Using learning design as an approach to creating new and innovative learning activities

Monday, 7 April 2008, 14:00 – 18:00   &   Tuesday, 8 April 2008, 09:30-18:00

Professor Gráinne Conole,
The Institute of Educational Technology, The Open University, UK
Email: g.c.conole@open.ac.uk; Blog: e4innovation.com

Overview:

The plethora of new technologies now available and the ways in which they can be used, presents a daunting prospect to teachers wanting to use these effectively and innovatively in their teaching. The workshop will introduce participants to a new methodology for learning design, which has being developed at the Open University in the UK. It aims to provide support and guidance to teachers in making decisions about creating learning activities. Our approach is predicated on the view that no one simple, narrow view of design is likely to be appropriate nor would such an approach meet the needs of the designer, because of the inherently messy and creative nature of design. Instead, we have developed a 'pick and mix' learning design toolbox of different resources and tools to help designers/teachers make informed decisions about creating new or adapting existing learning activities.

The methodology is applicable for designers/teachers designing in a traditional context – such as creation of materials as part of a formal curriculum, but also has value for those wanting to create Open Educational Resources (OERs) or adapt and repurpose existing OERs (Conole and Weller, 2008). Our methodology adopts an empirically based approach to understanding and representing the design process. This has included a range of evaluation studies (capturing of case studies, interviews with designers/teachers, in-depth course evaluation and focus groups/workshops), which have helped to develop our understanding of how designers/teachers go about creating new learning activities. Alongside this we have collated an extensive set of tools and resources to support the design process, as well as developing a new Learning Design tool, CompendiumLD, that helps teachers articulate and represent their design ideas. A number of publications provide more detail on the background to the work, its location within the wider literature and research in learning design and descriptions of specific aspects of the work – such as the development of CompendiumLD and discussion of the findings from the case studies (see for example Conole et al., 2007; Conole, 2008a and 2008b; Conole et al., 2008a and 2008b). Beetham and Sharpe (2007) and Lockyer et al. (2008) provide a good up to date edited works on learning design which provide a comprehensive overview of current research and development activities in this area. Conole and Oliver (2007) provide a summary of current research and development activities in e-learning, for those wanting an overview of e-learning more generally.

Who should attend?

The workshop will be of interest to teachers and designers wanting to create learning activities or those with an interest in learning design as an approach. The session will need to be located in a PC lab with Internet connected computers – one computer for

every two/three participants is needed. In addition the room should have a data projector facility for the overview sections of the workshop.

Workshop outcomes:

At the end of the workshop, participants will have:

- a good overview of the different approaches to and issues in creating learning activities and the complexity of the design process
- an understanding of the OU Learning Design methodology and how it can be used to support the design process
- an awareness of the range of resources, tools and methods which are available to support learning design – including case studies of good practice, learning object repositories and learning design tools/methods
- experience of thinking about the design process from different perspectives
- had hands on experience of using the CompendiumLD tool to create a learning activity
- an understanding of how the methodology can be applied in their own teaching context.

Workshop format:

The session will be highly participative. Delegates will be given plenty of opportunity to discuss the relevance of the LD methodology to their own context. The hands-on session will give them a chance to use the CompendiumLD tool to create their own learning activity. The tool can be used to map design processes at a number of levels of granularity – from detail mapping of small-scale individual activities – use of tools and resources, etc., through to brainstorming a course outline at a higher level. Ideally it would be useful if participants could come to the workshop with an idea of a design they would like to work on, however this is not essential as there will be an opportunity during the workshop to decide what to work on.

Workshop outline:

The session is designed to be flexible, so that it can be adapted and tailored to participants' individual needs and interests, hence the following is only an indicative guide of the workshop outline and activities.

- **Introduction**
    - o Brief overview of the workshop aims and objectives
    - o Indicative outline for the workshop
    - o Review of participants background and interests, what do they want to get out of the workshop
- **Overview of learning design**
    - o The problem: the gap between the potential of technologies and actual use in teaching/learning
    - o Strategies for design
    - o Learning design as an approach
    - o Thinking differently about design
- **The OU Learning Design project**
    - o Aims and objectives
    - o Activities and summary of progress to date
    - o Relevance to the workshop
- **A Learning Design tool - CompendiumLD**
    - o Demonstration of CompendiumLD

- o Hands on session – using CompendiumLD to create a learning activity
- o Discussion – relevance and use
- **Exploring the Learning Design toolbox**
  - o Hands on session exploring the resources, tools, and methods available in the LD toolbox
  - o Discussion – relevance, sharing and repurposing
- **Conclusion**
  - o Evaluation and individual next steps
  - o Discussion

Indicative timetable and breaks	
<u>Monday 7th April</u>	**<u>Tuesday 8th April</u>**
14:00 – 15:30 Session one 15:30 – 15:45 Coffee break 15:45 – 18:00 Session two	09:30 – 10.00 Arrival and coffee 10:00 – 11:30 Session three 11:30 – 11:45 Coffee break 11:45 – 13:00 Session four 13:00 – 14:00 Lunch break 14:00 – 15:30 Session five 15:30 – 15:45 Coffee break 15:45 – 18:00 Session six

An overview of the OU Learning Design project:

We are adopting an iterative methodology focusing on two areas of activity in parallel: a) capturing and representing practice – through user consultation and case studies and b) supporting learning design – through the development of an online tool and associated workshops (see table one). Therefore part of our philosophy is to gather evidence to better understand the ways in which designers/teachers currently go about creating learning activities, what kinds of support they use and where they have problems and need additional help. We are also collating a set of learning design resources. This includes case studies and examples of how others have used technologies in their teaching, tools to guide users through creating learning activities, different approaches and methods for thinking about the design process, and innovative approaches to thinking about the application of technology in a learning context. These external resources and tools are being collated into an integrated learning design toolbox, the intention is that users can pick and mix different resources and tools to meet their specific requirements. We are also developing a new learning design tool, which we believe is distinct from other tools that are currently available in that it specifically focuses on helping the user to articulate their design process and make this process explicit, so that it provides an overall visualisation of the design which can be shared with others but also highlights potential flaws or gaps. The online tool will be populated with both the information derived from the case studies, as well as selected resources and expertise drawn from our own experience in the field and the wider research literature.

Activities	Outputs and progress
Gathering user requirements[1]	Initial understanding of user needs
Capturing existing learning activities through case studies[2]	44 case studies written up and web site produced, categorised by type of activity, tools and discipline, barriers and enablers and key themes identified
Understanding and representing the design process	Range of representations identified, key benefits of each articulated, activity focused, process schema chosen as a primary visual metaphor
Development of a learning design tool	CompendiumLD. This includes production of LD icon set and LD process templates, inclusion of adaptive, context sensitive help
Testing and evaluation through focus groups and workshops	Ongoing programme of workshops and focus groups presenting the current toolbox of resources and support.
Identification and collation of learning design resources	External repositories of learning objects and case studies collated. Evaluation of the strength of external tools and resources for learning design.
Interviewing teachers about their approaches to design	15 interviews, data being analysis and themes identified. Providing empirical evidence of practice and an understanding of the design process
In-depth course team evaluation	A new course is being followed in detail as the course progresses to identify all the different stages and ways in which design occurs.
Iterative reflection and adaptation in the light of feedback and evaluation	Feedback and evaluation is continually shaping the ongoing development activities of the project

Table 1 The main OU Learning Design project activities

References

Beetham, H. and Sharpe, R. (Eds) (2007), Rethinking pedagogy for a digital age, Oxford: RoutledgeFalmer.

Conole, G. and Oliver, M. (Eds) (2007), 'Contemporary perspectives in e-learning research: themes, methods and impact on practice', *part of the Open and Distance Learning Series,* F. Lockwood, (ed), RoutledgeFalmer: London.

Conole, G. and Weller, M. (2008). *Using learning design as a framework for supporting the design and reuse of OER, Proceedings of the OpenLearn conference, 2007 and submitted to JIME.*

Conole, G., Thorpe, M., Weller, M., Wilson, P., Nixon, S. and Grace, P. (2007), 'Capturing practice and scaffolding learning design', Paper accepted for the EDEN conference, June, Naples.

Conole, G. (2008a), 'Capturing practice: the role of mediating artefacts in learning design', in L. Lockyer, S. Bennett, S. Agostinho, and B. Harper (Eds), Handbook of Research on Learning Design and Learning Objects: Issues, Applications and Technologies

Conole, G. (2008b), 'Using Compendium as a tool to support the design of learning activities', in A. Okada, S. Buckingham Shum and T. Sherborne (Eds) *Knowledge*

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[1] This work was carried out by Stewart Nixon
[2] This work was led by Peter Wilson

cartography – software tools and mapping techniques, http://kmi.open.ac.uk/projects/kc-book.

Conole, G., Cross, S., Brasher, A., Weller, M., Nixon, S. and Clark, P., (2008a), 'A learning design methodology to foster and support creativity in design', paper accepted for the Networked Learning Conference, Greece, May, 2008.

Conole, G., Brasher, A., Cross, S., Weller, M., Nixon, S., Clark, P., and Pettit, J. (2008b), 'A new methodology for learning design' paper submitted for the Networked Learning Conference, Vienna, June, 2008.

Lockyer, L., Bennett, S., Agostinho, S. and Harper, B. (Eds) (forthcoming), Handbook of Research on Learning Design and Learning Objects: Issues, Applications and Technologies, Ideas Group Publications

Curriculum Vitae:

Gráinne Conole is Professor of E-Learning in the Institute of Educational Technology at the Open University in the UK. Previously she was Professor of Educational Innovation in Post-Compulsory Education at the University of Southampton and before that Director of the Institute for Learning and Research Technology at the University of Bristol. Her research interests include the use, integration and evaluation of Information and Communication Technologies and e-learning and the impact of technologies on organisational change. Two of her current areas of interest are focusing on the evaluation of students' experiences of and perceptions of technologies and how learning design can help in creating more engaging learning activities. Updates on current research and reflections on e-learning research generally can be found on her blog www.e4innovation.com.

She has extensive research, development and project management experience across the educational and technical domains; funding sources have included the EU, HEFCE, ESRC, JISC and commercial sponsors. She serves on and chairs a number of national and international advisory boards, steering groups, committees and international conference programmes. She has published and presented over 300 conference proceedings, workshops and articles, including over 50 journal publications on a range of topics, including the use and evaluation of learning technologies. She is co-editor of the recently published RoutledgeFalmer book 'Contemporary perspectives on e-learning research'.