Innovative approaches to Learning Design
putting the pedagogy back in

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Paradoxes & conundrums

New technologies offer new pedagogical opportunities

Array of technologies Not fully exploited

Potential for reuse with Open Educational Resources

Open Educational Resources Little evidence of reuse
Aspiration

Creativity

Innovative learning activities exploiting new technologies

Reuse

Guidance

Sharing
Solution?

Guiding the design of learning activities

Learning Design: Designing *for* learning

A means of describing and representing learning activities

A means of sharing learning activities

New ways of thinking and innovating

To enhance the learner experience
The OU LD project

Visualizing design

Understanding design

Guiding design

Sharing design

CompendiumLD

CLouDworks
Categorizing design representations

Visualization tools

Visualizing design

List different purposes

Moving between representations
Guiding design

From existing practice (resources & case studies)

New ways of thinking

By scaffolding (templates & contextual help)

Learning design tools
Mechanisms for sharing (Real and virtual)

Sharing tools

Sharing design

Benefits of sharing

Critical mass and sustainability
The OU LD project

Materials & resources

Tool development

Trials & workshops

Empirical evidence

Andrew Brasher, Paul Clark, Simon Cross, Martin Weller, Juliette White, Perry Williams
Ask the users!

Expert brainstorming

Development of support resources

Testing the tools!

Feedback, feedback, feedback
Evidence base

Case studies → Use of tools

Interviews → The design process

In-depth course evaluation → The design lifecycle

Futures visioning workshops → Tools development

Workshops → Trialling & evaluation
Case studies

Use of tools in context

Ideas generation & support mechanisms

Pedagogical approaches

Representation

Barriers & enablers
In-depth evaluation

Design cycle

Team dynamics

Granularity of designs

Barriers & enablers

Multi-faceted
Design lifecycle

- Gather
- Assemble
- Run
- Evaluate
- Adapt
- Vision
- Course conception
- Course delivery
- Course refinement
- Learning activity
- Block
I was building a sense of what the new course might be … we must remember to do x, or a url of relevance.

One of the difficulties is mapping the whole process I have tried to approach course design using a holistic approach.

Scrapbooks & doodle maps

Holistic & atomistic

Mapping & connections

Start from assessment strategies and learning outcomes and get an alignment.

List of words clustered into blocks, arrows...can you have clusters link to TMAs [Assignments]

[Scrapbook] It’s in words, not diagrams a dumping ground for thoughts – [to] capture thoughts.

I tend to sit and doodle a map will draw the logic and flow of the course on paper and then go to compendium. Then the problem is sharing it.
Contradictions

- Process
- Implicit
- Text
- Static
- Capture
- Representation
- Lifecycle
- Product
- Explicit
- Visual
- Dynamic
Inter-connected factors

Course level

Outcomes
Tools
Pedagogy
Activities
Assessment
Curriculum

Design
Support

Student experience
Findings to date

Design process creative, messy, iterative

Serendipitous routes to support

No one perfect design tool or approach

Sharing and reuse difficult, but valuable

Different aspects to design - focus and level of granularity

Visualisation helps makes design more explicit

Text, visual, models of designs all have pros and cons
CompendiumLD

Main workspace for creating visual maps and designs

Standard Compendium icon set

Customised Learning Design icon set
Building a design

Student Tasks
Each student selects three countries

Student Resources

Tutor Tasks

Activity
Assignment
Output
Resource
Role
Stop
Task
Tool
Building a design

Student Tasks
Each student selects three countries
Find and retrieve data about these three countries
Post research to group wiki
Group nominate person to eliminate multiple entries
Each student posts at least one comment on forum
Coordinator makes changes Rest check and agree
Student gets feedback from tutor

LO – skills: searching of data and assessing quality of data
LO – skills: how to collaborate with others

List of countries
Internet
Wiki
Forum

Activity
 Assignment
 Output
 Resource
 Role
 Stop
 Task
 Tool

DONE: What if they need more help?

Paul Clark & Simon Cross
Scaffolding & support
What else could tutor be doing?

Student Tasks:
- Each student selects three countries
- LO - skills: how to collaborate with others
- LO - skills: searching of data and assessing quality of data
- Group nominate person to eliminate multiple entries and agree dispute process
- Find and retrieve data about these three countries
- Post research to group wiki
- Wiki
- Internet

Student Resources:
- Library key skills support pack: Internet

Tutor Tasks:
- Tutor reads comments and gives feedback to group
- Reflect on tutor feedback

Student Resources:
- Each student posts at least one comment on forum about experience of achieving learning outcomes
- Rest of group check summary and post comment
- Check resource okay for Level 1 students
- What method used to post? Written / audio etc.

Done: What if they need more help?
- Library key skills support pack: internet

Done: Could nominated person have greater role?
- Tutor tasks
- Tutor reads comments and gives feedback to group

Scenario background:
- Based on a broad scenario for the role-play simulation, a list of the likely major players has been developed and these become the simulation roles.
- Discuss scenario background to clarify understanding
- Read scenario background
- Understand scenario background?
  - False
  - True

Clarify scenario:
- Team develops a role profile using a wiki
- This can involve considerable research, how much role information to provide is a design decision

This can involve considerable research, how much role information to provide is a design decision
Cloudworks
Find and share designs

Welcome to CloudWorks
Inspiration for creating new learning activities?
Ideas for how to use new technologies in your teaching?
Cloudworks allows you to find other people's learning and teaching ideas, designs and experiences as well as sharing your own. You can also get access to many learning design tools and resources to help you create learning designs.

Find and share
- Cloudlets - summary stories of learning and teaching ideas
- Designs - more detailed information about a particular learning and teaching intervention. Designs can be uploaded in any format (as a text file, diagram, etc. or a format related to a particular learning design tool).
- Resource Bank - repositories of learning and teaching case studies, learning objects and methods and approaches to doing design
- Tool Bank - interactive learning design tools

Cloudlets
Resources
Designs
Tools

Web 2.0 principles:
tagging, profiles, user generated
Cloudlets

Using wikis for developing meeting agendas

Description:
Rather than send out a call for agenda items for a meeting (via email or other communication tool) use a wiki to collaboratively build agendas.

Submitted by rodger_graham

A significant learning experience

Description:
I got students to describe a significant learning experience. It could be good or bad, but they had to say why it was memorable. They then analysed the experiences of other students and were asked to draw out factors that helped make a learning experience memorable. This then provoked discussion about the design of good learning experiences. We did this via a shared database, but could be done in classroom also, or through a wiki.

Virtual teamwork to reflect on virtual teamwork

Description:
Students work in teams to create a website about Cyborgs. Each student makes a page on a different aspect. The group join the pages together into a linked website.
Peer review happens in pairs to give feedback on individual pages and use this to improve them.
Students communicate using a discussion forum.

Designs

A foreign language media archive

Learning to understand a foreign language as actually spoken requires authentic examples – if not from actual speakers then from audio-visual recordings.

When students need to become accomplished in practice, as well as solving problems on paper, they need authentic examples to develop their...

An ePortfolio as evidence of research skills

 compiling evidence of skills can be streamlined supported by online guidance.

PhD students are required to provide evidence of their doctoral research, but compiling such consuming task.

In this scheme, science, maths and technol of their generic skills audit early in their PhD to online resources which offer guidance or skills which they already have and how to encouraged to file skills evidence in an ePo by their supervisor, as part of their normal...

Digital threads

Reduce pressure on unconfident learners by teaching a balance of traditional and new skills, with material that is culturally acceptable and relevant.

In this WEA course, British Asian women are trained in the use of computerised sewing machines. Some of the students have language and literacy difficulties, and one challenge is to overcome their fear...
# Resource bank

## Resource Bank

**Add a resource**

<table>
<thead>
<tr>
<th>Title</th>
<th>Summary</th>
</tr>
</thead>
<tbody>
<tr>
<td>7 things you should know about..</td>
<td>The EDUCAUSE 7 Things You Should Know About provides concise briefs on different technologies and how they can be used in teaching</td>
</tr>
<tr>
<td>BLEM</td>
<td>Flashcards to describe the learner/teacher roles for 8 core learning activities</td>
</tr>
<tr>
<td>Connexions</td>
<td>Repository of open educational resources</td>
</tr>
<tr>
<td>EduTech Wiki catalog of online collaborative activities</td>
<td>A classification of types of collaborative online activities – useful for getting ideas</td>
</tr>
<tr>
<td>Engaging interactions for e-learners</td>
<td>Blog which posts e-learning ideas</td>
</tr>
<tr>
<td>Globe repository</td>
<td>Meta-repository of other repositories of learning objects</td>
</tr>
<tr>
<td>Ideas for online group work</td>
<td>62 great ideas for things to do with online groups, compiled in 2003 but still relevant</td>
</tr>
<tr>
<td>Interpreting technologies in use</td>
<td>A nice 3-D visual tool for thinking about the relationship between tools and pedagogy</td>
</tr>
<tr>
<td>IRISS Institute for Research and Innovation in Social Services (Scotland)</td>
<td>Home of the Learning Exchange - a repository of learning resources for social care/work education</td>
</tr>
<tr>
<td>JISC case studies of innovation</td>
<td>A guide describing a range of case studies on innovative uses of technology</td>
</tr>
<tr>
<td>JISC effective practice guides</td>
<td>Series of effective practice guides and case studies produced by JISC</td>
</tr>
<tr>
<td>LearnHub</td>
<td>A social networking site where people teach and learn online</td>
</tr>
<tr>
<td>Mapping tools to pedagogy</td>
<td>A 3D pedagogical framework highlight the key characteristics of learning</td>
</tr>
<tr>
<td>MERLOT repository</td>
<td>Repository of learning objects</td>
</tr>
<tr>
<td>MIT open courseware</td>
<td>A repository of open educational resources from MIT courses</td>
</tr>
</tbody>
</table>

## Learning objects

- OERs
- Networks

## Approaches

- Info on tools
- Case studies & ideas
Learning designs

Welcome to Effective Learning Designs, a good practice guide designed for teachers and instructors in higher education to access a rich set of resources that support the development of flexibly delivered high quality learning experiences for students.

This web site has been designed for teachers and instructors in higher education to access a rich set of resources that support the development of flexibly delivered high quality learning experiences for students.

Use the web site resources to develop high quality learning experiences for students by:

- exploring a range of proven learning designs, with exemplar aspects and full instructions on how to implement the designs (exemplars)
- examining a set of generic learning designs to apply in your knowledge domain (guides)
- making use of a set of tools for supporting learners (tools)
- reviewing the principles for design of high quality learning experiences (the project)

A selection of learning designs with exemplary aspects

A review and analysis of exemplars to determine suitability for generic use

A set of generic learning designs based on a selection of exemplars

A set of ICT-based tools with potential for generic use, based on exemplars
<table>
<thead>
<tr>
<th>Principles</th>
<th>Thinking &amp; reflection</th>
<th>Experience &amp; activity</th>
<th>Conversation &amp; interaction</th>
<th>Evidence &amp; demonstration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reflect on experience and show understanding</td>
<td>✔️</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Frequent interactive exercises &amp; feedback</td>
<td></td>
<td>✔️</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Provides support for independent learning</td>
<td></td>
<td></td>
<td>✔️</td>
<td></td>
</tr>
<tr>
<td>Supports collaborative activities</td>
<td></td>
<td></td>
<td></td>
<td>✔️</td>
</tr>
</tbody>
</table>
Organisation  
Creativity  
Dialogue  
Collaboration  
Reflection  
Interaction  
Inquiry  
Authenticity

**Positives**

Tools
E-portofolio, blog, wiki, RSS feed, etc...

Tasks
Search, discuss, collate, present, etc

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Time consuming  
Support issues  
Assessment issues  
Expensive  
Lack of interaction  
Difficult to manage  
New skills required  
Uninspiring

**Negatives**

Assessment by portfolio

Group report in a wiki

Blog reflection on practice

Group resources via RSS
8 Learning Events

http://cetl.ulster.ac.uk/elearning/index.php?page=8LEM-8

Flashcards for each event showing teacher and learner activities
# Design tools

## Learning Design Tools

### Add a tool

<table>
<thead>
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<th>Title</th>
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</tr>
</thead>
<tbody>
<tr>
<td>DialogPlus toolkit</td>
<td>An online learning design planning tool, providing structured guidance on creating learning activities ('nuggets')</td>
</tr>
<tr>
<td>CompendiumLD</td>
<td>A visualisation tool for creating learning designs</td>
</tr>
<tr>
<td>London Pedagogic Planner</td>
<td>A tool for mapping teaching methods to pedagogy and allocating topics across a course</td>
</tr>
<tr>
<td>Phoebe</td>
<td>A wiki of learning designs, templates and extensive information on different aspects of learning design</td>
</tr>
<tr>
<td>LAMS</td>
<td>Learning Activity Management System</td>
</tr>
<tr>
<td>Media Adviser Toolkit</td>
<td>A toolkit for mapping teaching methods to pedagogy</td>
</tr>
<tr>
<td>KEEP</td>
<td>Carnegie Foundation KEEP toolkit - document scholarship of teaching</td>
</tr>
<tr>
<td>Microsoft's Grava</td>
<td>A set of tools to allow users to author, assemble, and present content.</td>
</tr>
<tr>
<td>RELOAD</td>
<td>An editor for Learning Design, which supports the full IMS Learning Design specifications for Levels A, B and C.</td>
</tr>
</tbody>
</table>
User profile

Grainne Conole
Institute of Educational Technology, The Open University
http://www.e4innovation.com

Professor of e-learning with a broad range of research interests in the development, use and embedding of e-learning. Current interests include learning design and evaluating the student experience of using technologies.

Cloudlets
- Making medieval Greek text interesting
- Structured for and against debates
- Interactive posters and presentations
- Formative mini-tests in Chemistry

Designs
- Using a wiki to analyse a pop song in English teaching
- Using a wiki to analyse a pop song in English teaching Course brainstorm
- Promoting inquiry-based learning through mobile devices

Resources submitted
- Interpreting technologies in use
- The AUTC Learning Design Project on ICT-based learning design
- BLEM
- TELL Pedagogical Patterns book
- Globe repository
- Engaging interactions for e-learners
- OU e-learning case studies
- One page guides
- MIT open courseware
- OpenLearn
- Connexions
- The Phoebe teaching and technology guidance
- JISC case studies of innovation
- Mapping tools to pedagogy
- LearnHub
- SchoologyEverything
- The OU Learning About guides
- 7 things you should know about...
- Reusable Learning Object CETL
- OTIS repository of case studies
- The e-Learning centre library of case studies

Perry Williams
Institute of Educational Technology, The Open University

Between 1994 and 2003 I was an author and producer of bespoke learning materials for the independent company Learning Materials Design (now LMD Learning Solutions). Since then, I have been researching a PhD on learners’ experience of self-direction in e-learning. Before that, I was a lecturer in medical history at the Cambridge Department of History and Philosophy of Science.

Cloudlets
- Tools for supervising student discussion
- Designing or choosing collaborative tools
- Free chatting or structuring dialogue?
- How do students know when they’ve finished?
- Webquests for best use of internet search-time

Designs
- Portfolios for professional development
- Synchronous audio-graphic conferencing for language practice
- Video commentary on philosophical arguments
- Summarising the Cold War
- Computer-marked assessment (science)
- Simulation of a physical system
- Intense near-synchronous conferencing
- Social work simulation
- Understanding perspective
- Learning to interpret historical images
- Discussing creative writing
- Journaling for reflective practice

User details

Dynamic list of inputs

Evolving network
Simple tagging
Plans for CompendiumLD

- In-situ help
- Classify key representations
- Supporting creativity
- Scaffolding templates
- Text vs. visual
The term 'social networking' makes little sense if we leave out the objects that mediate the ties between people. Think about the object as the reason why people affiliate with each specific other and not just anyone… The fallacy is to think that social networks are just made up of people. They're not; social networks consist of people who are connected by a shared object.

Content as social object
Design as social object
Plans for Cloudworks

Annotation

Dynamic

Interactive widgets

Recommendations

Peer network

Discovery

Open API

Social motivation

Star ratings
Next steps

**Application:**
HSC level 2 redesigns

**Embedding:**
Institutional roll out

**Transfer:**
Other institutions
Different communities
Microlearner
Little snippets of learning that lead to a vast mind

2Learner
Create goals, tasks

Cloudworks
Pull in and publish relevant courses/designs

OpenLearn
Making educational resources freely available

SocialLearn
Pull in and publish relevant content

Making connections

43 Things

Social Learn

Twitter

Co here

Facebook
Further information

• OU Learning design briefing papers
  • http://e4innovation.com/?page_id=13

• Visualizing design - CompendiumLD
  • http://kn.open.ac.uk/public/workspace.cfm?wpid=8446

• Paul Clark - slidecast on using CompendiumLD
  • http://www.slideshare.net/PerryW/using-compendiumld-to-design-a-learning-activity-435001/

• Sharing designs - Cloudworks
  • http://cloudworks.open.ac.uk
Challenge...

Write a cloudlet
A short description of an interesting learning activity

Your name
Title
Description
Author
Tags

Prize for best one!!
G.C.CONOLE@OPEN.AC.UK

Blog: www.e4innovation.com