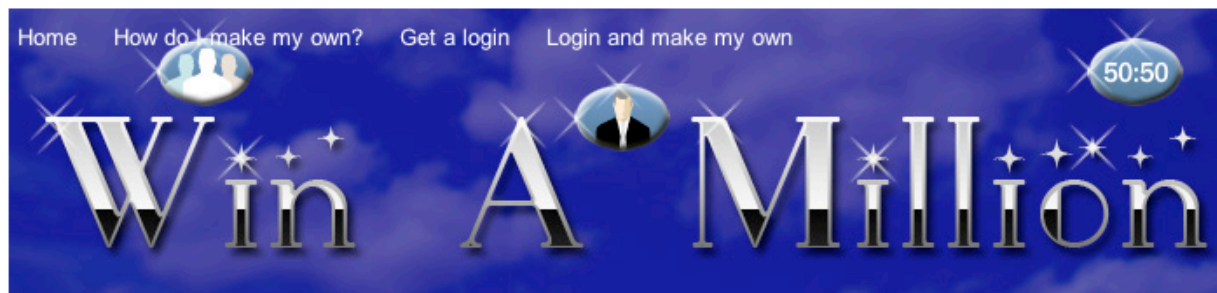
History, Classics, and Archaeology



Evaluating Multiple Interpretations (eMI)
Last updated: 18.12.07

<http://www.ucel.ac.uk/load/emi>

Appendix 8 Win a Million Quiz maker screen



Welcome to the 'make your own' Win A Million game experience . This GLO allows the tutor to set up a fun and familiar quiz environment complete with their own questions, answers and feedback. The result is a more engaging and entertaining way for the learner to test their knowledge.

How does it work? Read on...



You wish to test your students' knowledge of a particular area of study and decide you wish to make a quiz - what better way than to use a tried, trusted and globally-popular formula? With the Win A Million quiz maker tool you can make as many games with as many different sets of questions, answers and feedback as you care to imagine. The learner gets to test their knowledge in a fun and familiar environment, with feedback throughout the entire journey and as many goes as they wish to make a virtual million (It remains the responsibility of individual lecturers to decide whether to honour any cash prizes or not). Give it a try...

[Full instructions on how to make your own](#)



Each game can be set up from scratch by a tutor so that learners can be tested on literally any subject matter. Using a web-based pro-forma, the tutor supplies the questions, answers and the related feedback for each answer. The game is set up to mimick a certain popular TV game show and even includes popular features such as '50:50', 'ask the audience' and 'ask an expert'. When the learner fails to give a correct response the game concludes with the final feedback and a 'cash prize' with the option to play again. This results in an engaging learning object that may be repurposed time and again by tutors.

RLO-CETL authorised tutors can Log in [here](#) to create their own Win A Million games. If you'd like access to this facility, contact the RLO-CETL [hub team](#) with your details



Win A Million. Updated: 27 Nov 07. Email: mill-help@caret.cam.ac.uk

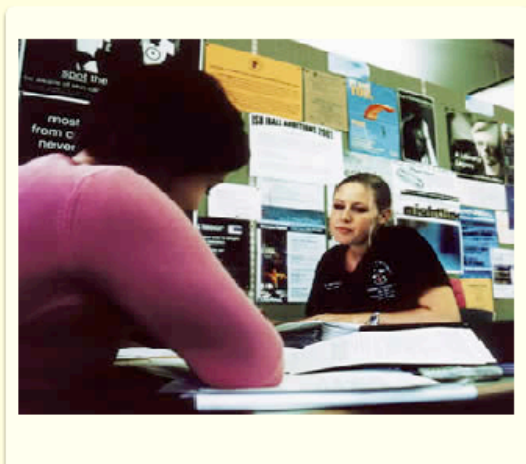


<http://www.ucel.ac.uk/load/million/>

Appendix 9 Mentoring screen

Mentoring: Shaping Practice

Communication >> Introduction >> 1/7



This section will focus on the skills of communication you will use when supporting a learner in your workplace. Communication is a key skill in all health, social care and education roles.

You may already feel confident about your own communication skills at work and this section will consider how to adapt these existing skills for use when supporting learners who are working alongside you.

Narration

Print

Back

Menu

Next

<http://www.nottingham.ac.uk/~ntzmp1/MentorGLO/rloObject.htm>

Appendix 10 – LOAM tool: Attribute selection - screen-shot

Attribute Selection

Attributes - Select an Item from the drop-down menu to add it to your selection

Select your attributes

Sort by IMS

?

Attribute	IMS Class	Attribute Description
Alignment	Activities	<p>Definition: The extent to which the various media types (audio, videos, graphics, images etc) are successfully integrated into the RLO so that the whole is greater than the sum of the parts.</p> <p>Conflict: For the learning object to be effective and engaging, the integration of the media elements should be both appropriate and seamless</p>
Assessment	Activities	
Interactivity	Activities	
Navigation	Activities	
Context	Environment	
Integration	Environment	
Media Standard	Environment	
Objective	Environment	
Feedback	Role	
Prerequisites	Role	
Self Direction	Role	
Support	Role	

Equal Attributes Equal IMS

Appendix 11 – LOAM tool: RLO Evaluation – screen-shot

RLO Evaluation

Load the RLOs you wish to compare

LOAM

2

RLOName	Alignment	Assessment	Interactivity	Navigation	Context	Integration
Millionaire	5	5	5	2	5	1
eMI	3	3	3	2	4	4
Mentoring	1	2	3	4	5	5
Ethical decision ma	1	1	5	5	4	2
MODE SCORES	1	1	3	2	4	1

eMI

Marking Criteria

- 1 Contains only 1 media type (audio, image, video etc)
- 2 Contains at least 2 media types
- 3 Contains at least 3 media types, but these are presented to the learner separately