



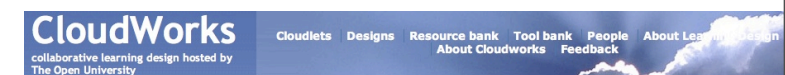
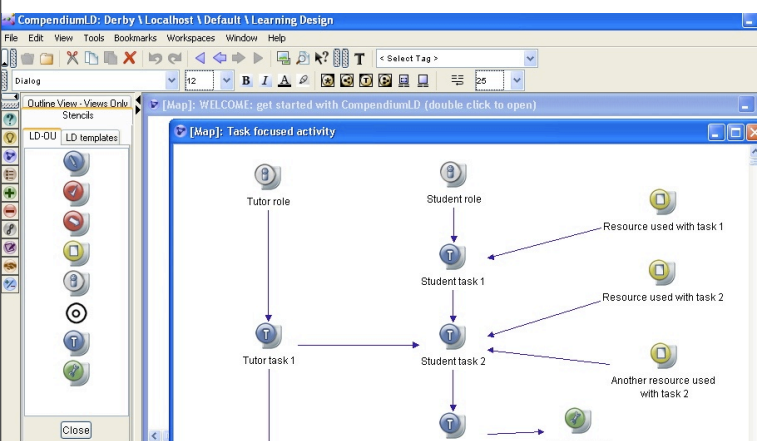
# Innovative approaches to Learning Design

putting the pedagogy back in

Gráinne Conole

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LAMS Conference, Cadiz  
26th June 2008



## 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

grainne

- Site user list
- My account
- Administer
- Log out

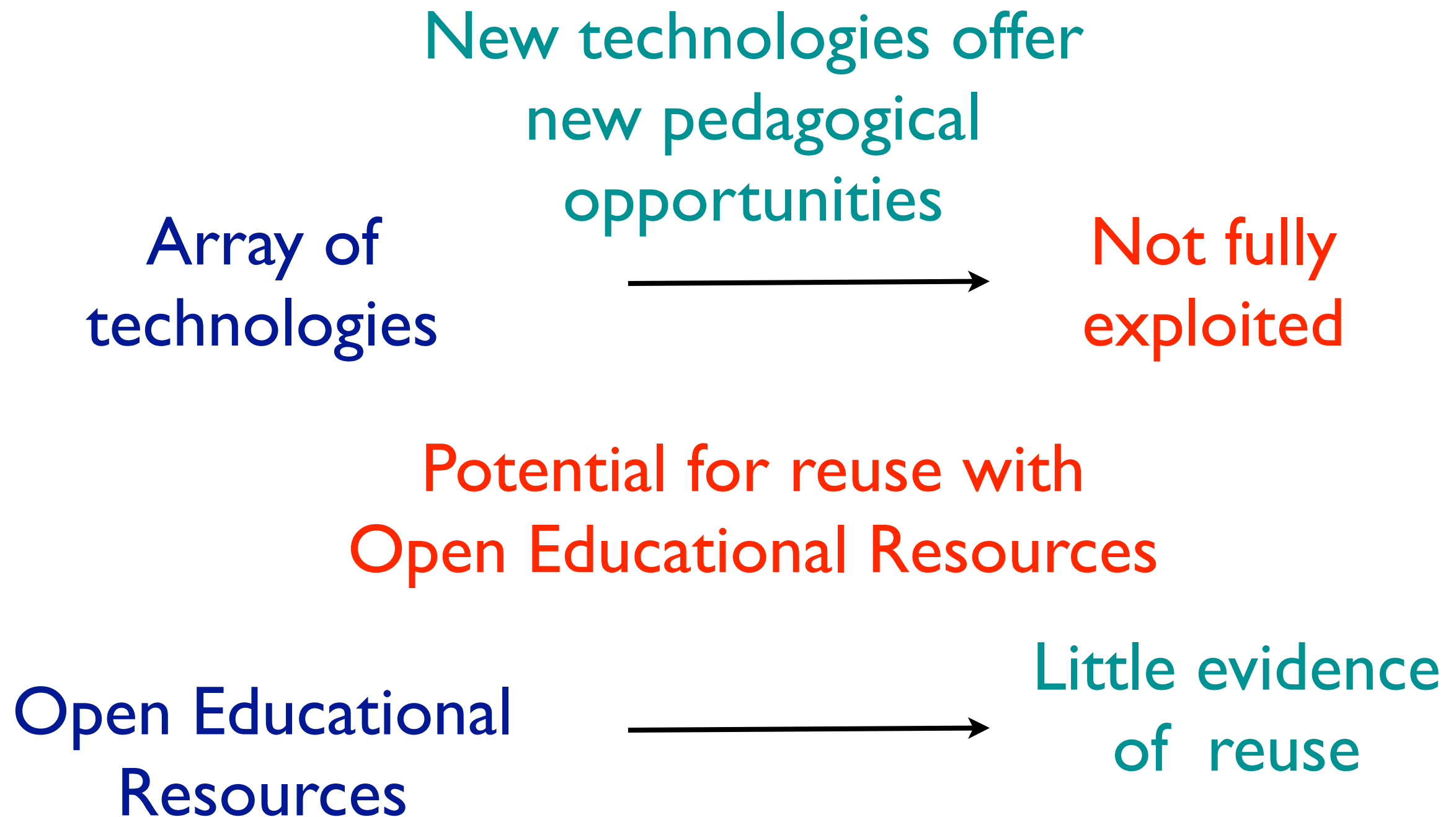
Pedagogy

**Open educational resources** student research journal evidence-based learning peer assessment resource based learning **collaborative learning** **generic discussion-based multimedia** virtual activity **Any practice** **collaboration**

Subject area

philosophy laboratory sciences **any** mathematics calculus health software design social sciences all **chemistry** physics

# Paradoxes & conundrums



# Aspiration

Creativity

Guidance

Innovative learning activities  
exploiting new technologies

Reuse

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

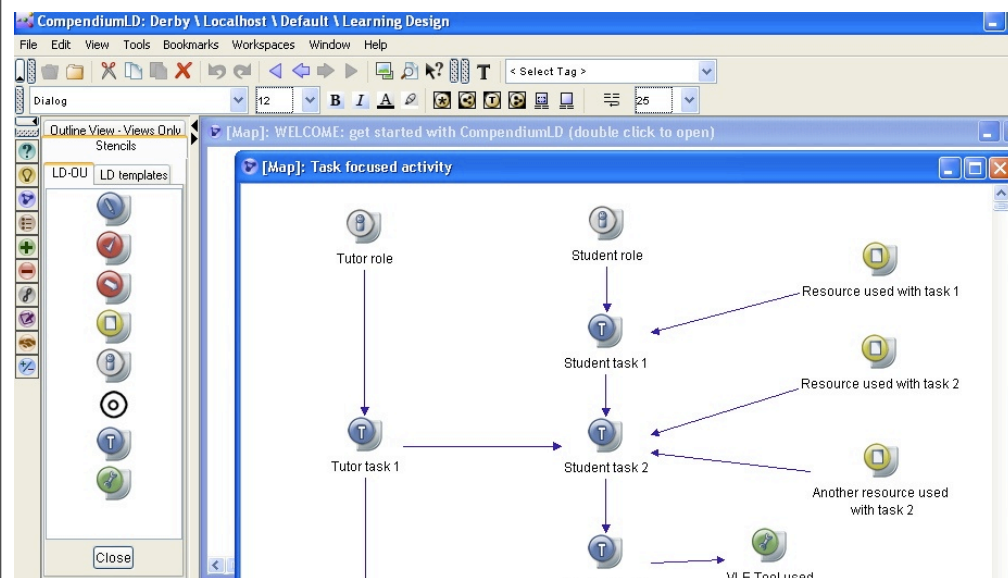
New ways of  
thinking and  
innovating



To enhance the  
learner experience

# The OU LD project

Visualizing  
design



CompendiumLD

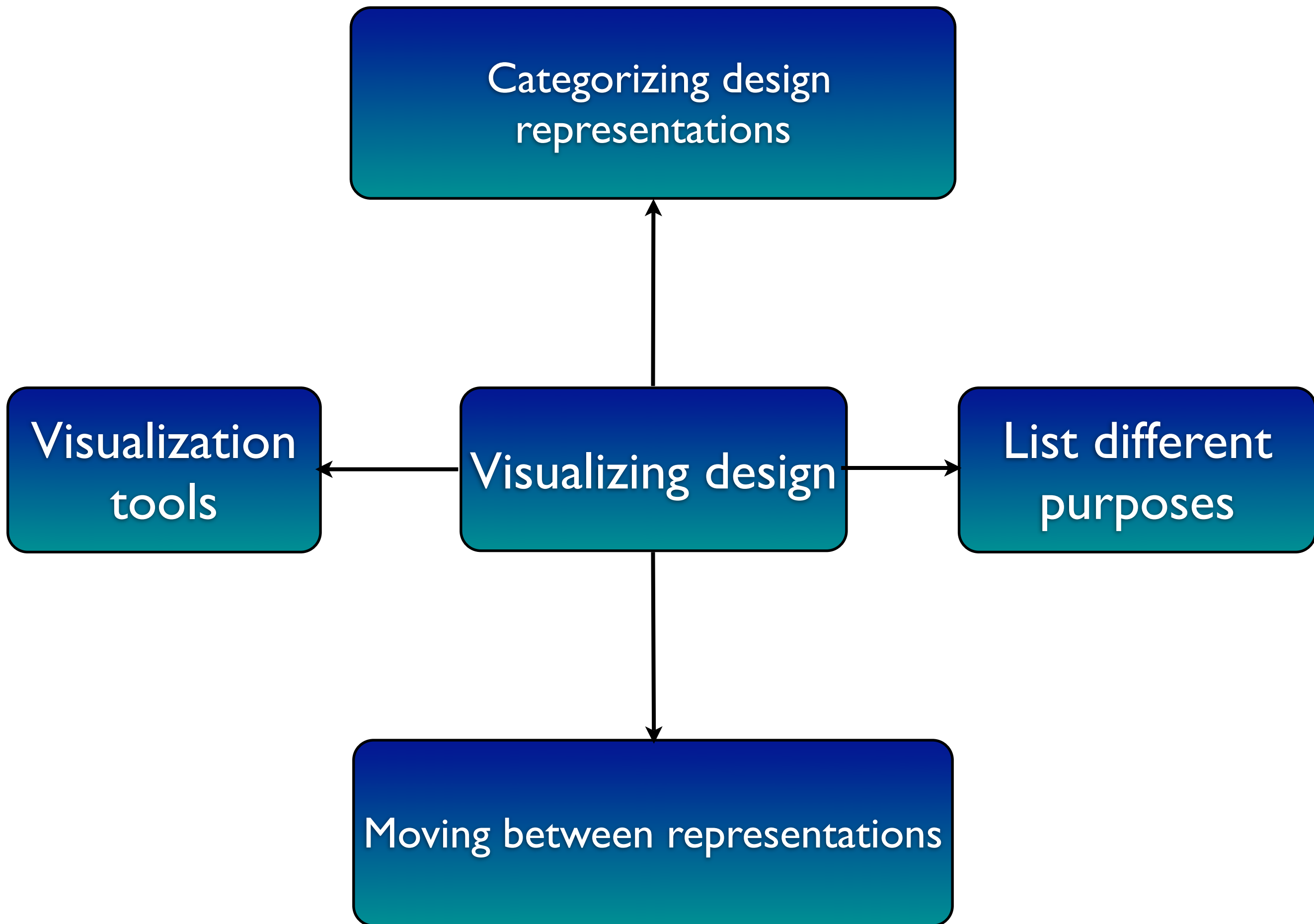


CLoudworks

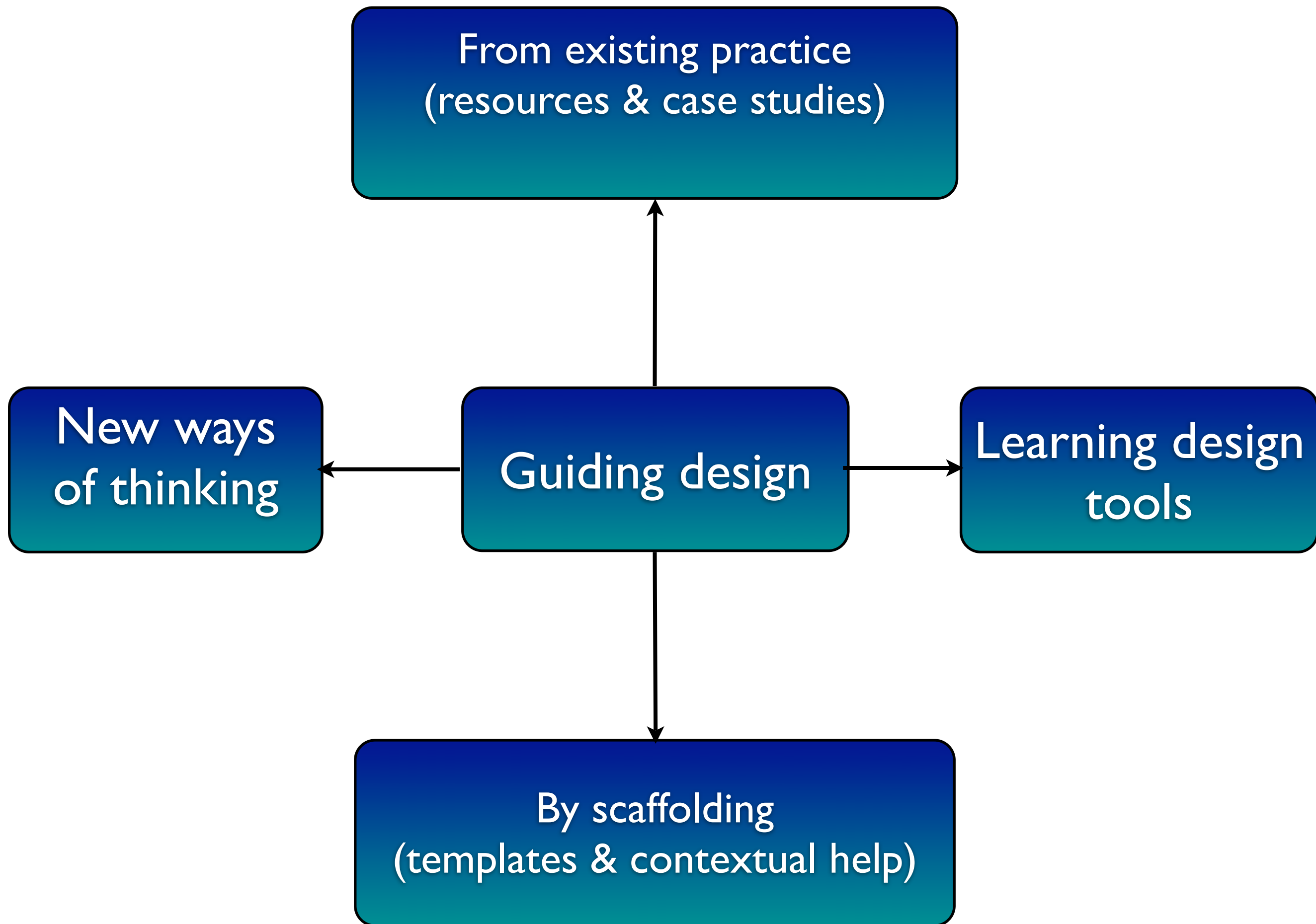
Understanding  
design

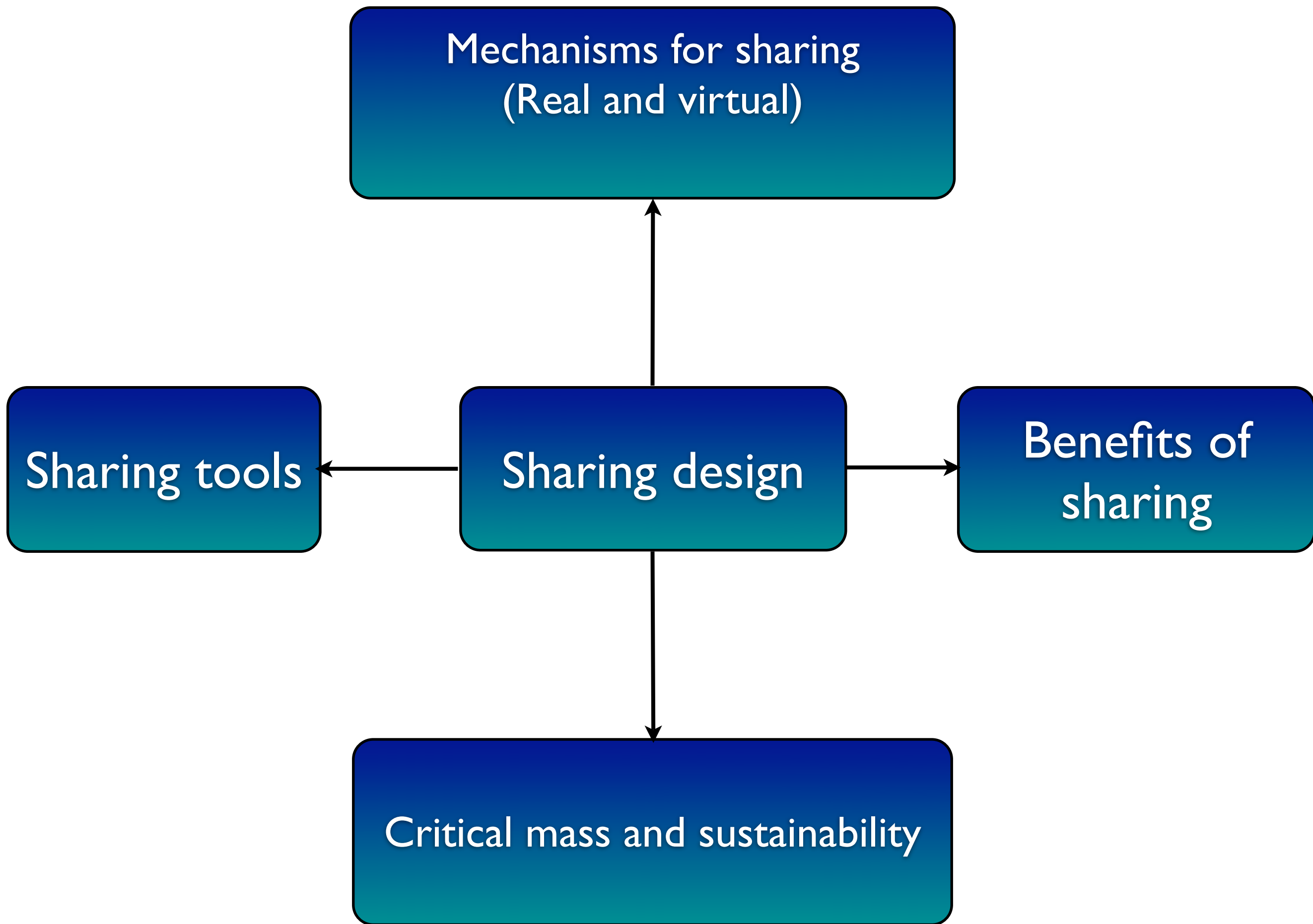
Guiding  
design

Sharing  
design



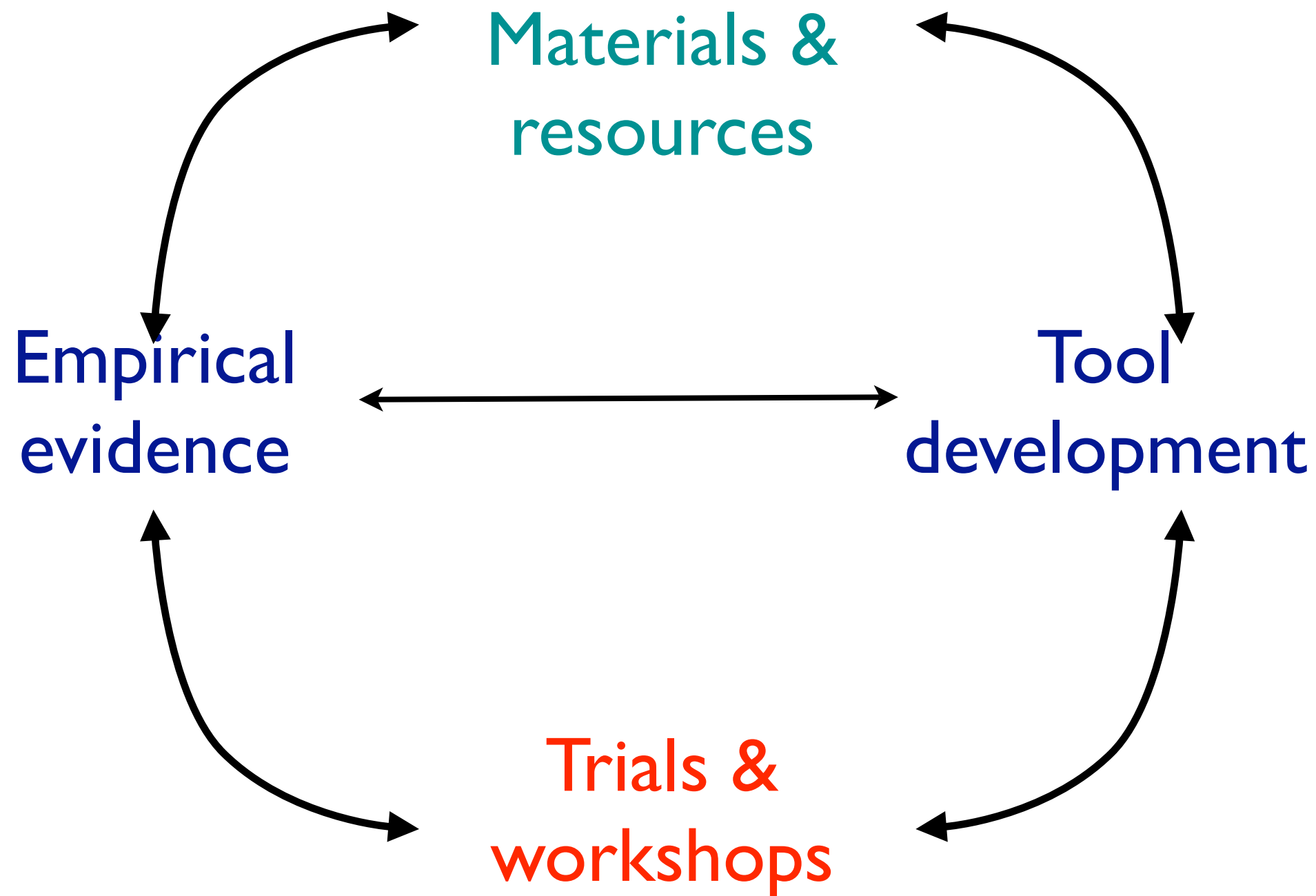








# The OU LD project



# 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

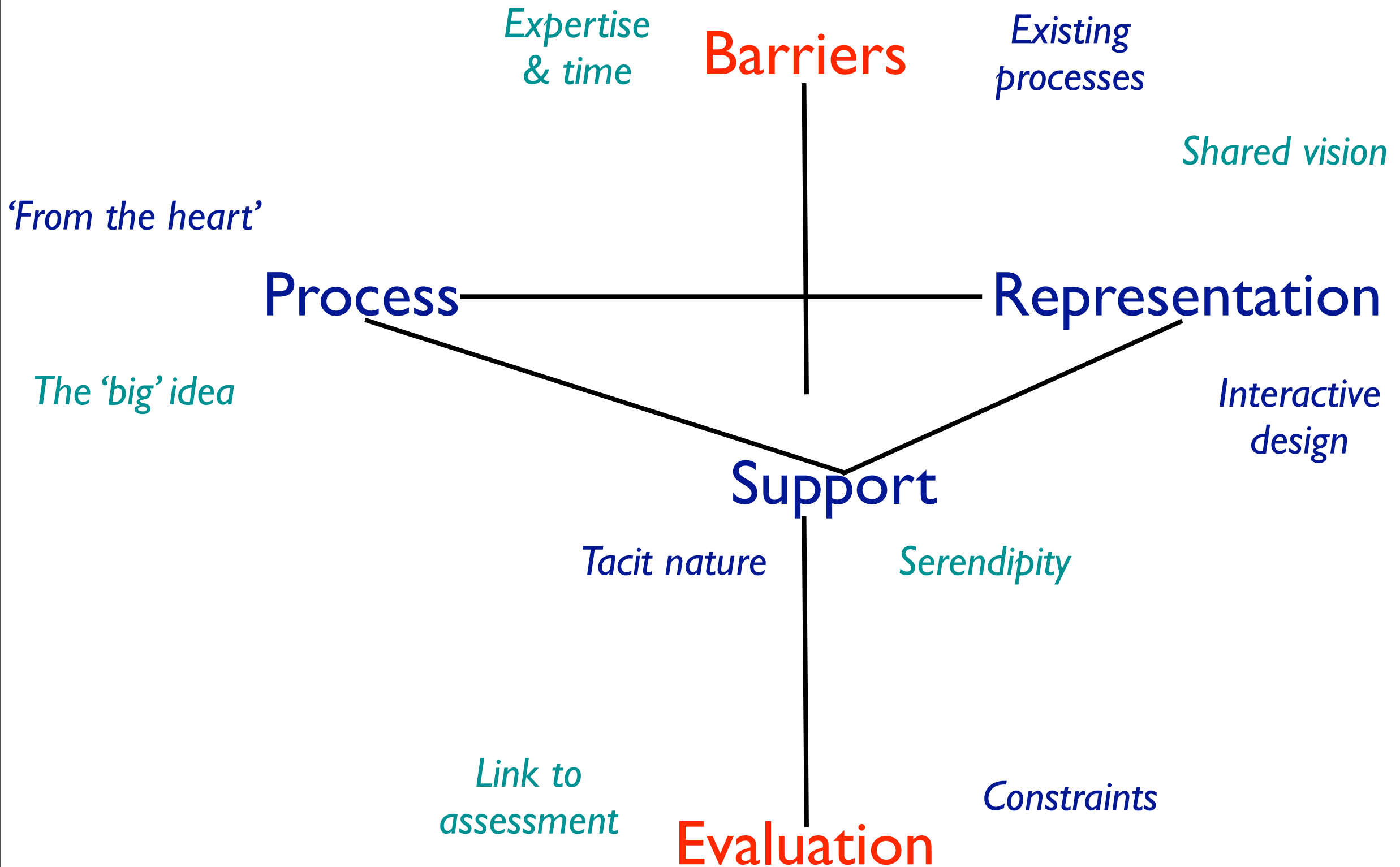
Pedagogical  
approaches

Representation

Barriers & enablers

| Learning Activity Case Study   |  |   |
|--|--|---|
| Learning Activity Title: Asynchronous discussion based collaborative learning  |  |   |
| Summary: Students collaborate to produce a Wiki report about management and social enterprise issues found in their places of work |  |   |
| Context  |  |   |
| Course context   | Title:   | Current Issues in Public Management and Social Enterprise |
|  | Course Code:   | B857  |
|  | Course chair or activity lead academic:  | Geoff Peters  |
|  | Discipline:  | N/A   |
|  | Faculty:   | Business School   |
|  | Date of first presentation:  | May 2007  |
|  | Time to complete learning activity   | 4 Weeks (50 hours)  |
| Learning activity description  |  |   |
| Why are we doing this?   | Students need a mechanism to research and share current issues in relation to public management and social enterprise.<br>Enable students to explore how these issues relate to their own organisations.   |   |
| What are the learning outcomes?  | Broadly speaking they are:<br>To encourage collaborative working.<br>To bring students closer to the cutting edge of the subject and to current thinking in terms of academic theory and practice.<br>More specifically, some of the key skills listed in the course guide include: <ul style="list-style-type: none"><li>• To locate, scan and organise information and data from a variety of sources, abstract meaning and share knowledge.</li><li>• To use proficiently communication and information technologies in research, investigation, problem solving, group working and communication including information search tools and web based collaboration tools such as Wikis and forums</li><li>• To communicate effectively, using a range of media, including preparing and appraising reports; negotiating with, persuading and influencing others</li><li>• To exercise self-awareness and self-management, perform time management, exercise sensitivity to diversity in people and different situations</li><li>• To perform effectively within a team environment and recognise and utilise other people's contributions to group processes.</li></ul> |   |
| How are the learning outcomes achieved?  | The overall the structure of this course is straightforward. The majority of the students' time will be spent working on two of the five current issues that are available. The learning activity involves using a Wiki in a learning set to prepare a joint report on each issue and then individually see how relevant that report is to their organisation (or one they know well). This is repeated for a second issue and learning set. Finally, students submit an end-of-course assessment (ECA) in which they step back from these two reports, and review a third report.<br><br>Students start by reading the course guide and information about each of the issues. Next they become familiar with the Wiki software through a tutor group activity where they write about their background, edit other peoples' pages and agree allocation of individuals to the five issues. In this tutor group members also choose the learning sets  |   |

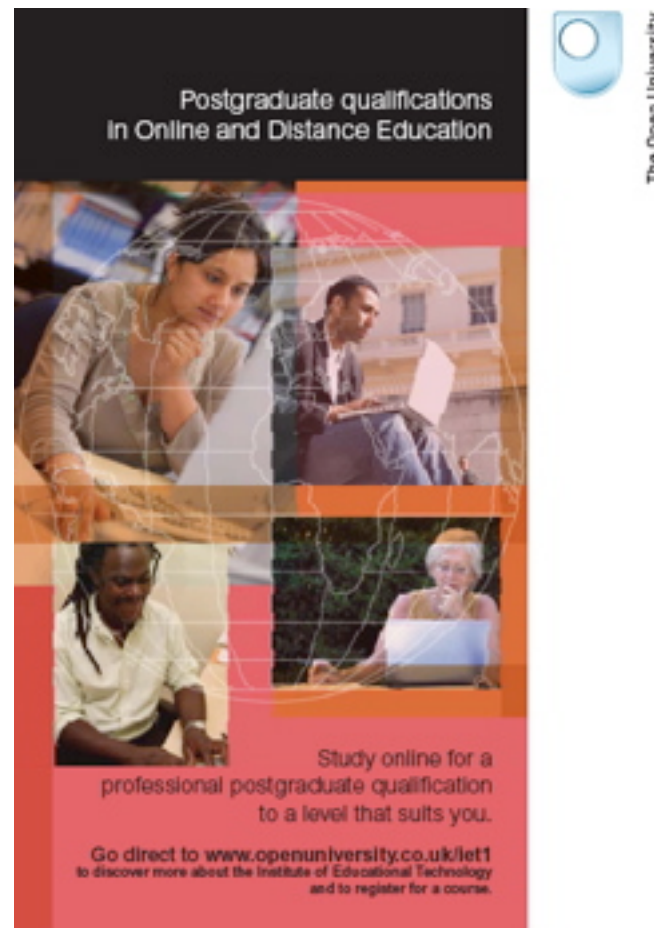
# Interviews



# In-depth evaluation

Design cycle

Team dynamics



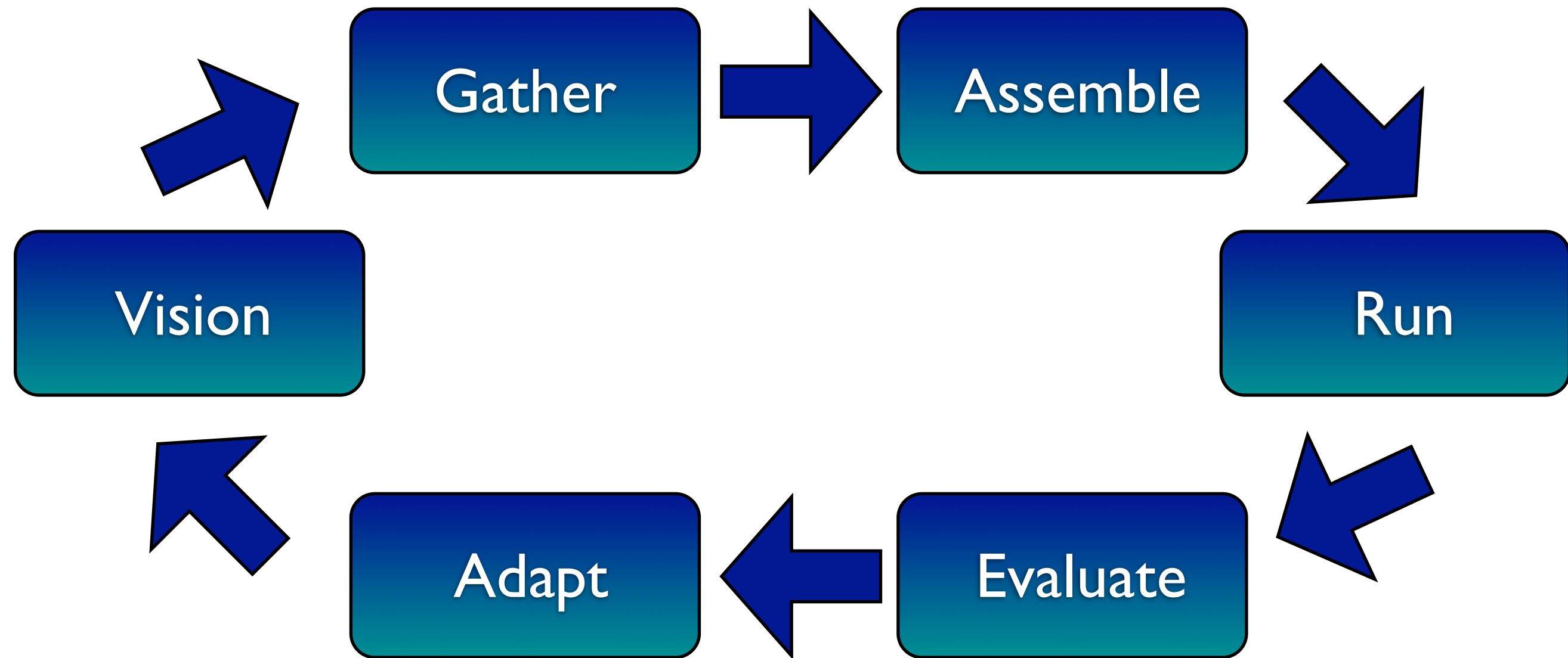
Granularity of designs

Barriers & enablers

Multi-faceted



# Design lifecycle



---

Course  
conception

Course  
delivery

Course  
refinement

---

Learning  
activity

Block

Course

# Interview snapshots

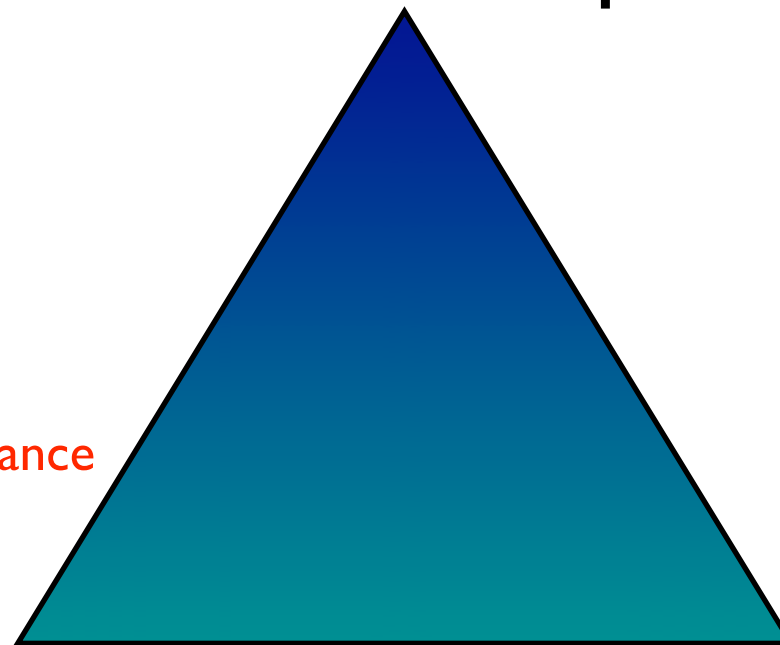
[Scrapbook] It's in words, not diagrams a dumping ground for thoughts – [to] capture thoughts

Scrapbooks & doodle maps

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

I was building a sense of what the new course might be ... we must remember to do x, or a url of relevance

Holistic & atomistic



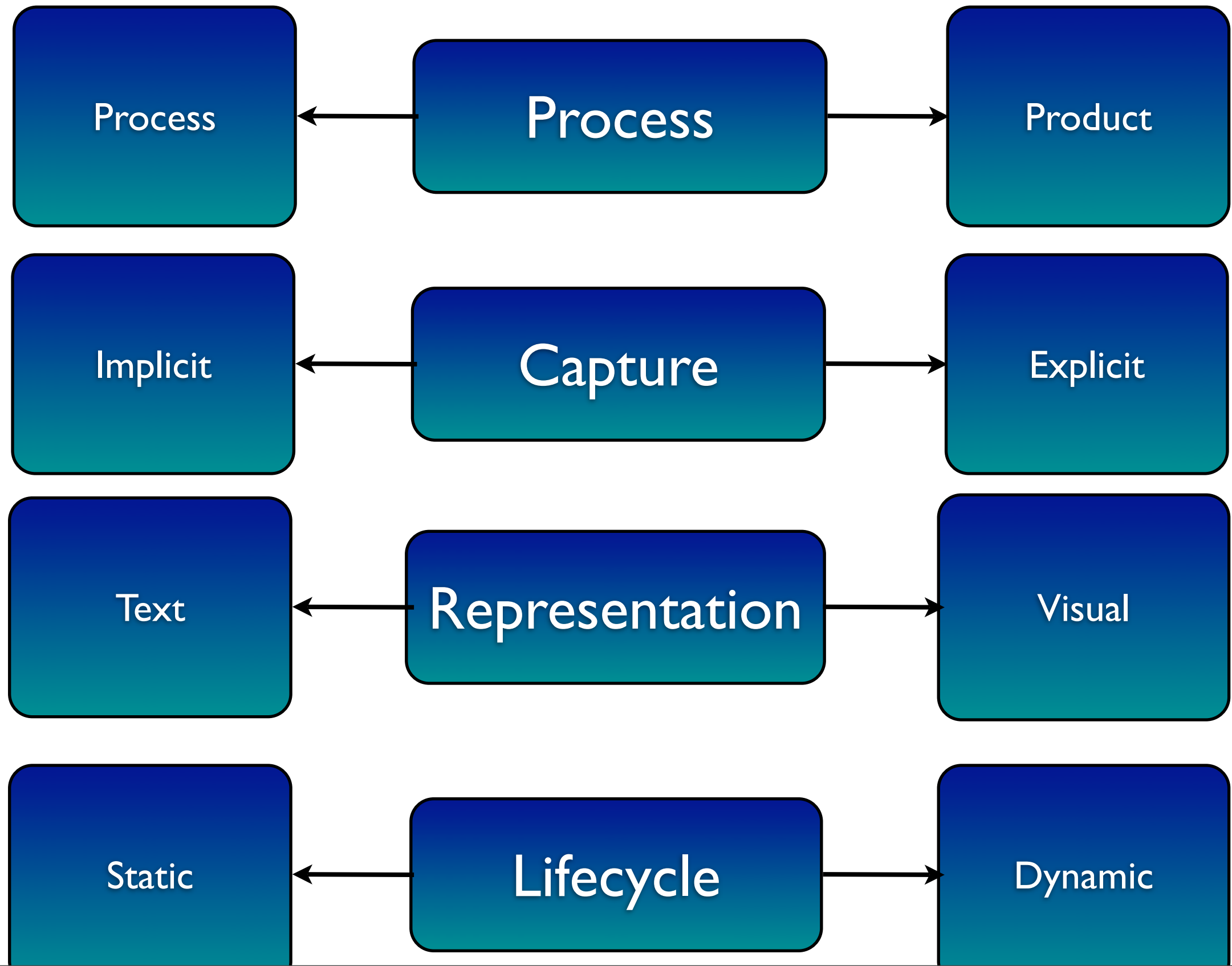
Start from assessment strategies and learning outcomes and get an alignment

Mapping & connections

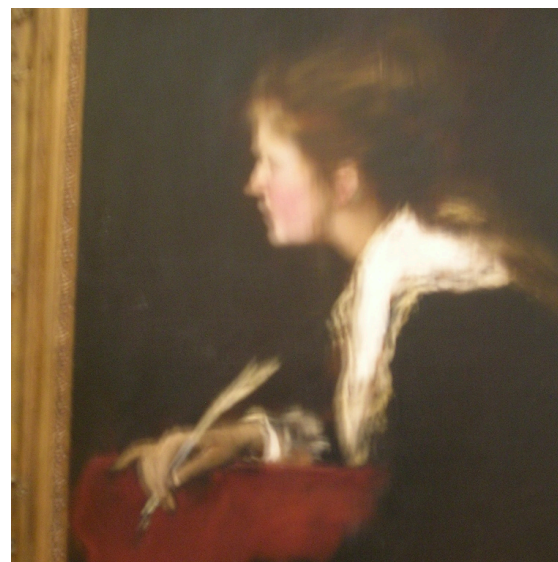
One of the difficulties is mapping the whole process I have tried to approach course design using a holistic approach

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

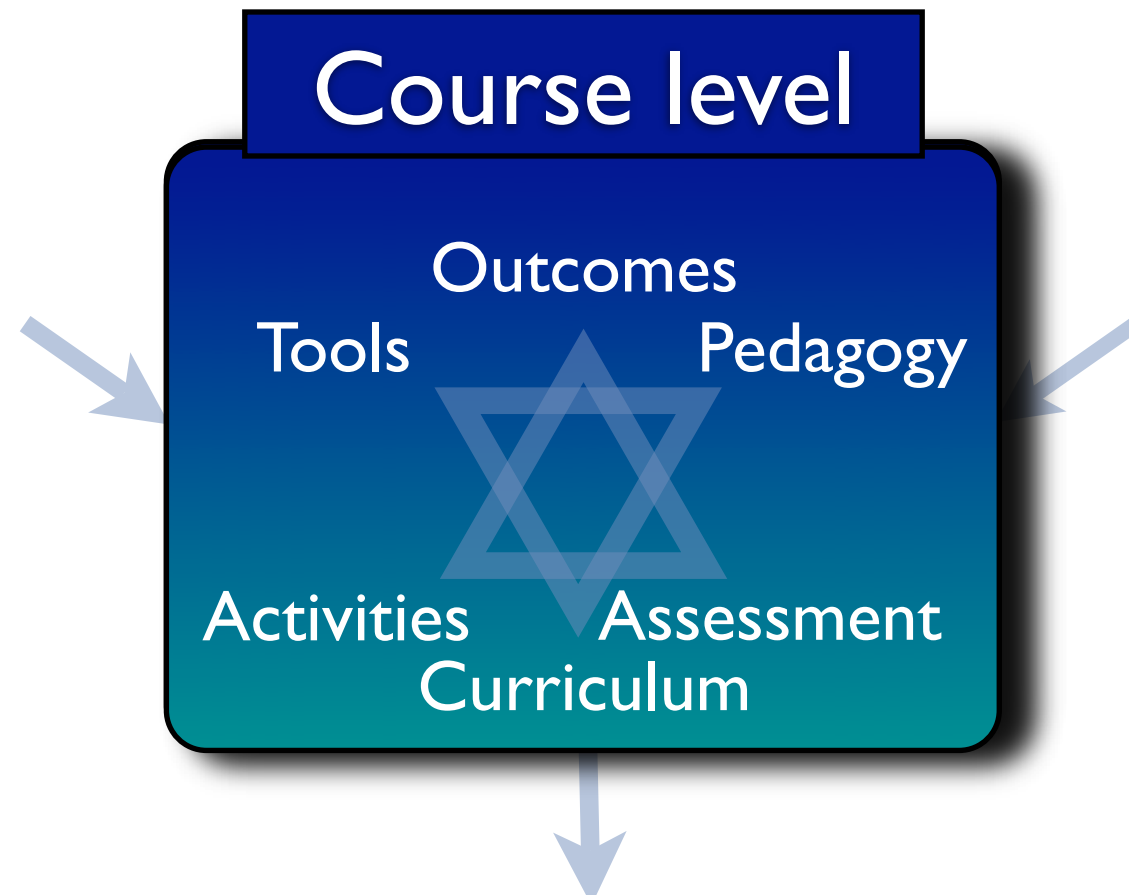
# Contradictions



# Inter-connected factors



Design



Support



Student experience

# Findings to date

Design process creative,  
messy, iterative

Serendipitous routes  
to support

Sharing and reuse difficult,  
but valuable

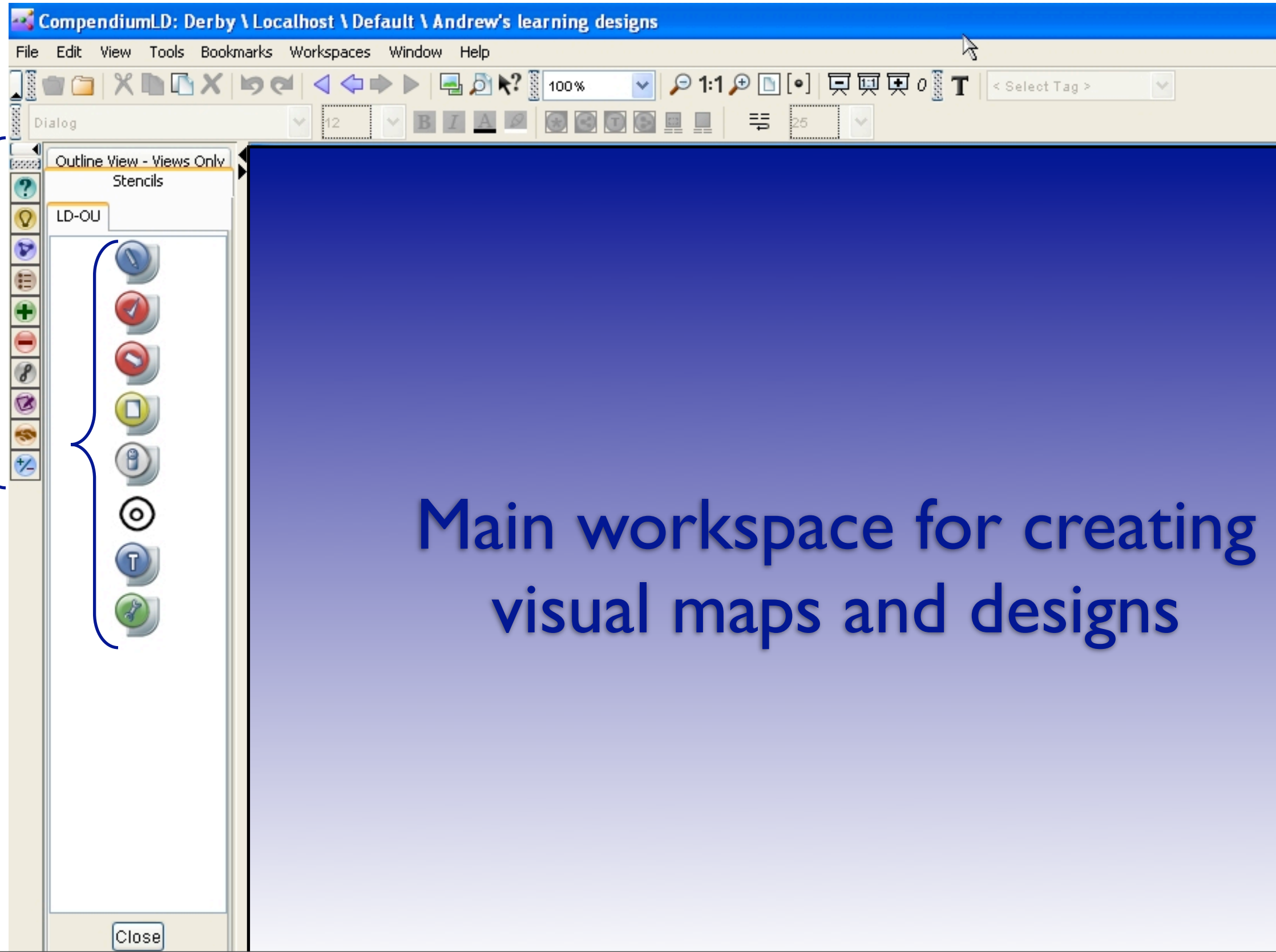
No one perfect design tool  
or approach

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



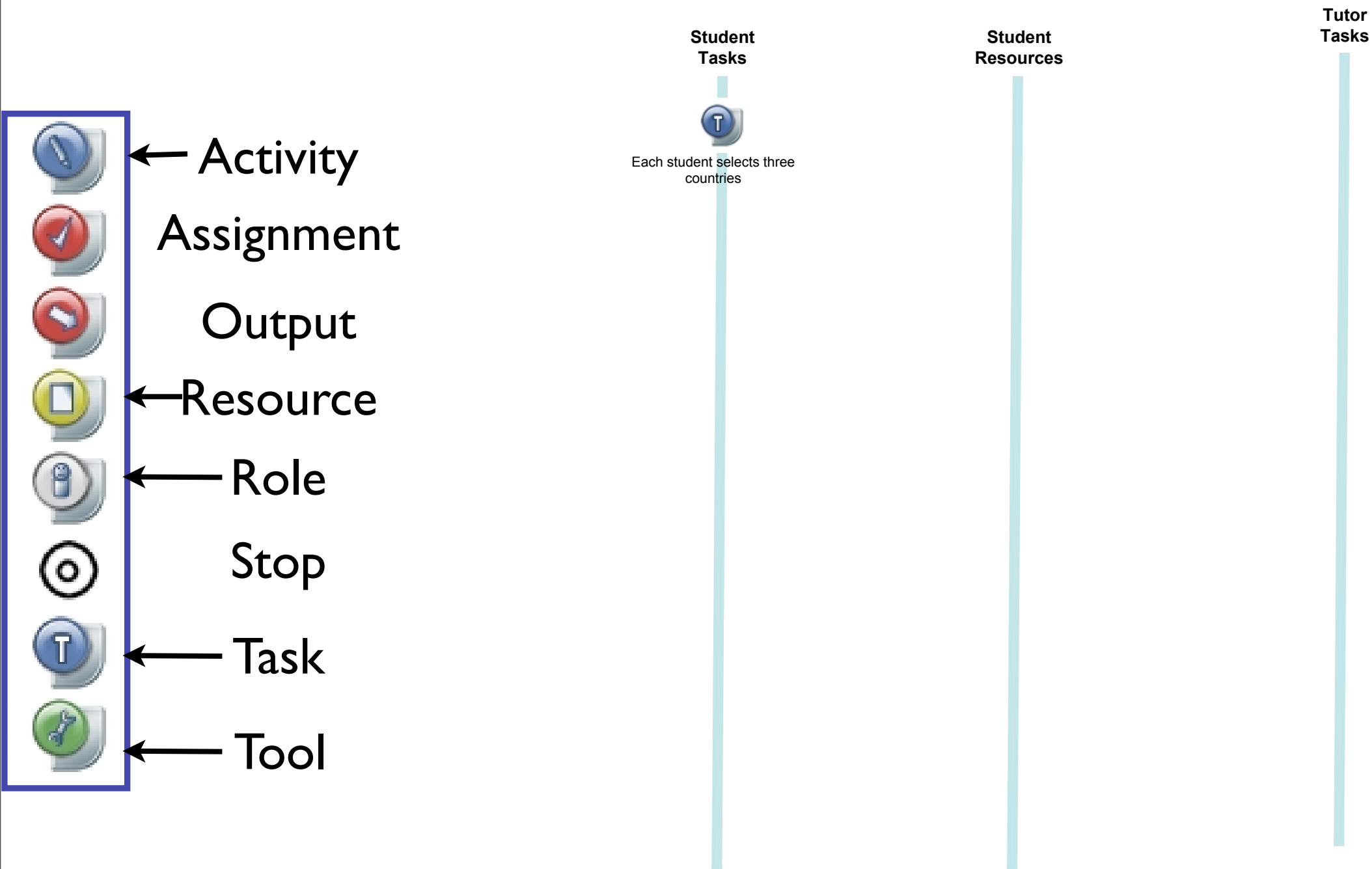
Standard  
Compendium  
icon set

Customised  
Learning Design  
icon set

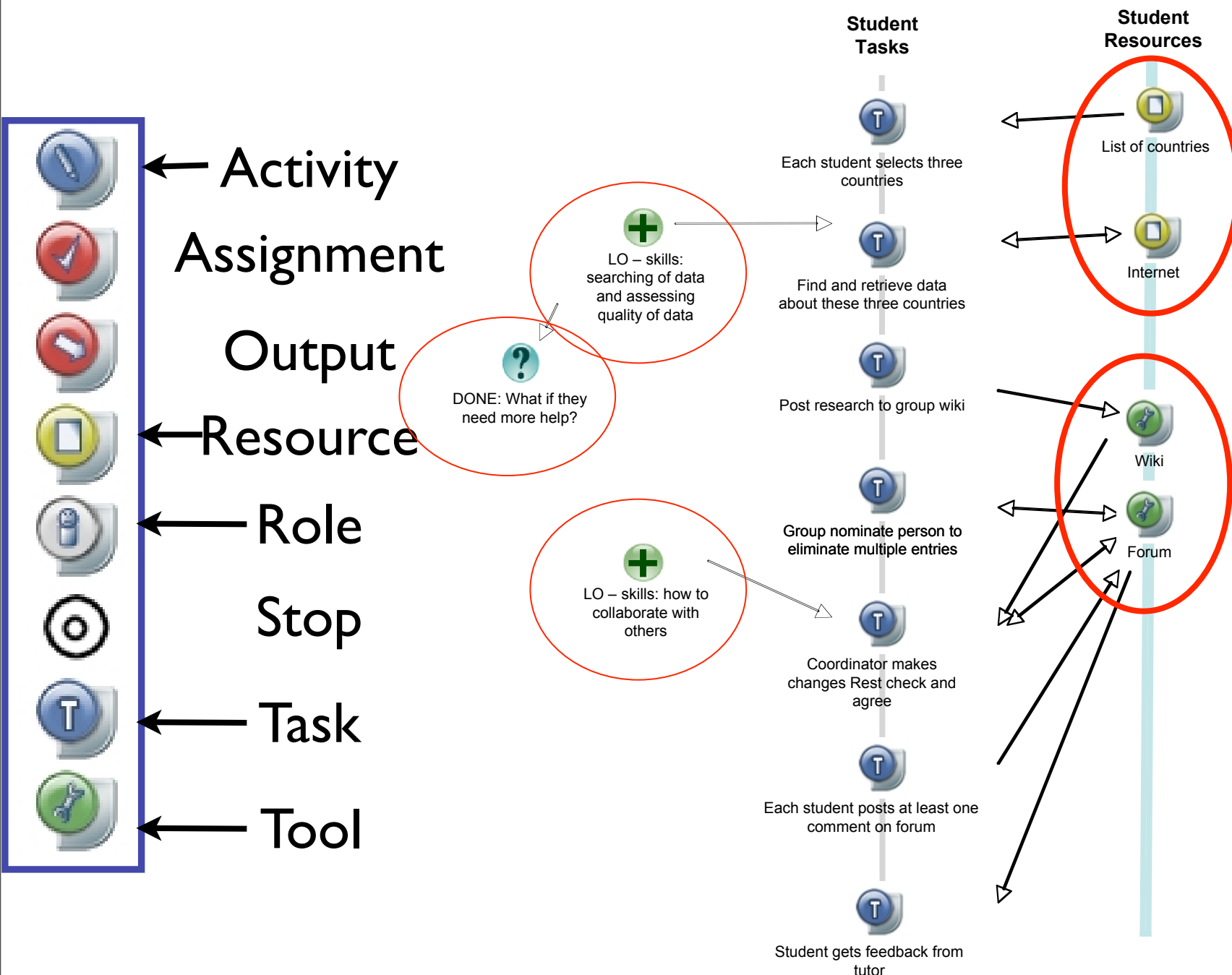
Main workspace for creating  
visual maps and designs



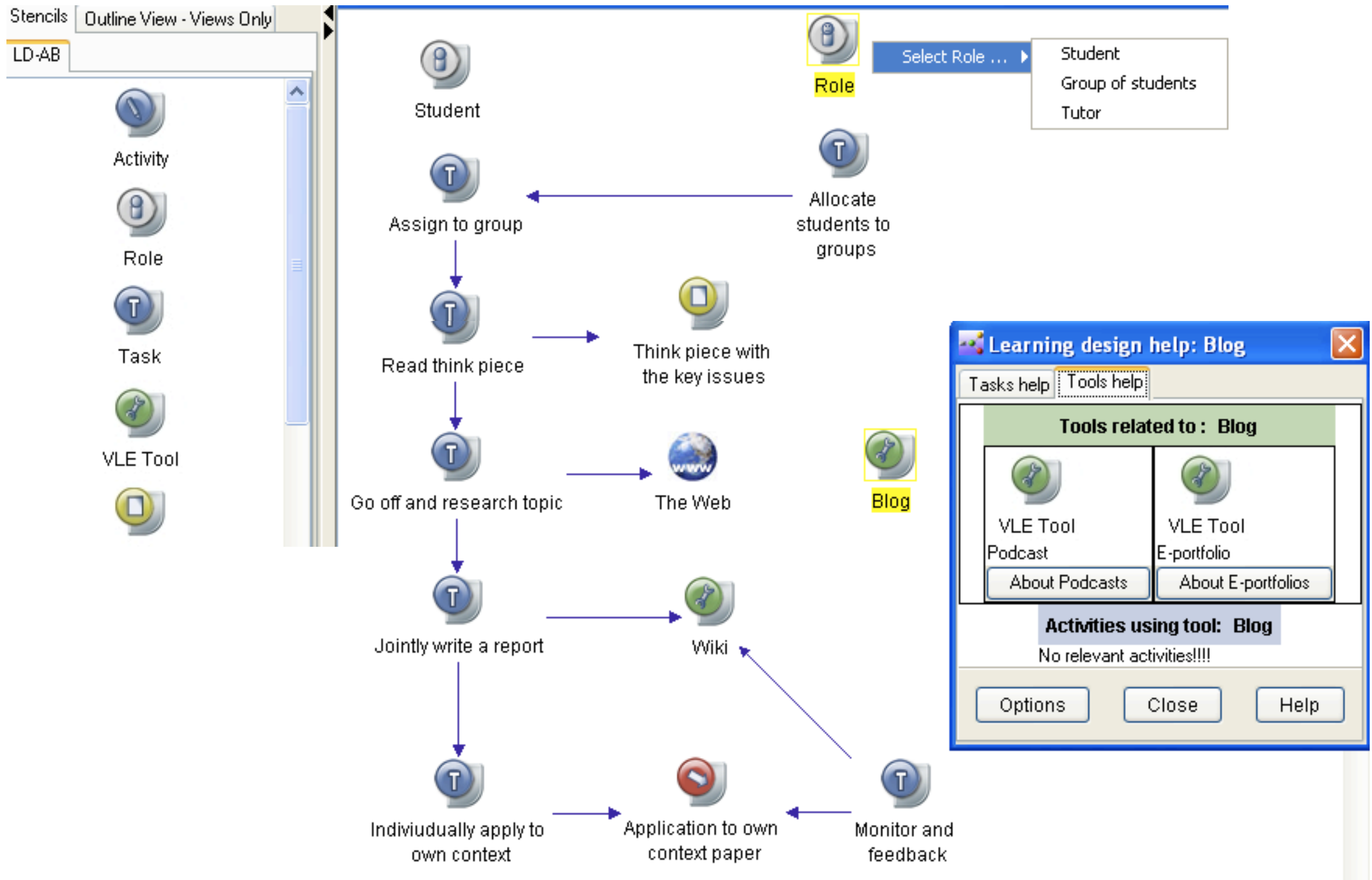
# Building a design

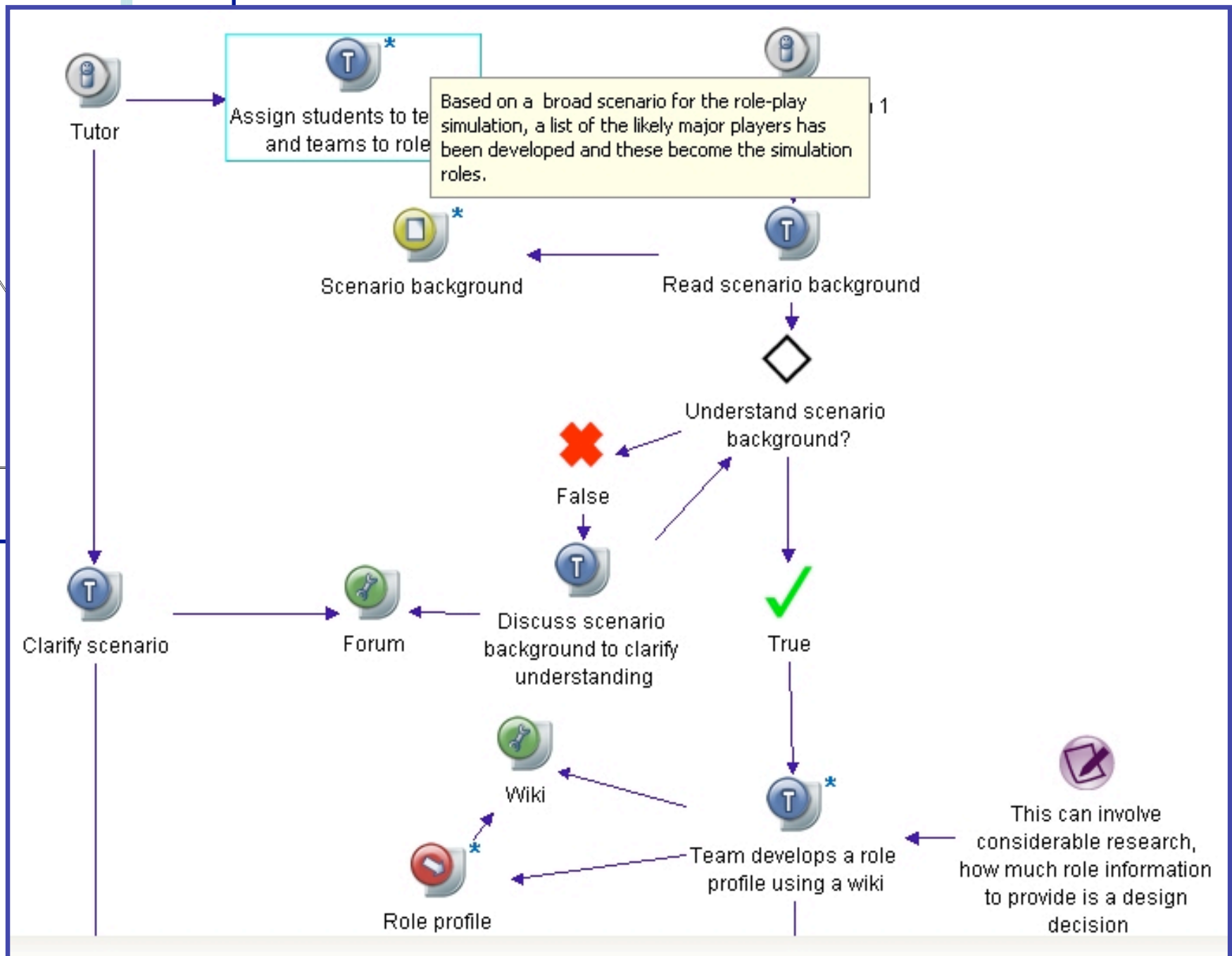
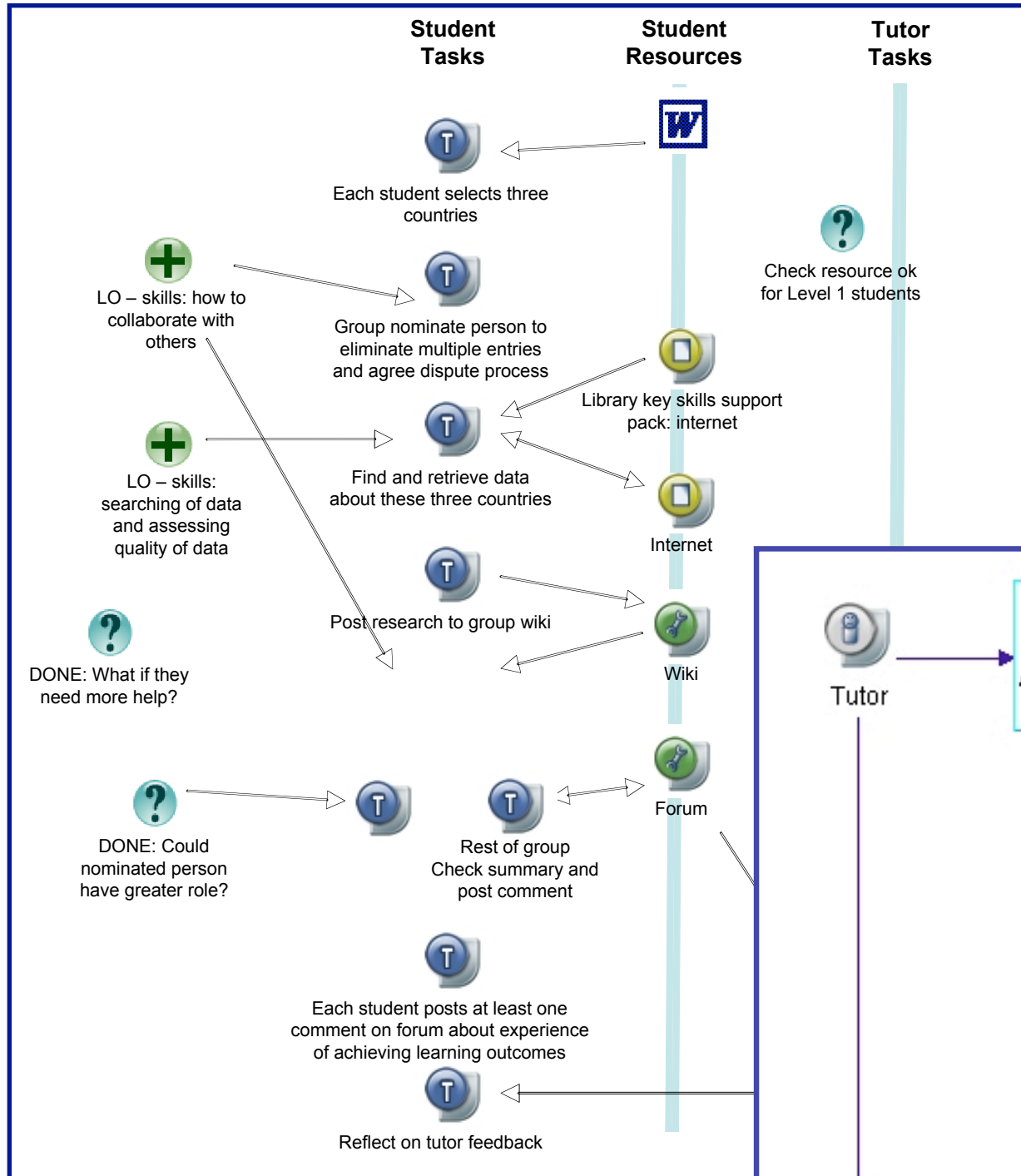


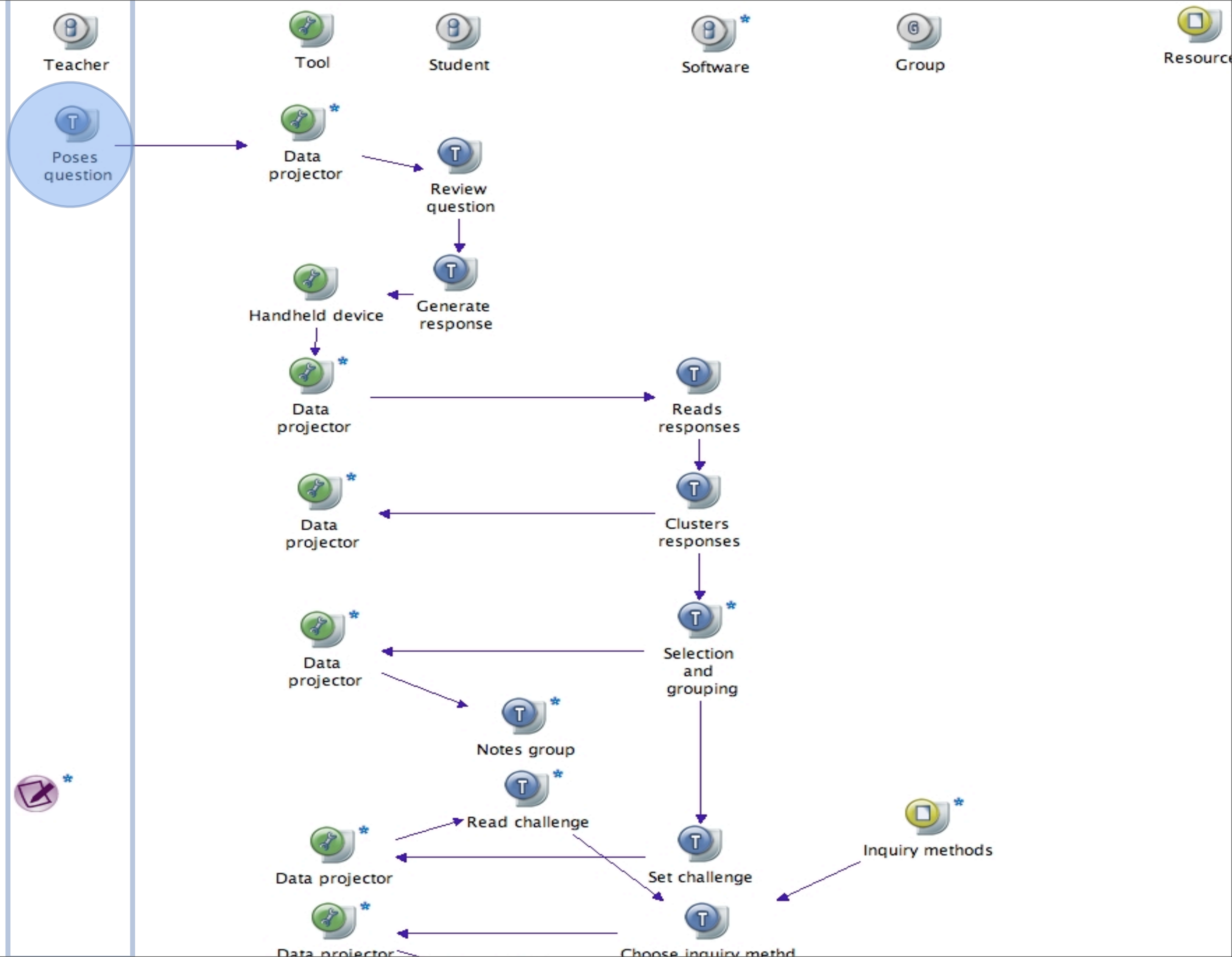
# Building a design



# Scaffolding & support







# Cloudworks

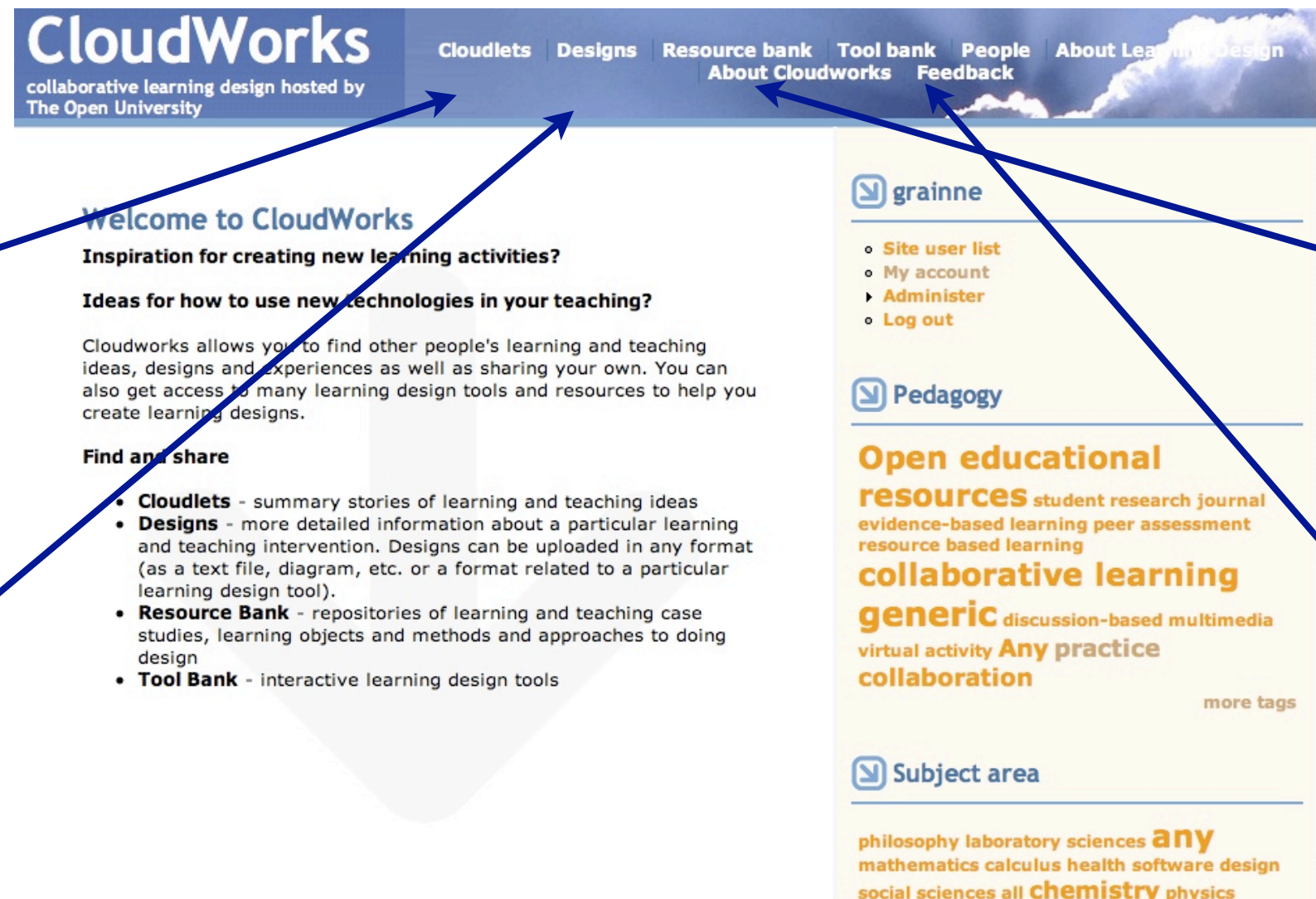
## Find and share designs

Cloudlets

Designs

Resources

Tools



Web 2.0 principles:  
tagging, profiles, user generated



# Cloudlets

Descriptive  
titles

Short  
& sweet

Simple  
tags

## Using wikis for developing meeting agendas

view

edit

### 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**

collaboration | wiki

## A significant learning experience

view

edit

### 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

edit

## Cyborgs in groups

view

edit

### 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.

Submitted by **karen\_pear** on 18 Apr 2008.

[/3.open.ac.uk/courses/bin/p12.dll?C01B823](http://3.open.ac.uk/courses/bin/p12.dll?C01B823)

MA (Tutor Marked Assignment) for the first few years of of the OU's MBA programme (**B823: Managing Knowledge**), ed students to participate in a web search and interpretation rking together in a virtual online team, using a variety of tools P shared workspace; FirstClass threaded forums; phone; required output was a group taxonomy of the web resources, dual report reflecting on how well the tools had ructured teamworking, and other reflections on being thrown ork in this way, as many organisations now ask employees

# Designs

A foreign language media archive

view

edit



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

view

edit

With foreign languages especially well as colloquial and regional very different from understand textbooks.

This resource is a collection of speakers talking in natural settings and a written English translation understanding and interpretation

Link:

<http://www.merlot.org/m>

Author: Elizabeth Pyatt

Format: Other

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

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

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

The ePortfolio is assessed simultaneously with independently of it.

## Digital threads

view

edit



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

More  
detailed

Any format

Additional  
links



# Resource bank

Resource Bank  
Add a resource

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

Learning objects

Info on tools

Case studies & ideas

Networks

Approaches

OERs

# Learning designs

Starting point

Approaches to learning

Designing for learning

home

exemplars

guides

tools

the project

search

overview

using this site

Learning Designs

products of the AUTC project on ICT-based learning designs

JISC

Effective

Welcome to Effective

a good practice guide

at practitioners in further

institutions and adult

Case studies

Information and Communication Technologies and Their Role in Flexible Learning

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.

[Move the mouse pointer over the

navigation tabs or over the diagram below

to see a description of Exemplars, Guides,

Tools, and The Project.]

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

↓

Exemplars

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

↓

→

↓

Guides

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

↓

↓

↓

Tools

A set of ICT-based tools with potential for generic use, based on exemplars

↓

←

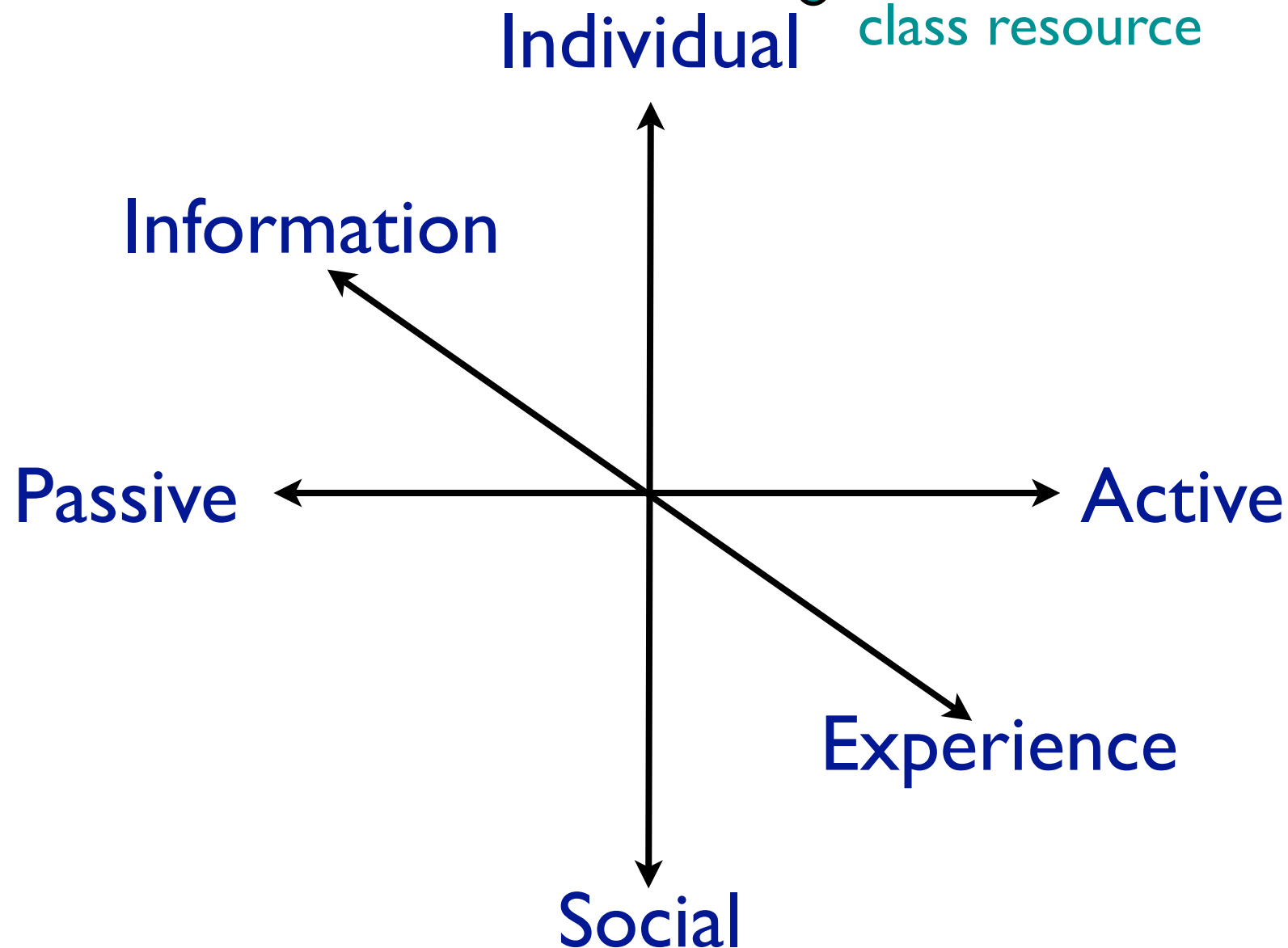
↓

Tools

# Interactive widgets

● Blog as  
reflective diary

● Blog collective  
class resource



| Principles                                   | Thinking & reflection | Experience & activity | Conversation & interaction | Evidence & demonstration |
|--|-----------------------|-----------------------|----------------------------|--------------------------|
| Reflect on experience and show understanding |                       |                       |                            |                          |
| Frequent interactive exercises & feedback    |                       |                       |                            |                          |
| Provides support for independent learning    |                       |                       |                            |                          |
| Supports collaborative activities            |                       |                       |                            |                          |

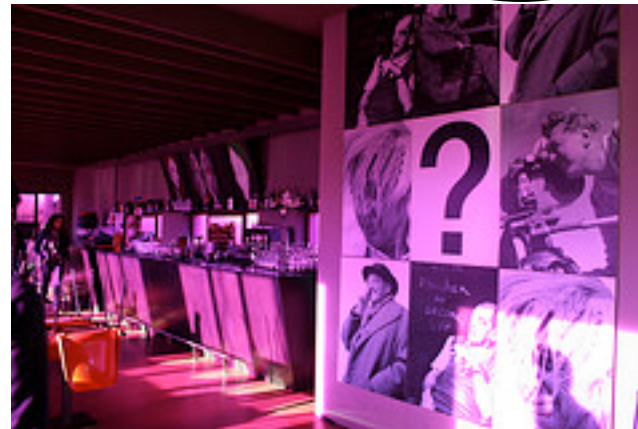


Organisation  
Creativity  
Dialogue  
Collaboration  
Reflection  
Interaction  
Inquiry  
Authenticity

## Positives

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

Tasks  
*Search, discuss,  
collate, present,  
etc*



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

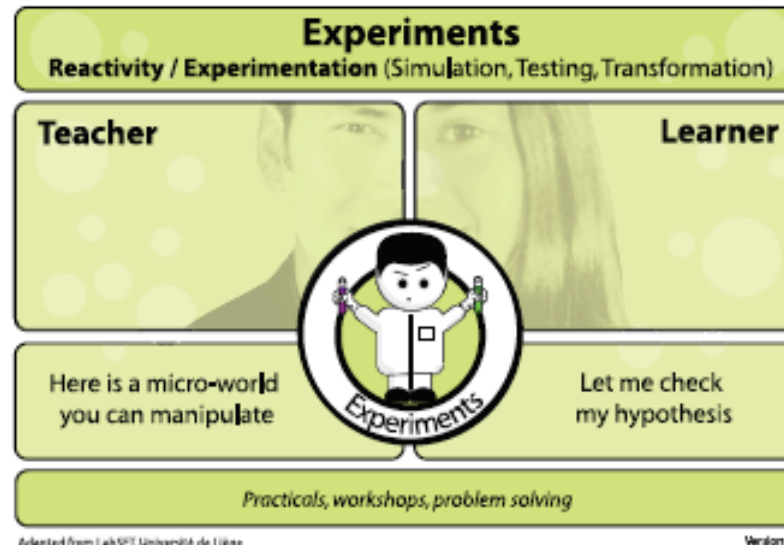
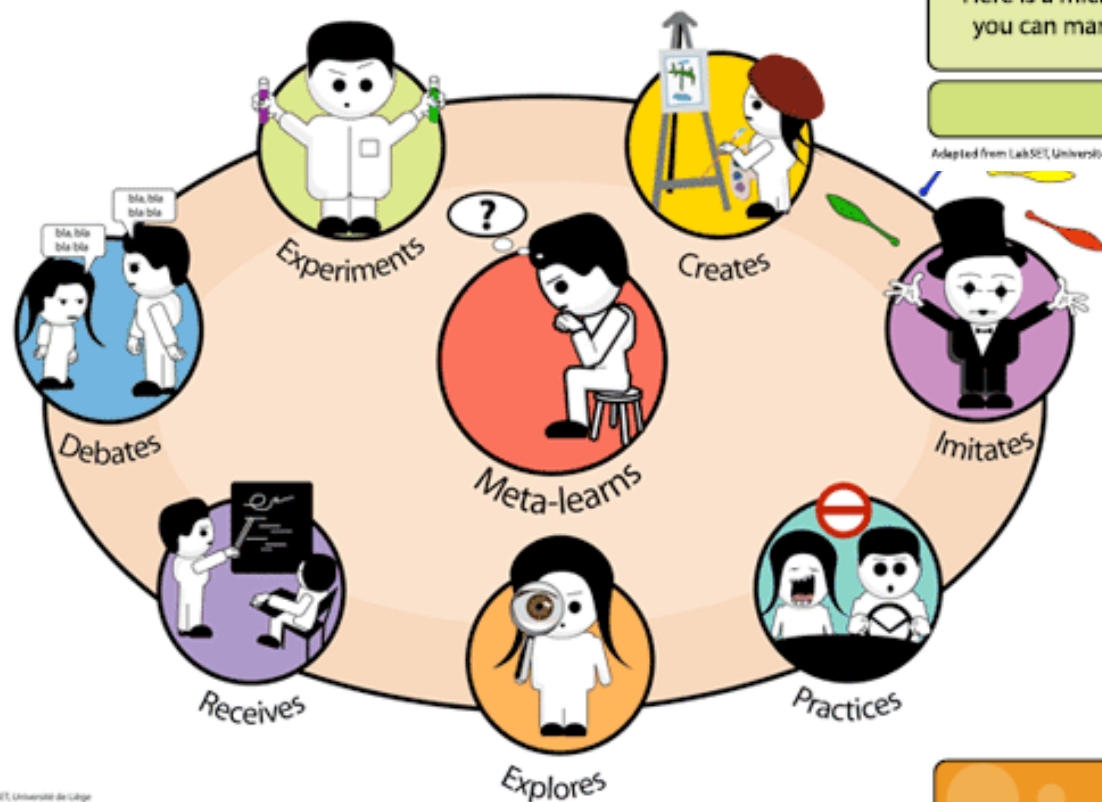
Blog  
reflection on  
practice

Group  
resources via  
RSS

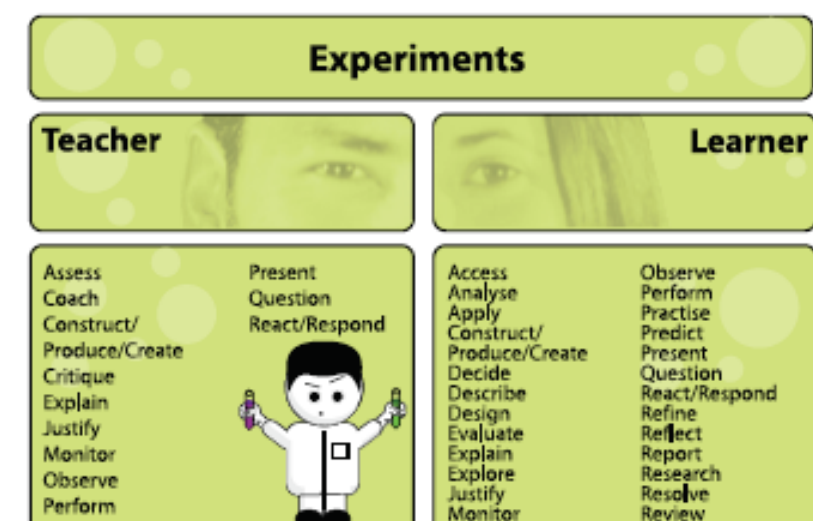
# 8 Learning Events

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

## The 8 Learning Events



Flashcards for each event showing teacher and learner activities



# Design tools

## Learning Design Tools

Add a tool

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

Current  
tools

Brief  
details

Additional  
links



# User profile



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

User  
details

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
- SLEM
- 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
- SchoolofEverything
- 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

Dynamic  
list of inputs

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 structured 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

Evolving  
network

# Simple tagging

## Tool

CTAT management phone Flash  
**multimedia** ePortfolio p  
mapleta resource bank VLE Microsof  
AcademicTalk posters audio editing  
paper-based **Flash** audio-visual de  
engine OER online resources Datab  
Lyceum google knowledge base w  
FirstClass e-portfolio **generic**

## Pedagogy

evidence-based learning research meta-learn feedback  
active\_passive journaling discovery learning online  
**discussion** group work experiment  
**collaborative learning** experiential  
learning questioning critical thinking independent  
learning **collaboration** imitate create practice decision-  
making competition formative assessment formal\_informal  
**reflection** Individual\_social debate student research journal  
project-based guided discovery Computer assisted  
language learning self-directed learning Open  
educational resources resource based learning  
investigation **discussion generic** peer assessment  
reflective learning project drill and practice **reflective**  
**practice scaffolding** demonstration **assessment**  
**presentation simulation** discussion-based concept  
development **role play** multimedia virtual activity **project**  
work analysis case studies critical discussion case-based  
**constructivism** negotiation quiz **problem-based**  
learning resource-based learning

computer science **history**  
iences philosophy any  
s teaching environmental  
pment studies ecology health  
pneering Statics all literature  
**uages arts** nursing Greek  
ental science **ICT** elearning  
calculus software design **MBA**  
language



# Plans for CompendiumLD

In-situ help

Classify key  
representations

Supporting  
creativity

Scaffolding  
templates

Text vs. visual

# Social objects

Engestrom

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

Weller

Content as social object  
Design as social object

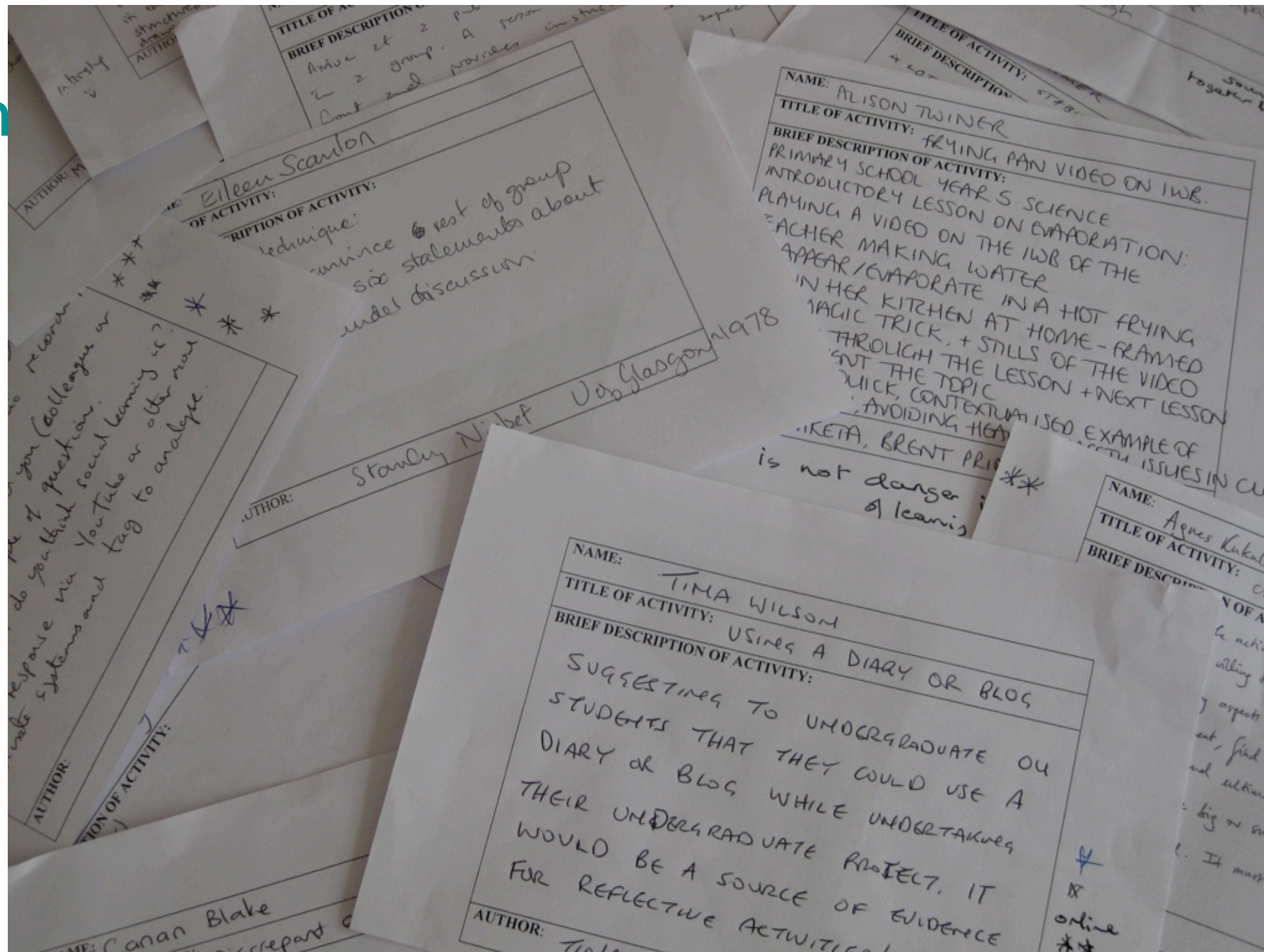
Wiley  
“Camp fire”

# Plans for Cloudworks

Annotation

Dynamic

Interactive  
widgets



Open  
API

Social  
motivation

Star  
ratings

Recommendations Peer Discovery  
network

# Next steps

Application:  
HSC level 2 redesigns



Embedding:  
Institutional roll out

Transfer:  
Other institutions  
Different communities



# SocialLearn



## Microlearner

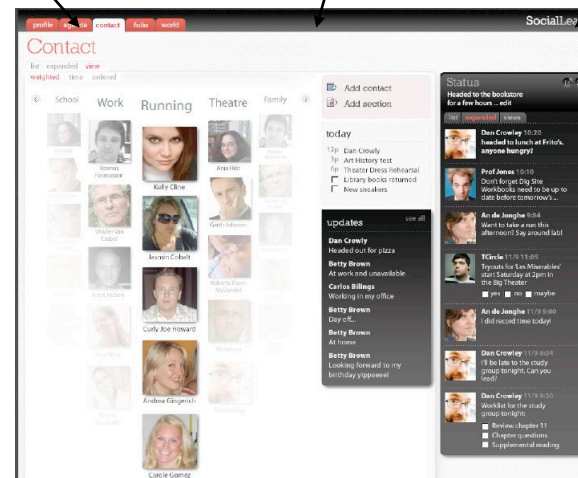
Little snippets of learning that lead to a vast mind

Writes to and imports  
goals, resources,  
stream

Making connections

## Cloudworks

Pull in and publish  
relevant courses/  
designs



Pull in and publish  
relevant content

Create goals, tasks

## 2Learner

Publicise study and  
learning story



facebook



# Further information

- OU Learning design briefing papers
  - [http://e4innovation.com/?page\\_id=13](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!!



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