



## OULDI-JISC Project Plan 2008-2012

12 June 2009

### **Overview of Project**

The revised and agreed title of the project is the **OULDI-JISC Project**

### **1. Background**

1.1 Over the last sixteen months at the OU, an extensive and developing set of resources, workshop guidelines, different methods of thinking about design and innovative tools have been under development supported by internal strategic investment funds. There is now an increasingly strong senior management support for development in this area and key institutional aspirations are concerned with the application of emerging technologies (such as roll out of the VLE, reuse of Open Educational Resources building on OpenLearn and the application of web 2.0 technologies through the SocialLearn project).<sup>1</sup>

In autumn 2008, the OU's current curriculum business model (CBM) project moved in to a new phase; beginning to look at trialling different curriculum models across all faculties. The CBMs are a set of generic models which exemplify different approaches to curriculum development. In addition to the "OU Classic" model (which focuses on team-based, in-house authoring of content), five new models have been identified - Wraparound, Brought-in, Disaggregated Assets (Learning Objects), Empty-box and web 2.0. For example, a brought-in course uses externally sourced material primarily; web 2.0 focuses on harnessing social networking as a main vehicle for delivery. Faculties have been asked to identify and audit courses for redesign.

1.2 A common claim in the literature is that the technologies now available offer enormous potential for enhancing the student learning experience, but there is a gap between this potential and the actual use of technologies. Learning design as an approach has emerged in recent years as a means of addressing this by providing guidance and support to teachers in the creation of learning activities. This proposal focuses on 2 institutional challenges that are becoming strategically important across tertiary education:

**Bridging the gap between technology and pedagogy.** The proliferation of web 2.0 and other tools offers many opportunities for education, but it can be difficult for educators to keep up with these developments, and then to have the time to consider how they might be effectively implemented into their curriculum design. The challenge is how to record and communicate the knowledge crucial to bridging this gap.

**Agile and responsive curriculum design,** How to respond quickly and adeptly to an increasingly diverse and rapidly changing market-led demands and subject domains, by incorporating flexibility and agility in curriculum design systems. There are 3 aspects to this:

<sup>1</sup> <http://openlearn.open.ac.uk> and <http://www.open.ac.uk/blogs/sociallearn/>

- i) An ever increasing number of potential subjects and associated topics that could be taught,
- ii) New curriculum and course business models are needed to cope with the increasingly complex context of tertiary education, and
- iii) As the demographics of learners diversifies, more personalised and adaptive approaches to curriculum design and delivery are needed.

### 1.3 Our LD methodology consists of 4 interconnected facets:

- Understanding design (gathering empirical evidence about design),
- Visualising design (means of articulating and representing),
- Guiding design (scaffolds and support) and
- Sharing design (to inspire and encourage uptake and reuse).

The tools, resources, and workshop materials we have developed, all focus around these four facets. Key milestones and developments about the project have been recorded on the blog [www.e4innovation.com](http://www.e4innovation.com) and recently we have added a blog feature to our Cloudworks site. There are three websites associated with this work. The main OULDI web site (<http://ouldi.open.ac.uk>), provides an overview of the work and includes a two-page downloadable PDF leaflet. There is also a website about CompendiumLD (<http://compendiumld.open.ac.uk>), which includes instructions on how to download the software. Finally, Cloudworks (<http://cloudworks.open.ac.uk>) is our site for sharing designs. We are now at a stage where we can test out this methodology across a range of contexts.

## 2. Aims and Objectives

### 2.1 Aim

This bid aims to extend and apply a new learning design methodology, which adopts an evidence-based, multi-faceted approach to support innovative approaches to curriculum design. The JISC Curriculum Design project (OULDI\_JISC) will enable us to trial and explore the use of the methodology with communities at the OU, four other HE institutions (Brunel Cambridge, London South Bank and Reading) and across at least two pan e-learning contexts (the Moodle and LAMS communities).

### 2.2 Objectives

1. To develop working relationships with units in the OU and to explore the transferability of elements of our approach by working with four other UK universities and two pan-communities, capturing barriers and enables by appropriate data recording mechanisms
2. To review the existing curriculum design processes at the OU in the first year of the project including describing and modelling the curriculum design process
3. To work with stakeholders at the OU to identify key moments in which enhancement or change in curriculum design process could lead to improved quality of design, and to work with partner institutions to undertake a similar process
4. To pilot learning design methodologies, tools and techniques in at least eight trials and to document and evaluate this experience

5. To engage with, build or enhance a range of communities and develop their capacity for self-sustainability particularly focusing on organised events, key topic or subject areas, existing operational units and conferences or special interest groups
6. To increase, monitor and evaluate exchanges of learning and teaching ideas and experiences in appropriate communities
7. To undertake and review annually enhancements to the website(s) being used to support the community building and activities planned (e.g. Cloudworks)
8. To undertake and review annually enhancements to the visualisation software used to support the pilot and design mapping tasks (e.g. CompendiumLD)
9. To continue to broaden in scope, content and definition the OU learning design methodology. This currently includes, although is not limited to:
  - Design workshops focused on enhancing design skills, enabling critical reflection on current processes and supporting possible new forms of working
  - Use of a social website to support discussions about design ideas, issues and experiences
  - Use of visualisation to support creative process of course and activity composition and assembly; orchestrate learning sequences thereby supporting the planning of writing, author reflection, critical review; as artefacts for establishing shared understandings and negotiating conceptions and to facilitate communication between stakeholders and established shared languages

### **3. Overall Approach**

#### **Strategy and Methodology**

3.1 Key components of the project will align with the four facets of our learning design methodology. The bid will include the review, pilot, documentation and evaluation of the roll-out and the planning, developing, managing and orientating of the innovation for the purpose of embedding within institutional processes. Feedback on our resources, tools and workshops to date has been encouraging – there has been much support and interest. We have run extensive events across the OU and externally the work that has been recognised both nationally and internationally (for example though invited workshops in the UK, Canada, Cyprus and Portugal). The project will work with each pilot to agree a strategy of learning design intervention informed by the OU method. It will undertake the same in the 4 other institutional contexts (Brunel, Cambridge, London South Bank, and Reading Universities).

3.2 Understanding design underpins all our work, we have built a robust body of empirical evidence (from case studies, interviews, focus groups and workshops) about design and we intend to extend this to review and pilot design at the curriculum level. The empirical evidence has informed the tools, resources and approaches to design that we have produced focusing in particular on visualising, guiding and sharing designs. An important

issue here is understanding complex and competing perspectives and variations in the design process.

3.3 A further key strand of the project is exploring the community component of design. Previous experience of developing and deploying design repositories has failed to anticipate adequately the role of social networking and social objects. In response to this important issue, Cloudworks is applying the best in social networking in gathering an evolving repository of designs and tools – key questions driving our development include how to:

- i) achieve critical mass,
- ii) ensure community development and
- iii) leverage user-centred sustainability.

Work on profiling and understanding specific customer groups through building personas has already begun.

3.4 Several communities are of interest to the project but the specific focus of, and need for adaption of, Cloudwork will rest on our assessment and prioritisation of attention to the following community categories:

- Internal communities: across the OU (such as the e-learning community, faculty-based teams and via institutional events and conferences) and the other 4 institutions (via specific events and local conferences)
- External communities: working with two established international communities – this bid has support from both the Moodle and LAMS communities for cooperative working
- Spontaneous communities: such as those formed at events and conferences – this is an emerging role for Cloudworks and may require adaption of the site
- Nascent communities: identify and build new communities: new lecturers, established educationalists/lectures, learning technologists & developers, but also those that could promote employer engagement and work-based learning
- Professional communities & informal communities: ensuring Cloudworks is adopted as a core tool for the OER community via the Hewlett-funded OLnet.

3.5 We are conscious that the development of Cloudworks must remain responsive and we will actively seek and react to new strategically relevant opportunities. We aim to use Cloudworks as a key conduit for driving our LD methodology where sustainability and community development are clearly important.

3.6 Technical development per se is not the focus; the bid offers the opportunity for comprehensive evaluation of the roll-out longitudinally over time. Nonetheless some technical development will be needed to address user feedback during the project, including further work on our tool for visualising designs (CompendiumLD) and our social networking site (Cloudworks). Cascading our approach in 4 other institutional contexts will help validate our approach and its transferability. The 4 institutions constitute Cluster C of the HE Academy pathfinder programme, so have all just completed an extensive benchmarking exercise and have each developed different frameworks for strategically embedding e-learning. Therefore this bid aligns well with their pathfinder work and there is a successful, established working relationship to build on (Conole was the critical friend for Cluster C).<sup>2</sup>

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<sup>2</sup> See for example <http://e4innovation.com/?p=117>

3.7 These five institutional contexts will demonstrate the transferability of the approach, provide in-depth case studies of embedding and become a means of supporting flexible curriculum design. An issue here will be exploring the extent and nature of the translation of aspects of the methodology in to the other contexts. Project partners will be introduced to our methodology and we will then agree how this can be used in their context. The intention is to adopt a cascade approach – initially running and support events in their institutional contexts and gradually moving to them adapting and integrating the approach as appropriate. We will synthesis feedback from the partners in terms of their experience of using the methodology.

3.8 This range of settings, both intra-institutional and inter-institutional, will provide a robust test-bed for pilots. It will also further our understanding of issues of what constitutes a 'critical' mass or 'saturation' for viability of usage and support and where the limits of sustainability lie. We intend to be opportunistic in terms of community build and are open to aligning with new initiatives – either internally or externally as appropriate.

3.9 Taken in combination, this innovation is timely for all five institutions – following on from the completion of the pathfinder work and aligning with current curriculum innovations in the OU. We believe our LD methodology should have much to offer the OU's current ambitious programme of change through the development of new curriculum-business models (CBM) serving both as a mechanism for review and evaluation and for promoting further developments. There have been initial meetings following a faculty audit and the second phase of the CBM project is about to start and we will participate in the newly formed working group. Early activity will/is considering how to take this work forward and has as its key criteria excellence in pedagogy, innovation and cost effectiveness. Such themes are likely to overlap with aspects of our process review and so, between the CBM modelling and our own review we will identify our key strategic opportunities for curriculum design pilots.

3.10 We expect to pilot our methodology in several faculties. There will be a pilot undertaken in:

- The faculty of Health and Social Care (HSC)<sup>3</sup>
- The faculty of Education and Languages (FELS)
- The OU Business School
- Course as part post-graduate global distance courses

3.11 Our work will build on previous engagements with these faculties, and this previous engagement will also be reported as part of our final documentation. In the case of the HSC we have already held a two-day event in June 2008 where academics about to embark on the redesign of second-level courses were introduced to our LD methodology (and associated tools and resources) and over the Autumn we worked with them to explore how these can be used specifically in real course contexts. With FELS we ran a very successful 'Design Challenge' event in September 2008 (rated 'very good' or 'good' by most participants) and there was a further workshop in January 2009. We have also begun a programme of work with OUBS and ran an initial workshop to look at the design of their new global MBA in May 2009. Further events are planned including another workshop in June. The project will use this to build on the interest and enthusiasm generated as a result of this event with the relevant stakeholders

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<sup>3</sup> <http://e4innovation.com/?p=201>

3.12 Our critical success factors operate at several levels. Some rest upon specific use and achieving real change - such as the effectiveness by which communities can be encouraged to engage with or develop with support by Cloudworks - and others attitudinal and social changes that lead to recognition and acknowledgment that the principles of sharing, exchange, and visualising have a value. Our critical success factors are outlined below. The Evaluation Plan (see later) details how these will be monitored and evaluated:

- A body of evidence sufficient to demonstrate the Cloudworks website has created real enhancement in the professional knowledge and understanding of participants and increased their sense of belonging to a community of practice.
- A community of sufficient size and/or a sufficient annual programme of community engagements that ensure the site will continue to be used frequently without intervention from the project team.
- Demonstrable positive improvement in the quality of final designs that can be attributable or would appear to be attributable to interventions made by the project.
- Resources and guidance that are regarded by users as clearly and effectively supporting them in the intend task/skills/knowledge acquisition.
- Two software products that are regarded fir-for-purpose for install and use in diverse university setting and that have either been used by, or inspired use in, several of these settings.
- If failure to fully achieve any of the above, a clearly documented account of lessons learnt and difficulties encountered

We anticipate that critical success factors will likely evolve over the lifetime of the project.

3.13 The aims of OULDI-JISC are broad ranging and ambitious and we remain very aware of the difficulties of trying to achieve some of what we are setting out to do. For example, we are aware for example of the difficulties associated with previous innovation and transformation work on uptake of technologies, issues around changing skills sets and attitudes of staff, tensions between technical innovation and existing legacy systems, difficulty of achieving self-sustaining communities of practice and the failure of many previous systems that have trying to gather and promote good practice. The final success factor recognises this uncertainly and challenge. It suggests that should we not be fully successful, so long as we can document the lessons learnt then our activities will carry strong positive benefit (although such an outcome would clearly be less desirable than the other factors for success).

## 4. Project Outputs

4.1 The project will have the following outputs:

- a) A record and evaluation of our approaches to implementing institutional change through adopting a LD approach.
- b) A clearer understanding of using learning design successfully in curriculum innovation, strategies and approaches to embedding LD as an approach across a range of contexts and models.

- c) A self-sustaining learning design community providing a forum for exchange of ideas and designs, along with guidelines for success factors identified to make such a community work.
- d) A set of resources and guidance on different aspects of learning design and outlines for associated design activities and tailored workshops.
- e) A sustainable and evolving, user-generated site (Cloudworks) for collaborative learning designs with a critical mass of learning designs, as well as tools and resources for design. We would like to see a steady increase in use of the site with up to 500 clouds produced in the first year, 1500 by the end of year two and 4000 by the end of the project.
- f) Evidence of use of a software application designed to support learning design and visualisation

4.2 The key deliverables associated with these outputs are:

- A baseline report
- Curriculum process review
- Final report
- Evaluation report
- Description and models of design processes before and after intervention
- Guidance for other institutions, this will in the first instance focus on those with a brokerage role in the partner institutions
- Tools for sharing and visualisation
- A minimum of four OU case studies on curriculum design and one case study per partner institution will be produced
- A synthesis of the evidence gathered during project (such as data from workshops, events, surveys and interviews)
- Reflective log recording our experiences on an ongoing basis in the project.

## 5. Project Outcomes

The overarching outcome for the project is a clearer understanding of using learning design successfully in curriculum innovation, strategies and approaches to embedding LD as an approach across a range of contexts and models.

### 5.1 Learning and teaching practice

**Efficient design processes:** the creation of a social network site (Cloudworks) based around sharing designs in a range of formats will significantly support the process of reuse and scaffolding the design process, thus leading to more efficient production. Adding features to CompendiumLD such as activity timing feature to help designers estimate student and tutor workload before committing to production

**Flexible design processes:** by incorporating designs from a wide range of users and communities any individual educator or institution has access to a far greater knowledge base than previously, thus promoting flexible approaches. This supports our belief in promoting a 'pick and mix' approach to design as the support a novice designer needs is different from those of an expert designer.

**Innovation and creativity in design.** Through the development of a visual learning design tool (CompendiumLD) we have explored the tension between having a highly structured approach to design and a more open one. CompendiumLD supports in-situ help,

templates for design and different approaches to design. Clouds within the Cloudworks site can represent any teaching and learning ideas or designs and can include a range of representations, including Moodle XML, LAMS sequences, CompendiumLD maps, case studies, narratives, etc.

**Flexible perspectives:** A further aspect of the project is the creation and trial of a number of dynamic, interactive widgets (such as java applets) for design. We see these as providing different ways of thinking about the design process. Particular widgets we have already identified and trialled in workshops include a 3D-tool for mapping tools in use to different types of pedagogy and a 2D matrix for mapping teaching approaches to different pedagogical approaches. We also want to apply an open API approach – so that others with an interest in developing related widgets can link into Cloudworks.

### 5.2. Technology and Standards

**Efficient recombination:** CompendiumLD, the widgets and other resources and tools provided by Cloudworks will facilitate rearrangement of tasks, activities and units at curriculum level. This will support flexibility and, especially using visualisation, will lead to a greater appreciation of how changes impact the entire design and the understanding of the relationship between learning outcomes, assessment, tasks, tools and resources.

**Understanding design processes:** evaluation of the value of the LD methodology to different users through workshops, a body of review and monitoring work (such as working and observing course teams) and usage data from the Cloudworks, will strengthen knowledge and mapping of how course-related information is created, disseminated and received.

**Stored in systems for ease of reuse:** Cloudworks will provide a system in which users can share and discuss experiences and designs. By allowing users to adapt, and comment on existing designs, the site acts as a conduit for collecting the experience of implementation, which can be mined to inform technical development.

**Curriculum documentation and individual institutional ‘installs’:** the aim is to develop initially a community-wide social network site, so as to gain a critical mass of contribution, but institutions may also choose to have a local network confined to the institution. The experience of implementation in institutions will lead to the development of an ‘institutional install’, i.e. a standard version of the Cloudworks site that can be installed by any specific institution for internal use. These institution-specific instantiations will have a resource area for the official curriculum documentation that is required by that institution.

**Resource and workload planning:** our recent research supports the need for tools that calculate staff and student workload and allow the assessment of resource implications both in visual and textual representational formats.

**Design processes and requirements for technical services are well documented, and are used to inform technical development.** For example, the CompendiumLD tool features technology-specific help, so if a user selects ‘VLE forum’ as a technology in the design process, related activities and tools are provided. Again, the development of institutionally specific versions of Cloudworks will encourage institutions to address explicitly their technology needs.

### 5.3. Strategy and policy

**Appropriate and agile curriculum design processes in place to help achieve institutional missions.** It is our belief that, open source software and user generated content demonstrate one of the best approaches for dealing with complexity and rapidly changing environments and this leads to the adoption of a bottom-up, distributed

approach. Much of curriculum design is currently solely a top-down process, which is still important, but the combination with a community-based, distributed approach offers institutions a means of addressing their curriculum design needs. Any given educator is unlikely to have the expertise they need to harness new technologies to meet new curriculum demands. However, a socially powered system that combines the expertise of educators from a wider group is more likely to contain the expertise somewhere.

#### **5.4 Contribution to the JISC programme**

The project will contribute to the outcomes of the programme in the following ways:

**Improved understanding of effective design and how design processes can be supported by technology.** The Cloudworks site is intended to be easy for a practitioner to contribute to, as well as find appropriate designs, resources or tools for specific needs. Through the benefit offered by a socially powered system, the motivation to participate is increased, and thus the benefits of the design process are made more apparent. As well as this the project will operate specific implementation plans, running workshops at the 5 institutions, which will include a range of stakeholders, including developers, support staff, teachers and senior management.

**Evidence of learners achieving their goals through flexible curricula.** By following the design process through to implementation in 5 institutions it is hoped that evidence of the impact of practitioners using the design tools can be demonstrated and evidence of how this leads to an improved learning experience for students.

**Enhanced institutional processes in place that support innovation.** By working closely with 5 institutions, a range of different types of institutional processes will be gathered. These will then be accommodated in the institutional version of Cloudworks to make the link between institutional policy and pedagogic practice explicit.

**Domain knowledge, reusable models, user requirements to support the development of technical infrastructure.** By having technology as one of the main tag fields in Cloudworks, the use of technology in teaching is forefronted and provides an easy means of accessing the range of tools. Also, the inclusion of both the LAMS and Moodle communities will provide a technological perspective on the curriculum design process which will inform all users.

**The stimulation of positive and informed change in curriculum design processes.**

Using a socially driven approach will stimulate debate around the notion of curriculum design, because the designs become social objects, around which users congregate.

**Enhanced understanding of how the use of technology in the design process can lead to tangible benefits.** The Cloudworks site itself, and associated tools and widgets, will be an example of how technology can lead to tangible benefits. In addition the inclusion of tools such as the JISC-funded pedagogic planners, LAMS and CompendiumLD, and their use in targeted workshops will demonstrate how such tools can aid the design process in different ways.

#### **5.5 Value to HE and FE community**

Through working with 5 different institutional contexts as well as 2 different design communities (LAMS and Moodle) there is coverage across FE and HE. It also ensures that the methods and approaches are trialled in a variety of different contexts. Furthermore because the project builds on existing collaborations, it will be possible to achieve greater and quicker penetration than would be possible if we were starting from scratch. The project will be of value to the HE and FE community as follows:

1. It provides a social network for educators around social objects.
2. It provides a wide range of designs that educators can take and adapt, thus acting as a valuable knowledge base.

3. It provides access to a range of design tools and approaches to thinking about design that can be used in the design process and will thus meet the needs of different approaches to design.
4. It acts as a repository for resources relating to the curriculum design process.
5. It helps bridge the gap between technology and pedagogy for practitioners by allowing different pathways into the designs, and providing a range of tools and widgets to explore the affordances of particular technologies.
6. It promotes the concept of learning design by allowing users to embed designs in other media.

## 6. Stakeholder Analysis

Stakeholder	Interest / stake	Importance
<b>Internal</b>		
Pro-vice chancellor (PVC) Curriculum Design (Alan Tait, Tony Walton, James Fleck):	Curriculum Business Models project: evidence and evaluation of how new models are realised and implemented	HIGH
PVC Learning and Teaching (Kirkpatrick)	Curriculum/course teams engaged in the pilots: evidence of the OULDI-JISC work showcasing new methods of working across the OU for IET and in particular demonstrable evidence of transfer of research work and externally funded activities into institutional strategic work	HIGH
Open University (OU) Community: Course Teams, Course Managers and developers & Associate Deans:	Cloudworks to provide a place to record designs and experience for sharing and use. Application of tools, resources and approaches developed by the project to different faculty contexts and across the different stakeholders involved in the course design and delivery process,	HIGH
Institute of Educational Technology (IET)	Key in terms of IET's institutional service role and support for development of strategic priorities – these have already been mapped for the current programme of work. An example of a way in which IET might develop new approaches to working with the faculties and linking research and practice more closely.	MEDIUM
Learning and Teaching Solutions (LTS)	Provides a mechanism for bridging between the academic course teams and technical implementation of designs into the VLE and other tools	MEDIUM
Knowledge Media Institute (KMI)	Exploration of the technical research aspects, evidence of adaptation of the original Compendium tool development by KMI	LOW
Olnet / OER community	Mechanisms for embedding the outputs of Openlearn and exploration of methods for promoting sharing and OER reuse	MEDIUM

<b>Learners</b>	A more explicit representation of the design intentions and a mechanism using this as a means of guiding learning. Use of Cloudworks as a tool for sharing ideas and resources for courses.	MEDIUM/LOW
<b>Partners</b>		
Lead contacts at the Four cluster C universities:	Alignment with existing e-learning pathfinder frameworks. Expect to identify 1-2 courses to engage with; demonstration & training of Compendium, Cloudworks etc; subsequent support; joint collection and analysis of data; undertake own work to embed and disseminate within institution. Some internal resources will be provided.	HIGH
Those internal stakeholders identified by each of the four Partner Institutions	Senior management, teaching and learning staff, course designers, academics, students etc.	MEDIUM
Moodle Community	An opportunity to apply the LD methodology across the broad Moodle community base, exploration of interoperability with existing Moodle tools, builds on the existing relationship between Moodle and the VLE programme at the OU	MEDIUM
LAMS Community	An opportunity to apply the LD methodology across the broad LAMS community base, exploration of interoperability with LAMS, exploration of the relationship between CompendiumLD and LAMS, the builds on the existing partnership of research and development between LAMS and the OU	MEDIUM
The FE community	Relevance specifically to the FE community, in conjunction with an existing communication mechanism such as the JISC Regional Support Centres	MEDIUM
<b>Other curriculum Design and Delivery Projects</b>		
The other curriculum design and delivery projects	Sharing findings, engaging in discussion, shared understanding. Interest in tools, approaches and resources developed.	MEDIUM
Phoebe and the London Pedagogical Planner LPP.	Building on the work of the existing JISC pedagogic planners – we have already trialled this in our workshops to date and have had discussions with Phoebe about how we might more closely integrate this with CompendiumLD	LOW
<b>External</b>		

JISC	Expect deliverables and engagement with other projects	MEDIUM
Other HE and FE institutions	Potential customers for the guidance and 'off-the-shelf' product we develop	MEDIUM
Academic community	Evidence and evaluation data, methodologies, experience and success in 'building' community.	MEDIUM
Professional communities	Will be approached and participate in community building and design sharing initiatives. Some communities, such as learning technologists do not yet have a mature online community.	MEDIUM/LOW
Informal communities	Informal communities. Using experience of OpenLearn and SocialLearn as a conduit	LOW

## 7. Risk Analysis

(1=low risk, 5=high risk)

Risk	Probability (1-5)	Severity (1-5)	Score (P x S)	Action to Prevent/Manage Risk
Course Business Model project takes longer than expected to deliver that required for this project	3	4	12	<p>We have always intended to use our own process review of curriculum models as a key driver of our enhancement work so this will be unaffected by a lengthening of CBM timescales. However, our pilots are intended to operate within the context of CBM so if timescales are changed this will impact the clarity and definition of the context and institutional direction we are working with.</p> <p>Monitoring: We will ensure we align as best we can with the CBM work by maintaining a presence on the working group and ensuring our work is always compatible with their current position.</p>
Competing service/s to Cloudworks launched	3	4	12	<p>The principle behind Cloudworks is promoting sharing and communication. In developing and piloting the tool in practice we will gain valuable experience and understanding in how the tool can best be used. Even if Cloudworks is superseded, which we are prepared may happen over the medium-term, the knowledge and communities formed will still have value. In addition, the site will have an open API, so lends itself to linking to other initiatives.</p> <p>Monitoring: engaging in regular communication/contact with other national and international groups working on learning design (e.g. conferences, workshops, correspondence) will bring competing services to our attention</p>

Networks do not reach a critical mass	3	4	12	<p>We know previous publically, accessible repositories appear to have failed to gather critical mass and, whilst this project seeks to do something significantly different, we expect to minimise this risk by bringing in 4 other Universities, 2 established learning design communities and create an additional tier of networks restricted to the individual University or groups within it. Furthermore, this project will trial the mechanisms for community building – the evidence from which will be useful for future related projects – and continue to build an understanding of central issues through quantitative and qualitative research and evaluation.</p> <p>Monitoring: As Evaluation Plan</p>
Under-engagement in pilot projects (external)	2	4	8	<p>Resource will be assigned to each pilot in order to ensure that the OU team and our partners have time to undertake any additional workload during the process and during the evaluation phase. There are four external institutions so under-engagement at any one would not significantly compromise the overall pilot. We would also expect that in having a full-time project officer post we will ensure there is constant support and encouragement (supported by the Project Lead and Manager) and that by piloting in a variety of contexts, any local problem with one will not unduly affect the remainder.</p> <p>Monitoring: Curriculum Design Project Officer to have regular contact with partners. Engagement reported at team and Partner meetings</p>

Lack of Senior management engagement (internal and external)	2	4	8	<p>At the OU we have strong endorsement for this work (through the PVC for Curriculum and Awards - Prof. Tait, the PVC for Learning and Teaching - Prof. Kirkpatrick, the newly established cross-institutional LD steering group and the steering group for the CBM work (James Fleck – Dean of Business, the Associate Dean for Science, Jim Iley and Tony Walton from the Strategy unit). This is also evident, as the work to date has been funded through strategic internal investment. A second phase of funding has been approved for 2009-2010, providing valuable matched funding for this bid. This internal investment is both timely and complementary to the funding sought from JISC for this proposal and means we can build on an already well-established programme of work. Letters from partner institutions demonstrate similar levels of senior management engagement and interest.</p> <p>Monitoring: Project Leader to ensure regular communication with senior management and feedback to project team</p>
Legal rights to the content in Cloudworks	2	4	8	<p>We are aware that the matter of ownership and copyright of material could be an issue, especially on the internet version of Cloudworks, although have met with the legal team at the OU and planning terms and conditions for the site. We will talk to individuals and universities and undertake research to further understand the issues and develop responses in Cloudworks. Whilst predicated on the idea of openness and sharing, this may mean closed or restricted spaces and greater guidance and advise. Of central importance is that users are able, confident, reassured and willing to use the site in a way particular to their situation.</p> <p>Monitoring: of Cloudworks user</p>

				feedback as detailed Evaluation Plan. Periodic review of situation by project officer
Development of required features in CompendiumLD	2	3	6	It is possible we will not be able to add all the features that we have identified (or will identify) however this will not detract from the existing core product of CompendiumLD which is already in continuous public beta release. The bid has allocated dedicated developer time of 0.25FTE for the first two years (and 0.2FTE thereafter) for development work. In addition, work exploring how (techniques, application, benefits) designers can use and derive maximum value from CompendiumLD and this work will be augmented by development of for OU internal use at 0.5FTE over the next calendar year. Monitoring: regular updates at monthly strategic team meetings and as Evaluation Plan.
Development of required features in Cloudworks	1	5	5	0.5FTE developer time in the first year and 0.25 thereafter. An agile development structure is in place. This work will be augmented by development of Cloudworks for OU internal use at 0.5FTE over the next calendar year. Monitoring: as in Evaluation Plan
Under-engagement in pilot projects (internal)	2	2	4	'Under-engagement in pilot projects (internal)' is deemed less of a risk as we have a good choice of courses and faculties in which we could choose to pilot this work. Monitoring: regular meetings and communication between Project Officer and Project Lead and faculties will ensure any problems are identified.

Staff turnover	2	2	4	All key roles are or will be in either permanent or two-three year contract posts. Any threat is likely to emerge towards the close of the project (years 3-4) although most skills loss could be found within IET. Managing: Loss of project-specific knowledge will be minimised by sharing of knowledge within the core team of 5 and effective project management and process of recording and documenting work undertaken.
Competing software to CompendiumLD launched	1	3	3	High development costs of visualisation software will deter most entrants to the market. There is little competition with existing learning design tools as they seek to facilitate design in fundamentally different ways. And besides, even if another tool is launched, we will have gained valuable experience and understanding in how visualisation works – which has more wider relevance than any one tool Monitoring: as part of our ongoing development we will ensure we remain aware of other software developments
Failure to adopt innovation in technical development	1	3	3	In bringing together existing technical developers with prior experience working on these innovations we expect to minimise this risk. We also expect our collaboration with Moodle and LAMS to further the technical expertise.

## 8. Standards

Name of standard or specification	Version	Notes
XML		CompendiumLD
SQL		CompendiumLD
XHTML		CompendiumLD
JPEG		CompendiumLD

PNG		CompendiumLD
JAVA		CompendiumLD
HTML	4.0	Cloudworks
CSS	2	Cloudworks
RSS	2.0	Cloudworks

## 9. Technical Development

The Cloudworks website is currently on the Drupal open-source content management system which uses PHP and MySQL. Our plans to move this to a more flexible framework will be reported to JISC in due course.

The project will take a 'Release Early, Release Often' approach and during the Cloudworks development phases, releases will be scheduled once per month. Each of these one-month periods will start with an iteration meeting at which the Cloudworks team will decide the priorities for the next release, taking into account evaluation and feedback so far on the site. To coincide with this meeting, details of the release and plans will be posted on the Cloudworks blog. Because of the innovative nature of the project, we feel that a more 'agile' and iterative approach suits the project best.

All code will be kept under version control, initially on the departmental version control system, but we plan to later move to making the development work open-source. Unit tests will be written where appropriate and the code will also be reviewed by another member of the development team in the Institute of Educational Technology. Usability testing and evaluation is incorporated into the project.

CompendiumLD is being developed using an iterative rapid prototyping approach. Features are informed by evidence gathered in interviews and workshops, and prototypes are shown to relevant user groups.

## 10. Intellectual Property Rights

As discussed in the risks section, the principal concern emerging from events and survey is about 'who owns a design'. Whilst individual designers may feel ownership, terms of contract or the nature of relationships within a design group may mean this answer is more ambiguous; and whilst informal sharing is practiced by many, more formalised, visible sharing through Cloudworks will draw greater attention. In addition there are issue of third party copyright in images, text, audio etc uploaded to Cloudworks and how the site will responsibly monitor and respond to rights infringement. Not all potential users may be familiar with rights issues so some guidance will be required (terms and conditions, check box when uploading to confirm contributor has necessary permissions/ownership) and enforcement may be required. Whilst we seek to encourage an open approach to sharing, we do acknowledge this may need to be tempered in some contexts and continued consultation, including with rights teams will be taken.

A second IP issue involving part of the code used in CompendiumLD has been resolved and

this is no longer a barrier that should affect our ability to make CompendiumLD publicly available and free to use, or compromise the standards or technical development discussed above.

## ***Project Resources***

### **11. Project Partners**

#### **11.1 Partners**

**Brunel University: Phil Albert** is Head of e-Learning and oversees an e-Team to promote and support e-learning with staff and students.

**Reading University: Maria Papaefthimiou** is e-Learning Manager at the University of Reading, working in the Centre for the Development of Teaching and Learning.

**London South Bank University: Helen George** is Head of the Learning & Teaching Enhancement Unit at LSBU. She leads an academic development team who support the delivery of the University's Learning and Teaching Strategy.

**University of Cambridge: Dr. Patrick Carmichael** is Head of Evaluation Group at CARET, University of Cambridge. Director and PI of a number of ESRC and EPSRC research projects, from October 2009 he will be director of 'Ensemble: Semantic Technologies for the Enhancement of Case Based Learning' project funded under the ESRC/EPSC Technology Enhanced Learning Programme.

**LAMS Community: James Dalziel** is Professor of Learning Technology and Director of the Macquarie E-Learning Centre Of Excellence (MELCOE) at Macquarie University in Sydney. He is Director of the LAMS Foundation and LAMS International Pty Ltd; and has led projects such as MAMS (Meta Access Management System), RAMP (Research Activityflow and Middleware Priorities), and ASK-OSS.

**MOODLE community: Martin Dougiamas** is CEO of the company that has developed the innovative open source Virtual Learning Environment, Moodle. He has a strong background in both technical and pedagogical aspects of elearning and is a strong supporter of the adopted of a constructivist, student-centred approach.

#### **11.2 Roles**

Each partner will assume the role of liaison, contact person and coordinator, when required, for the institutional pilots and community building aspects of the project. They will be encouraged to think through and propose a plan for how, and which elements, of the learning design methodology would be relevant to their institution. They will also foster a community of interest in their institution and provide logistical and practical support for delivery of events, etc.

11.3 The consortium agreement is in the final stage of production and we anticipate that it will be signed by all partners by the end of April.

### **12. Project Management**

12.1 The project builds on an established learning design team at the OU. The team will meet face-to-face on a regular basis to oversee general project activities. Two meetings have been held to date (Oct at the OU, January at London South Bank). This will be supplemented via communication through the OU Learning Design (OULD) mailing list, a shared space in GoogleDocs and the project website. Regular work progress updates will be made and documented and agile development structures adopted where appropriate for programming. Cluster Group Partners will meet regularly, initially once every term for dissemination, discussion and planning. The OULDI-JISC curriculum design project office will act as the main contact point for the partners. They will keep partners informed of OULDI-JISC activities, help facilitate and set up meetings and events, and coordinate input and reports from partners. The appointment to this post will not start in June 2009 after a longer than expected recruitment process..

12.2. An internal steering group has been established for some institutionally funded strategic work and this has strong cross-institutional representation. We intend to use the same steering group to for the OULDI\_JISC project but will also invite the Programme Cluster C's critical friend, appointed to the Cluster by JISC, to attend as an external representative. Reports on progress will be submitted to this group and it is anticipated this will meet at least twice in 2009 and at least once a year after that. The first meeting of this group is planned for mid-May 2009. We see the partner work and the internal work as connected and distinct and therefore do not think representation from the partners on the internal steering group would be appropriate.

12.3 Gráinne Conole will provide the overall lead for the project. Project management will initially concentrate on detailed project planning design, building shared understandings of challenges, establishing responsibilities and timescales, and setting an evaluation plan. Once underway, work will direct co-ordination of tasks, monitoring, evaluation, report reparation (including six monthly and final report) and synchronisation of work with an institutional project on learning design roll-out. Evaluation is integral across the project and is core to our approach. We intend to gather a range of empirical evidence to support the project itself and the deliverables it produces in years 3 and 4. We will build on the approach taken in the existing OULD project, as well as the research and evaluation approach adopted in the OpenLearn initiative.

12.4 The following section details who will be working on the OULDI-JISC project and the time each has been assigned to it:

**Project Lead (20 days in year 1, 2 and 3, 15 days in final 9 months):**

**Gráinne Conole** is Professor of E-Learning in the Institute of Educational Technology (IET) at the Open University in the UK. Gráinne 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](http://www.e4innovation.com). Telephone: 01908

655362. Email: g.c.conole@open.ac.uk

**JISC Curriculum Design Project Officer (FTE for three years):** *new full-time post-approximately 55% of their time will be spent on piloting, reporting and evaluating innovation (work package 3) and 45% on community building and co-ordination for sustainability (work package 4).*

**Rebecca Galley** takes up the Curriculum Design Officer post in July and will be based in the Teaching and Learning team in IET at the Open University. She is an educator with experience in delivering teaching and learning to diverse groups, across both business and education environments. She has a special interest in the impact of teaching and learning on communication, co-operation and creativity within groups and organisations. Most recently Rebecca has been lecturing in Post-compulsory Education.

**Cloudworks Developer (0.5 / 0.25 / 0.25 / 0.2 FTE):**

**Dr Juliette White** is a web developer and programmer in IET at the Open University. Juliette has worked on the JISC-funded JoinIn and D4LD projects and the EU-funded EU4ALL project. Technical skills include PHP, Java, ColdFusion, MySQL, HTML, CSS and Javascript. She has contributed to the Moodle core codebase, has experience of usability testing and a good knowledge of web accessibility. As well as over five years programming experience, Juliette has also worked as a learning technologist at the University of Surrey and as lecturer at Oxford University. Her blog is at <http://www.jvww.com>. Telephone: 01908 655730. Email: j.culver@open.ac.uk

**CompendiumLD Developer (0.25 / 0.25 / 0.25 / 0.1 FTE):**

**Andrew Brasher** has a background in research and development of software for education and electronic publishing, including EU research projects on electronic publishing (1994-2001). He joined the Institute of Educational Technology in 2001 as a Research Fellow in technology enhanced learning, and since 2006 has worked for the Institute's Learning and Teaching Development team. Previous technical development work includes JISC and EU projects related to learning and education. Telephone: 01908 655630. Email: a.j.brasher@open.ac.uk

**Project Management (0.25 / 0.25 / 0.25 / 0.2 FTE)** and associated work will be shared between:

**Dr Simon Cross** is based in the Teaching and Learning team in IET at the Open University. For the last year Simon has project managed the OU Learning Design project, led on collating the learning design evidence base and been involved in developing workshop and visualisation techniques. Other recent project involvement include researcher to an ESRC project about student encounters of eLearning and project manager of PRESTO - the University student panel survey. Over the last few years Simon has a Certificate in Professional Management and has worked as an Associate Lecturer. Telephone: 01908 655401. Email: s.j.cross@open.ac.uk

**and**

**Paul Mundin** is based in the Learning and Teaching Development Team. Paul has fifteen years project and programme management experience across the government, telecommunications and

finance sectors working for Atos Consulting, KPMG Consulting and Unisys Ltd. This work involved the delivery of change programmes, systems integration and business process improvements. Prior to this Paul worked as an education consultant for Unisys Ltd designing and developing IT training courses for financial services clients and was also a secondary school teacher. Email: P.D.Mundin@open.ac.uk

### **Academic consultancy**

**Dr Paul Clark** is Senior Research Fellow in IET at the OU UK, having just completed a five-year appointment as Pro-Vice-Chancellor (Learning and Teaching). He is a **consultant** to the project (15 days years 1 and 2). Dr Clark was previously the Chief Executive Officer of the Institute for Learning and Teaching in Higher Education from 1999 to 2002. Email: p.m.clark@open.ac.uk

**Martin Weller** is Professor of Educational Technology at the Open University. He will be assuming an academic **consultant** role in the project (assigned 12 days/yr for first three years). Martin has a background in elearning, delivering the OU's first online course with 15,000 students in 1999. He is the author of two text books, *Delivering Learning on the Net*, and *Virtual Learning Environments*. He was the OU's VLE Director and is currently the academic director of SocialLearn, the OU's project to develop a social networking based model of operation. He has gained several JISC grants to develop the learning design player, SLED, and has just completed the Minerva funded FLOSScom project, examining how learning occurs in open source environments. His interests are in the implications of emerging technologies for HE, learning design and social networks. He blogs at <http://edtechie.net>. Email: m.j.weller@open.ac.uk

**Dr Patrick McAndrew** is Senior Lecturer in The Open University's Institute of Educational Technology and will offer **consultancy** to the project (assigned 10 days/year for three years). He has led a range of research projects addressing how materials and environments can support learning through the use of learning design and the provision of tools for learners. He is currently the Research and Evaluation Director of OpenLearn, a major initiative to provide open content for free education supported by The William and Flora Hewlett Foundation. From the 1<sup>st</sup> March 2009 he is director of the newly established Hewlett-funded, Olnet initiative. Olnet has application of the OULDI learning design methodologies as a key strand of activities. In addition, Cloudworks is being used as one of the core tools for the 'day one' technical environment for Olnet. Email: p.mcandrew@open.ac.uk

Given the complex nature of the project and challenging issues being addressed, we may seek help and advise from broader expertise and consultants around specific issues. It is likely these will be relevant to other projects in the programme and therefore we would anticipate undertaking this jointly with others.

### **13. Programme Support**

Through critical friend and support and synthesis team



MOODLE international									
<b>Total Directly Incurred Non-Staff (B)</b>									
<b>Directly Incurred Total (C) (A+B=C)</b>									
<b>Directly Allocated</b>	<b>Days</b>		<b>Days</b>		<b>Days</b>		<b>Days</b>		
Staff									
Grainne Conole, Project Lead, PB2									
Martin Weller, PB1									
Patrick McAndrew, AC4									
CAU academics									
Sub-total									
Estates									
Other									
<b>Directly Allocated Total (D)</b>									
<b>Indirect Costs (E)</b>									
<b>Total Project Cost (C+D+E)</b>									
Request from JISC									
Institutional contribution									

**Detailed Project Planning**

**15. Workpackages**

See Appendix A

## 16. Evaluation Plan

Each point below relates to one of our critical success factors (Section 3.11). Further clarification and detailing of this evaluation plan will be made by the Curriculum Design project Officer and reported to JISC in the project's first annual report.

16.1 This evaluation relates to Objectives 5, 6 and 7 and critical success factor 1.

Questions:

- Increase in professional knowledge and understanding: has there been an increase in the professional knowledge and understanding of participants as a consequence of using Cloudworks?
- Positive shift in culture towards sharing: is the level of self-reported activity of posting and viewing increasing? Are people more engaged in posting and viewing/? Is it seen as more central to how they get ideas and report practice?
- Community identity increased: have participants experienced an increase in their sense of belonging to a community?
- Positive shift in attitudes towards sharing: are people more willing to share to larger networks? Has the value attached to online sharing of user-generated content increased?
- Positive impact on practice: have posting on Cloudworks supported users in decision on efficiency, flexibility and innovation in their designing?

Tools and frameworks for assessing transformation:

- Data/reports from an annual survey of a sample of Cloudworks users (those registered as users of the site): questionnaire survey asking about use, assess to, attitudes, satisfaction, amount of exchange taking places, and how it has enhanced their sense of community/identity. Preferably around 100 users will be invited to respond by email and sampling strategy may need to adjust for different types of user. Questions should also include a measure of reuse, of effectiveness in scaffolding the design process, of experience of greater flexibility. Survey design and administration: CDPO post. Use & Audience: technical development (ad hoc use by team of raw data), reporting to senior managers/stakeholders/steering group (timely summary reports in accordance with institutional reporting or key project events), final report (full evaluation of datasets).
- Data/reports from a final end of project survey sent to all registered users of Cloudworks and those who have been leading or instigating communities on Cloudworks (details as 1.1). Survey administration: CDPO. Use: Final report.
- Semi-structured interviews with members of at least five cloudscapes (communities). A selection of cloudscapes should be made with at least one each from the following groups: internal, external, spontaneous, nascent and professional. These need not be with the lead members, indeed some interviewees should be chosen at random so as to get a picture of all users. Questions could cover immediate and long-term use, and be sensible to

issues of efficiency, flexibility and innovation in the design process. Undertaken by CDPO with support from Project Lead and Manager and secretarial transcribing early in year three. Use: for project team (to develop final install versions), communities themselves (to promote reflection and support further efforts of exchange), and for final evaluation report.

- Reviewing all posting and comments of at least five cloudscapes (at least one each from internal, external, spontaneous, nascent and professional) with particular attention to any reference to increases of knowledge and understanding and sense of community. Use as 1.3.
- A review each year to ensure that a balance of different types of communities is being included in the project (a balance between internal, external, spontaneous, nascent and professional). Undertaken by project manager for use in planning by project team.

Note: there are likely to be multiple definitions of a Cloudworks 'user' so sensitivity in respect to the level of engagement and participation will be required and may be used to inform section of survey samples.

16.2 This part of the evaluation relates to Objectives 1 and 5 and critical success factor 2.

Questions:

- Increase in usage statistics: has there been a quantifiable increase in the amount of exchange of teaching and learning ideas, numbers of users and frequency of use?
- High enough level of engagement to support sustainability: are communities likely to continue after project involvement, especially in respect to the pilots? What is the rate of retention and activity over time of Cloudscapes? What is the rate of retention of users? What are the projections for use in Year 4? Who will continue to use Cloudworks after the project ends?
- The critical 'mass' threshold has been surpassed: what are the indications that a critical size or mass has or has not been reached?

Tools and frameworks for assessing transformation:

- General usage data for Cloudworks: record regular statistics on number of Cloud and comment postings, subscribers and cloudscapes; this will look for increasing or stable usage statistics. This will be made at the close of each iteration by Cloudworks Developer. General usage data for CompendiumLD downloads which will be recorded regularly by CompendiumLD developer (CompendiumLD users constitute a community in their own right).
- Looking at groupings of users by an analysis of key user data (e.g. by number of postings, comments, page views, times logged in). What does this tell us

about particular behaviours and engagement? Are there trends? This will involve contributions from several of the project team.

- Data for each cloudscape on the site showing use over time. Those with continuing use or a pattern (e.g. annually) will demonstrate sustainability. Data from Developer
- Data from questionnaire survey (that outlined in 16,1) showing people's willingness to use Cloudworks, future intentions of use and their attitudes towards the internet as a method for exchange of ideas and experiences. Survey takes place in year three lead by CDPO.
- Confirmation from community 'leaders/organisers' that they plan to continue to use Cloudworks. Evidence (text, process maps etc) that use of Cloudworks is being included in to institutional strategies, plans, working practices or programmes. Collated by CDPO and project representatives in partner institutions in year three.
- A listing of all institutions that have or plan to make institutional installs of the software. Compiled by Developer and CDPO at close of project.
- Interviews with the project's representatives at each of the partner institutions to discuss prospects of continued use, sustainability and barriers and enablers of transfer. CDPO at close of year three.

16.3 This component of the evaluation relates to Objectives 2-4 and critical success factor 3.

Questions:

- Greater clarity in the understanding of the process and when should the interventions take place: Is there agreement on process review? Are the interventions considered appropriate?
- Increase in the pedagogic quality, cost-effectiveness, innovation and/or fit-for-purpose of the overall designs produced or designs produced during a particular stage of design: what have been the improvements in the design process supported by the interventions? Do practitioners feel these interventions have been useful and valuable? Have they learnt or adapted practice? Are there conflicts between the four measures of success? What other understandings of success are held by those involved?
- Documents produced by participants as part of the workshops or other interventions that show development or enhancement of designs during the process. This would include paper (flipcharts) and electronic information (e.g. Cloudworks postings or CompendiumLD whiteboard screenshots)

- Feedback forms completed by participants immediately after the intervention. Questions would be contextual but should allow evaluation of pedagogy, innovation, cost-effectiveness, and effectiveness of learning.
- Reflective logs kept by those in the project team involved in the design interventions. These should be shared at project meetings.
- Semi-structured interviews with those involved in each pilot (2-5 interviews) per pilot. To take place once the pilot has formally ended lead by CDPO post.
- Questionnaire survey of those involved in pilots before (this will constitute part of baseline) and after each trial. Some questions to be similar to allow comparison of use, attitudes, knowledge and practice. In the questionnaire there should be a measure of the extent that resources (such as CompendiumLD) have facilitated rearrangement of tasks, activities and units at the curriculum level.
- Focus group with each pilot after the trial, wherein the design is mapped and discussed in reference to the original process review mapping and the completed design. Participants are asked which parts of this process was affected by the interventions. Lead by CDPO. This data, when combined with 3.1-3.3 and 1.3, would constitute a pilot case study.
- Agreement by key stakeholders that process review is an accurate representation. This requires good process mapping. For the OU this agreement would be informed by the Steering group and senior managers. Partner institutions would need to organise this depending on their organisation.
- Comparison of process mapping with individual experience through the observation of individual course teams involved in the pilot. Course team process, documents and observation of practice will be collected and used to write the case studies.
- Response from senior managers (either letter or interview) at all five participating institutions in respect to how useful they perceive the interventions to have been in respect to strategic and policy implications – e.g. in supporting the development of appropriate and agile curriculum design processes.

16.4 This part of the evaluation relates to Objectives 1, 4 and 9 and critical success factor 4. Have the resources and guidance produced been useful to users? Have they clearly and effectively supported users in completing the intended task/skills/knowledge acquisition? What other resources are demanded?

- Responses to questions on feedback forms about specific resources/guidance and needs for further support and guidance. Observation

of their use in interventions (record kept in reflective log). To be coordinated by CDPO.

- A question in the semi-structured interviews (see 3.4) and questionnaire (see 3.5) about suitability and role of resources provided and what more could be provided. This should include questions on value in workload planning and value in resource planning where relevant.
- Mapping of user feedback, comments and requests for resources to those resources that have been produced or identified by the project. Also mapping of resources produced against user group (e.g. new designer, established designer, course manager, etc.) with gap analysis.
- Audit of resources produced and evaluated against a set of criteria (to be established at a later date).
- Audit of workshops, events etc. delivered. Reflective logs by presenters should be kept and any feedback retained so the final report can include a section of short reports that trace the development and evolution of the resources/events.

16.5 This final aspect of the evaluation relates to Objectives 7 and 8, and critical success factor 5. Are the software products fit-for-purpose? Can and have they be installed and used in other institutional settings?

- After each iteration, record and document progress, developments and issues (this constitutes part of the reflective log that will be edited and submitted as a final deliverable).
- Undertake periodic expert evaluation and usability evaluation and usability testing of the two software products.
- Review feedback from users – this may be those using the software remotely, or those attending workshops or events (in conjunction with 3.2)
- Data/reports from an annual survey of a sample of CompendiumLD users: questionnaire survey asking about use, satisfaction, benefits and barriers. The OULDI evidence base already contains data from previous workshops. The survey design and administration: CDPO post and Developer. Use of the Cloudworks site is covered in 1.1
- List of institutions that have requested an institutional install of Cloudworks and CompendiumLD, or which have made use of the Cloudworks API. Each should comprise of a short (1-3 paragraph) case study of their initial experiences of installing and setting up.
- Audit of the interactive widgets developed for the Cloudworks site with data from any expert user testing and user feedback.

- Regular review of project structures to ensure available user and stakeholder feedback is being communicated to development team for use in informing technical development.

16.6 The evaluation plan includes many cases where evaluation is undertaken during the project. This reflects the need for an evolving set of empirical evidence feeding back into project activities. We believe this is important because we recognised the complexity of this work and the ambitious nature of what we are attempting to achieve; coupled with local political and cultural complexity and a radical changing institutional context. This ongoing critical feedback is therefore essential to ensure the ongoing set of activities we are engaged with are appropriate. We think it likely as a result of evaluation and feedback some of the directions of our planned activities may change and we will clearly document this and provide a rationale for our decisions as part of our reporting mechanisms.

## **17. Quality Plan**

17.1 Standard IET quality mechanisms will be adhered to. Technical development will adhere to all standards specified and the control of the technical development iterations will be met through efficient project management and documenting procedures. The evaluation process (see section 16) will ensure quality processes are in place and customer's expectations of quality are understood. This process of benchmarking, monitoring and evaluation will also ensure that the outcomes are effective (meet customer expectations), in addition to meeting any technical specifications and conformance criteria defined through the development processes.

**18. Dissemination Plan**

<b>Timing</b>	<b>Dissemination Activity</b>	<b>Audience</b>	<b>Purpose</b>	<b>Key Message</b>
Continuous	Leader and project blogs	All stakeholders and customers: Partners, eLearning and Learning Design community, educators, policy makers, JISC	To promote and raise awareness; To gather comment and feedback (blogs will have a comment feature)	The project is vibrant and responsive, making demonstrable progress and welcoming comment
Continuous, updated regularly	Project website: project reports, documents, guidance and papers, links to blogs and other project resources	As above	To promote and raise awareness; To inform; To present a comprehensive picture of the project and its aims To provide contact details	The project has a clear identity and is composed of complementary strands
Continuous	Tools websites (e.g. Cloudworks and CompendiumLD)	Users of the tools	To inform and update users; To gather feedback on the tools which will be used to inform development;	Development of tools is responding to user needs
As required	Project organised workshops and events	Pilot groups, partners, target user groups,	To present and instantiate the learning design methodology, techniques and tools To gather user comment and feedback through feedback forms, survey and observation	How Learning Design and the method offered can improve practice and effectiveness of learning
As required	JISC events	Curriculum Design groups, and also with other JISC work including the Curriculum Delivery group and the JISC RSCs	To inform about project and promote links; To have the opportunity of sharing of experience	OULDI work may have a role and relevance to your work and is interested in working in partnership with other projects

As required	JISC Learning and Teaching Experts Group	Wider JISC community	To present on OULDI-JISC and to gain feedback	Ensuring that the project is of value across the HE and FE communities
Oct 08 / As required	Printed material and guides (already produced an OULDI 2-page handout about the project which is being disseminated at workshops and conferences)	Those attending workshops, conference presentations etc; those seeking to use the methodology or tools in their practice	To provide guidance for those coming to and using the LD methodology, tools and resources	What the project is doing; guidance to better practice
As required	Posting of news items on the circle site	The JISC curriculum design and delivery projects	Updates on progress and activities	What the project is doing
As required	External conferences and academic papers: we anticipate the work undertaken to lead to a number of academic publications and conference papers, raising the profile of the project	Academic and academic-related teaching and learning staff	To engage in two-way dissemination activities with the wider community; To raise profile, To gather information about other projects	Results of OULID work
Key stages	Reports to steering group	Steering group	To report and validate progress To secure engagement and seek group's comments on direction for future work	Project progressing to plan

## 19. Exit and Sustainability Plans

19.1 A central theme of our approach is openness and sustainability and this is reflected in the alignment of the objectives, tasks, deliverables, and dissemination strategies. For example, continuous dissemination will ensure ongoing openness and visibility whilst our key outputs, including sharing Cloudworks and embedding tools, will promote sustainable practice.

19.2 We recognise the ambitiousness of our long-term ambitions for Cloudworks and the significant challenges this presents. We anticipate working very closely with Cetis and others to develop a shared evolving understanding of what sustainability means in this context and

the ways in which web 2.0 technologies can be leveraged to achieve change. We have noted the advice to explore links with the subject networks and will consider that at an appropriate point in time. Through Olnet we have established an initial strong link into the OER community and we would hope to build on this through the newly funded JISC/HEA OER projects.

19.3 Given that the project outputs may evolve over the next four years, it is too early to give specific scenarios for taking the project forward after 2012, however, the following are certainly anticipated:

<b>Project Outputs</b>	<b>Why Sustainable</b>	<b>Scenarios for Taking Forward</b>	<b>Issues to Address</b>
Cloudworks communities	User generated content and community building. By close of project will have formed cohesion and self-identity	To be confirmed	-
Cloudworks 'institutional install' version	Institutions can take the open source of Cloudworks and adapt to specific institution	To be confirmed	-
New practices and understandings of curriculum design	These practices and understanding will engender a forward looking vision with greater openness to innovation and change	To be confirmed	-

## ***Appendixes***

### **Appendix A. Work packages**



Workpackage and activity	Earliest start date	Latest completion date	Outputs (clearly indicate deliverables & reports in bold)	Milestone	Responsibility
<b>WORKPACKAGE 1: Project Management / Key Events</b> <i>Objective:</i>					
1. Team Meetings	October 08	-	Strategic meetings monthly. Strand-specific meetings as required. Tuesday morning reserved for informal meetings if needed		All, co-ordinated by Project Manager
2. Reports	April 09	-	<b>Six-monthly reports</b> in April and October each year		Project Manager
3. Draft and finalising project plan with JISC	September 08	As directed	Draft plan ready by 31 October Final draft ready by May 09		Project Manager, Project Lead
4. Steering group meetings	January 09	-	First meeting scheduled for May 09. Output will be directional steer for following year.	Meeting 1: May 09 Meeting 2: Sept/Oct 09 At least once a year thereafter	Steering Group, co-ordinated by Project Manager

5. Partner meetings and management	October 08	-	First October 08. Second January 09. Project plans for each institution to be scoped by April 09 and ready for agreement. Anticipate 2-3 meetings a year thereafter		Project Officer
6. Iteration meeting management	November 08	-	This will support agile process of technical development of Cloudworks with organisation of meetings for each iteration or phase	Yes (usually every 4-6 during development)	Project Lead, Project manager co-ordinates
7. Prepare six-monthly monthly plans	Start of project	End of project	Six-monthly monthly plan outlining key work and deliverables and staff involved.	Every six months	Project manager
<b>WORKPACKAGE 2a: Technical Development - Cloudworks</b>  <b>Objective:</b>					
1. Review vision and plan	October 08	November 08	Vision statement aligned to new project priorities		All
2. Initial development of site	October 09	-	Website live and functional		Developer
3. Expert evaluation of site in respect to accessibility	January 09	-	Evaluation report used to inform future development		Project Officer commission
4. First phase of iterations (2.5 months JISC funded, 3.5 months OU strategic project funded)	March 09	August 09	A series of development iterations. Detailed weekly/fortnightly reports produced by Developer. Iteration meetings every 4-6 weeks.		Developer
5. Clarification of IP ownership of (Cloudworks) designs and technical implications	March 09	August 09	Writing and adoption of Terms and Conditions for site and implementation of necessary safeguards for ensuring users have copyright of material.	April 09 meeting with OU legal team August 09 Terms and	Project Officer / Developer

				Conditions added	
6. User testing and evaluation following graphic design and site architecture redesign	May 09	July 09	Expertise brought in from IET's LTD team. Evaluation by team (will likely be included in October's <b>Six-month report</b> )		Developer, LTD Officer
7. Second phase of iterations (1.5 months JISC funded, 2.5 months OU funded)	September 09	December 09	Series of iterations. Regular written reports by developer to project team and development log.		Developer
8. Evaluation (after phase 1&2)	December 09	February 10	Evaluation activities inc. review, list of institutions using Cloudworks and possible evaluation survey		Project Officer
9. Third phase: responsive development	March 10	August 10	Approximately 3-4 months over a 10 month period responding to needs from pilots for functionality etc.		Developer
10. Evaluation (after Phase 3)	August 10	October 10	Evaluation activities inc. review, list of institutions using Cloudworks and possible evaluation survey		Project Officer
9. Fourth phase: iterations	October 10	January 11	Two or three iterations. Regular written reports by developer to project team and development log.		Developer
10. Producing an 'institutional install' version	August 11	December 11	An institutional install version of Cloudworks (v.4)		Developer
11. Final evaluation	December 11	March 12	Data for final report		Project Officer

WORKPACKAGE 2b: Technical Development - CompendiumLD					
<u>Objective:</u>					
1. Scope and co-ordination with KMi	December 08	-	Begin preparatory work for Phase 1 including co-ordination with KMi		Developer, KMi
2. Phase 1 development: consolidating existing functionality (installs, bug fixing etc) and adding some new functionality	February 09	September 09	Enhanced functionality to support curriculum design as directed by user evaluation/feedback, Steering group and outcomes of institutional work. Development log kept.		Developer
3. 'Visualisation' summit	September 09	-	Summit for people to share experiences, examples and benefits of visualisation with results contributing to next phase of development.		Project Officer & Developer
4. KMi development	September 2009	-	Further work looking at core code development by KMi to support OULDI developments of Compendium. Timing rests on availability of programming staff in KMi		KMi developer, developer
5. Evaluation of development (Phase 1)	September 09	October 09	Review of user feedback. List of institutions using CLD. Possible evaluation survey. Assessment as to whether any expert testing is required		Project Officer
6. Phase 2 development: consolidation and testing	September 09	March 10	Further functionality and user testing in preparation for use from October 09. Development log maintained		Developer, Project Officer
7. Phase 3: responding to use	April 10	June 10	Identification of user reported issues and development of solutions		Developer

8. Evaluation of development (Phase 2&3)	September 10	October 10	Review of user feedback. List of institutions using CLD. Possible evaluation survey. Assessment as to whether any expert testing is required		Project Officer
9. Phase 4: iterations	October 10	June 11	Series of 3-4 iterations culminating in new version. Development log maintained		Developer
10. Producing an 'institutional install' version	September 11	December 11	Finalising of the install version of CompendiumLD (v.4)		Developer
11. Final evaluation	December 11	May 12	Evaluation		Project Officer
<b>WORKPACKAGE 3a: Baseline, review and resources evaluation</b>  <b><u>Objective:</u></b>					
1. Collection of Baseline Data	November 08	June/August 09	Survey and interviews, due to late recruitment of Project likely to be presented in second six-monthly report		Project Officer, Team
2. Review of current processes and practice	April 09	July 09	Presented in second six-monthly report		Project Officer
3. Test (mini-) Pilots	March 09	December 09	Prior to formal pilots scheduled to begin in Autumn 2009 a number of test (mini-) pilots will be undertaken at the OU including with the Business School and FELS.		Project Officer manages this process
4. Data collation for final evaluation report	September 11	March 12	As detailed in Evaluation Plan 16.4.		Project Officer, Team

<b>WORKPACKAGE 3b: Pilots</b>					
<u>Objective:</u>					
1. Scoping with faculty to begin pilot plan	May 09	September 09	Draft pilot plan		Project Officer, Lead
2. Baseline Data collection and preparation	May 09	September 09	Data recorded and documented. Included in six-monthly report		Project Officer, Team
3. Pilot takes place, possibly multi-phase depending on pilot plan	September 09	June 11	Evaluation and monitoring as required.		Project Officer
4. Mid-way debrief	July 10	-	Evaluation focus groups, interviews etc concerning progress, successes, barriers etc. Data used in mid-way report. Any case-studies written up and disseminated		Project Officer
5. End of pilot debrief	August 11	-	Focus group, interviews etc about successes of pilot. Data used in final report. Any case-studies written up and disseminated		Project Officer
<b>WORKPACKAGE 3c: Partner Institution's Pilots</b>					
<u>Objective:</u>					
1. Initial introductory meeting	October 08		Buy in from institutions and awareness of LD work to date		DONE
2. Meeting to agree pilot plans	January 09	-	Pilot plans for 2009		Partners, project lead
3. Scope and preparation of institutional pilot plans and agree consortium agreements	February 09	June 09	Draft pilot plans		Partners
4. Plan pilots	July 09	-	Agreed plans		Project Officer

5. Intervention, events, workshops and support as detailed in plans	July 09	October 10	As required: presentations, events, advice, workshops		Project Officer
6. Mid-life evaluation	October 10	-	Review of progress, coincides with six-monthly report		Project Officer
7. Further intervention, workshops, events and support	November 10	October 11	As required: presentations, events, advice, workshops		Project Officer
8. Evaluation interviews and other data gathering for case studies etc	July 11	October 11	Data collection		Project Officer
10. Final evaluation meeting	October 11	-	Data presented and agreed for inclusion in final report		Project Officer
<b>WORKPACKAGE 4a: Community building - UK</b>					
<b><u>Objective:</u></b>					
1. Begin scoping institutional communities for engagement with Cloudworks	December 08	-	Identification of some possible communities to involve		Project Lead /team
2. Trial of Cloudworks as a conference/meeting community support tool	December 08	May 09	Trial of Cloudworks as a support network for external conferences (e.g. Ascilite, NROC, Hewlett OER conference, Programme Cluster C project group) and internal conference (OU-CALRG conference)		Project Lead, Developer
3. Establish an IET Critical Friends Group	April 09	-	Small group to advise on Cloudworks development		Developer
3. Community building programme phase 1	August 09	December 09	Once Officer in post: identify and begin trials with at least five OU communities (see also Evaluation Plan)		Project Officer
4. Interim evaluation of Cloudworks users and community activity	December 09	January 09	Data collection and evaluation. Review to ensure balance of representation in evaluation.		Project Officer

5. Community building programme phase 2	February 10	December 10	Continue working with existing three communities and snowball community engagement to more OU groups		Project Officer
6. Interim evaluation of Cloudworks users and community activity	December 09	January 09	As 4.		Project Officer
7. Final evaluation	December 11	April 12	Data gathering for final evaluation and reporting		Project Officer
<b>WORKPACKAGE 4b: Community building - LAMS/Moodle</b>					
<b>Objective:</b>					
1. Initialisation and scoping of LAMS and Moodle communities	October 08	-			DONE
2. Work in concert with LAMS team to organise the European 2009 LAMS conference at the OU	June 09	June 09	European LAMS conference hosted by the OU (OULDI team)		Project Officer, Project Manager
3. Agree plan for engagement with community	August 09		Engagement plan		
4. Community engagement activity as per Plan	September 09	September 11	Community building and engagements: Communities more engaged in LD through Cloudworks and other tools. Stronger links between community and Cloudworks		Project Officer

<b>WORKPACKAGE 5: Sustainability plan</b>					
1. Iteratively develop sustainability plan during main phase of project	-	September 11	Sustainability plan	September 2010	Project Lead, Project Manager, Project Officer
2. Implement sustainability plan for Cloudworks, CompendiumLD and other outputs (where relevant) of the project	December 11	May 12	Sustainability plan implemented		All
3. Presentations at events and conferences	Start of project	End of project	Presentations at key events for both the dissemination of project accomplishments and gathering of comments and responses with the view of promoting interest and uptake (for sustainable implementation).		Project Lead

For reference, the original project plan submitted in September 2008 has been inserted below. The timing and organisation of activities will differ slightly from the project packages outlines above.

