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Project Information

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Lead Institution	University of Oxford
Project Director	Sean Faughnan
Project Manager & contact details	Marion Manton Technology-Assisted Lifelong Learning University of Oxford Department for Continuing Education Ewert House, Ewert Place Summertown Oxford OX2 7DD United Kingdom Tel: 01865 280986 Email: marion.manton@conted.ox.ac.uk
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Transforming Curriculum Delivery through Technology Programme

Interim Reporting Template

Project Name: Cascade: University of Oxford

Report compiled by: Marion Manton and Bridget Lewis

With contributions from: Sean Faughnan and Nicola Warren

Reporting period: 1 September 2009 – 28 February 2010

Section One: Summary

The Cascade project aims to use technology to enable the University of Oxford's Department for Continuing Education to respond better to the challenges of the government's Equivalent or Lower Qualification (ELQ) policy[1] by:

1. **Undertaking its activities more efficiently** so that resources are focused on value-adding activities e.g. delivering improvements to the student experience and the creation of tools that support best practice.

2. **Developing new, or repurposing existing activities** to support the Department in the delivery of its new vision and provide additional revenue streams as it seeks to maintain its position as an internationally-recognised centre for excellence for continuing and professional education.

3. Supporting the Department's ability to deliver academically superb courses to students of the highest calibre through the use of new tools and functionality to **augment the services currently offered to students**.

These aims are being pursued by undertaking activities in five focus areas:
1. Online assignment handling
2. VLE support for courses
3. Development of generic content
4. Course design
5. Online payment and enrolment

Within these focus areas, and more generally, the key developments during the reporting period are:

- The technical development and testing of the new online assignment handling system and the start of piloting with staff and students from March 2010.

- Initial pilot studies, using the Department's VLE to support a number of undergraduate and postgraduate level courses, enabling us to develop templates and a process for creating VLE sites for new courses. Piloting of the templates with staff will commence from April 2010.

- A range of generic content for the VLE sourced and developed; we are now focussing on piloting these materials with staff and students and developing additional materials in key areas that can be readily customised for use in individual courses.

- The continued support for academics considering the use of technology as part of the Department's new course development process.

- Further enhancements to the online payment and enrolment system. Online transactions with the Department have doubled in value during the project, with the average transaction increasing by nearly 50 per cent as more types of courses can be booked in this way.

- The appointment of our new external evaluator, Henriette Lundgren, and the development of a detailed Evaluation Plan. Evaluation activities are now progressing rapidly.

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[1]   HEFCE announcement of withdrawal of funding for equivalent or lower qualifications (ELQs)
(http://www.hefce.ac.uk/Learning/funding/elq/)

Section Two: Activities and Progress

During the reporting period the project has made good progress with activities being undertaken in the following areas:

- Workpackage 4: Pilot course-based models
- Workpackage 5: Develop e-administration solutions
- Workpackage 6: Develop models
- Workpackage 9: Evaluation
- Workpackage 10: Review and embed
- Workpackage 11: Project reporting, community engagement and dissemination

This section of the interim report provides a review of piloting and development activities carried out under workpackages 4, 5 and 6 for each of the five focus areas of the project. Activities undertaken in the areas of evaluation, sustainability and communication and dissemination are reported in Sections Four to Six. While there has been good progress overall, consolidating our plans for the rest of the project, especially in the area of evaluation (see Section Four), has highlighted some potential issues. With this mind, we have spoken to our Programme Manager, Lisa Gray, about the possibility of extending the project for two months until 31 December 2010. This will allow us more time to report fully on project activities, which will only come on stream at the start of the 2010/11 academic year in mid October 2010. The workpackages document has been updated to reflect the impact of this change, and a new version is submitted with this report. The key project outputs, deliverables and milestones remain the same.

1) Online assignment handling

A major activity of the reporting period has been completion of our initial technical development work to add the functionality required by the Department's assignment handling process that was not available in the standard Moodle assignment module. The following new functionality has been added:

- Assignment time extensions (as a new module and modifications to existing code)
- Registry workflow (as a per-course option to aid co-existence with non-registry workflows)
- New Capabilities and Roles in the Moodle permissions system
- Addition of optional extra questions (e.g. word count) at assignment submission

This Moodle development work used a checkout of Moodle's Git[2] source control repository, following the M19_STABLE branch. Local branches of this have been used to manage functionality bespoke to the Cascade project and non-Cascade modifications; which will be of wider benefit to others.

During January and February 2010 the project team undertook an iterative process of testing and by the end of February the first version of the new assignment handling system was released for beta testing. The development work has progressed well but has taken a little longer than planned as extra time was needed clarify the assignment workflow, which is subject to the restrictions imposed by University regulations, and to consolidate the definition of the roles of the personnel involved in the process (students, tutors, markers, Registry, Course Director and other course administrative staff). During the reporting period, a detailed test plan was developed for the beta testing, which will commence in March 2010, and a demonstration 'dummy site' was created to aid the production of user documentation and to assist with demonstrating the new system.

Within the Department, there has been a lot of discussion around the subject of online assignment handling, both informally and more formally through academic committees. In an attempt to collate feedback, an online survey was circulated to academic and support staff to enable them to express their views. One issue is that many academics conflate the processes of online assignment submission with on-screen marking and their support for the former is marred by their concerns about the latter. In order to clarify the distinction, a presentation to the Department's Academic Board, of

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2   Git is a distributed version control system (see: http://git-scm.com/about).

which all members of the Department's academic staff are members, is planned to demonstrate the new online assignment handling system and offer advice about on-screen marking. Although the development of on-screen marking tools is beyond the scope of the Cascade project, it seems sensible to address concerns and offer some guidance in this area, as a way of reducing potential opposition to the wider implementation of online assignment submission.

Within this area of the project, the focus over the next few months will be on:
- An iterative process of beta testing and piloting the system, initially with Registry and IT colleagues who have not been involved in the development of the system (during March 2010) and then piloting with groups of academic staff and students (from April 2010).
- Continual improvement of the system as a result of user testing.
- Liaising more widely with the Department throughout the spring, using existing committee meetings (e.g. Academic Board) and additional workshops, to ensure stakeholders better understand what the system can offer.
- Developing comprehensive guidance and supporting resources for all.
- Rolling out the new system to all courses using the existing online assignment handling system, and a selection of new courses, from September 2010.
- Ensuring that, by the end of the project, we have a robust online assignment handling system ready to be rolled out more widely across the Department.

2) VLE support for courses
Since the last interim report, activity in this area has focused on:
- Setting up a Moodle site to support the tutors of the Department's Weekly Classes programme.
- Supporting two course teams to pilot using the Department's VLE (Moodle) to support their face-to-face courses and monitoring the pilots to see how well different features of the Moodle sites were received.
- Developing guidance documentation and materials to help support staff and students to use Moodle more effectively.
- Developing templates to enable Moodle sites, for a range of course types, to be set up with minimal staff effort.
- Developing an implementation plan for setting up Moodle course sites using the templates.

The pilot project to use a VLE to provide support to the part-time tutors of the Department's Weekly Classes programme[3] began in December 2009. We surveyed the tutors to get a baseline on their current use of technology and their opinions of how they might use technology in their teaching. With 60 per cent of the Department's part-time tutors aged over 55, we felt that they might not engage with an online survey, so we decided to undertake a paper-based survey to ensure we received feedback from as broad a range of our tutors as possible. Although opinions were split between enthusiastic and negative towards incorporating technology into their teaching, the majority of the tutors had sufficient experience with their own personal use of internet technology for us to have a good base to build on. All but one respondent had a computer and internet access at home and 91 per cent of tutors checked their email daily (and all respondents with a computer at home checked email at least weekly).

These results suggest that much of the Department's current paper-based communication could be made electronic, with an opt-out for the minority. This confirmed our view that, while providing VLE support for weekly class students is not financially viable at this time, using a VLE to support our distributed network of part-time tutors had the potential to be valuable, both in terms of administrative

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[3] The Weekly Classes programme (http://www.conted.ox.ac.uk/courses/results.php?Category=400) is one of the Department's largest and well established programmes offering several hundred individual courses, each delivered in 2-3 hour face-to-face teaching sessions over a period of 10 to 20 weeks.

efficiency gains and improved service as well as a providing an opportunity to pave the way for the potential wider use of Moodle in the future should the Department decided to implement online assignment handling for this course programme.

Since September 2009, VLE support for courses has been piloted with staff and students of the Department's Undergraduate Diploma in British Archaeology[4] course and the Master's programme in Psychodynamic Studies[5]. These pilots have given the project team useful insight into how the VLE sites are being used and how well they are being received by both students and staff. The course teams are generally positive, despite having to spend time learning how to upload and edit content. They find the Moodle environment very useful for communicating with their students on both administrative and academic matters, and are keen to implement the system in other courses within their subject areas and to expand use of the VLE for teaching as well as course administration.

Initial student responses to the VLE support provided for their courses have been generally positive, although many lack confidence in their skills with technology (something that can be partially addressed through the generic content pilot detailed below). Some students have been very proactive in their use of the VLE, requesting that group chat rooms and wikis be set up for their group projects. These pilots will continue for the rest of the academic year and our evaluation surveys at the end of the courses should provide a more substantial picture of engagement with the pilot VLE sites.

The Cascade project team is currently reviewing the results of the pilot studies to decide which features to include in templates to assist Departmental staff to set up VLE sites for their courses. In conjunction with the generic content focus area, we are also deciding what content should be included and how the templates should be structured to cater for the wide range of different course types offered by the Department. This has been allied with the development of a simple process to support staff to use the templates to easily create a VLE site for new courses. Interestingly, following consultation with the technical development team, a more low-tech solution than originally envisaged has been specified as the optimal solution, both in a technical sense and from a user perspective. This solution consists of:

- Moodle templates, for a variety of course formats, set up as separate courses within a Moodle installation.
- Packets of generic content set up as a repository in a separate Moodle course.
- Course staff access the set of templates and choose the one most relevant to their course.
- Using the Moodle 'Back up' and 'Restore' features, course administrators replicate the template, renaming the copy with their course title.
- Course staff copy any other generic content they wish to use from the central repository in to their course and customise it to fit their requirements.
- Student enrolment is automatically performed, drawing student information from the Department's database, InfoSys, into the Moodle course.

Within this area of the project, the focus over the next few months will be on:

- Piloting the creation of new VLE sites using the Moodle templates during the spring.
- Using data collected from the pilots to consolidate the content and format of the Moodle templates.
- Completing guidelines and supporting resources to enable wider implementation.
- Continuing to support staff and students taking part in the current pilots.

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[4] Undergraduate Diploma in British Archaeology (http://awardbearing.conted.ox.ac.uk/archaeology/udba.php)
[5] Master's programme in Psychodynamic Studies
(http://awardbearing.conted.ox.ac.uk/psychodynamic_studies/mstps.php)

3) Generic content

In the previous reporting period, areas where the availability of generic content could benefit the Department were identified. During the last few months work has focussed mainly on the identification of specific sources for generic content already in existence, or in development, within the Department or elsewhere in the University, and where there is the most need of, or opportunity for, the development of new content. Content within this pilot area can be grouped broadly as administrative (e.g. directions to libraries) or academic (e.g. study skills). However, where there is an overlap in the ownership of content (such as is the case with course handbooks) we have been presented with a particular challenge (see the section below).

We are now developing a small subset of new materials that were identified as desirable in our earlier consultations with stakeholder or which can act as models for adaptation and use by a number of course teams. This material includes:

- A generic induction for Masters-level programmes.
- Screen capture library guides in key areas.
- Study skills resources for the historical disciplines.

We are also considering the best mechanisms for making this content available to our user groups for uptake and customisation. As indicated previously, this work is closely linked to the development of the templates in the VLE support for courses focus area.

Course Handbooks

As part of the content for the Moodle templates, we intended to make each course handbook readily available for incorporation into the relevant Moodle. However, this is proving to be rather a difficult challenge. Although the majority of the staff responsible for producing course handbooks agree that the current system is problematic, attempts in the past to tackle the issues have failed, largely due to the numbers and variety of stakeholders involved. If, as part of the Cascade project, we could resolve the issues in this area, it would be of major benefit to the Department.

At present, each course handbook contains material that is Departmental, programme or course specific, and which is further divided into core, mandatory information or optional material. The boundaries of these divisions are not well-defined, neither are the responsibilities for the content included in each section, although the overall document has to be signed off by the Course Director. The problem comes with coordination of the content in the sections and the lack of consistency of style throughout the document.

Our approach is to define the boundaries of each type of content and produce a series of template documents, each template dealing with one content area. Each template would be populated, or edited by, Registry, the programme team or the course team, as appropriate. These could then be drawn together into the handbook for each course.

By distributing the production of each handbook to Registry, programme and course teams, many of the problems associated with their coordination disappear. Once approved, the definitive version of the course handbook could be incorporated into the Moodle, or linked to it, if it was considered preferable to have all handbooks in one central location. Any updates through the year could then be disseminated via the Moodle and kept as separate addenda to be incorporated into the next release of the handbook.

As this approach is at a very early stage, we have yet to establish whether it is acceptable to all stakeholders involved. We envisage a challenge ahead, trying to persuade people to move away from the traditional, but flawed, approach and accept a change.

Within this area of the project, the focus over the next few months will be on:

- Piloting generic content materials with staff and students in spring 2010.
- Completing the development of new materials ready for inclusion in courses at the start of the 2010/11 academic year.
- Ensuring generic content is available in the context of VLE support for courses activities.

- Completing guidance materials to support implementation.
- Continuing work on finding an acceptable solution to the challenge of providing online course handbooks.

4) Course design

Our work in this area is dictated by the timing of new course proposals, of which there were few during the reporting period. As a result, the team has taken a largely opportunistic approach to this focus area, working with course teams and individuals when the opportunity has presented itself, and focussing as much on the elements of course design that take place once the accreditation documentation has been pinned down, rather than the accreditation process itself. Unsurprisingly, this has resulted in significant links with the work in the generic content and VLE support for courses focus areas. This engagement with stakeholders has given us valuable insight into those areas where academics and administrators are happy to incorporate technology into the teaching of their programmes and where they need more support to make effective choices.

Intervening at the pre-accreditation phase has proved challenging as it is difficult to identify the most effective way forward in an activity that academics, who are hard-pressed for time, undertake very rarely. However, there are now several new courses in the early stages of consideration, putting us in a strong position to progress with this work. We are currently in the process of designing our approach to the guidance required and investigating the most suitable platforms for its delivery, including the Departmental website and intranet, within Moodle, print documentation and face-to-face support.

Within this area of the project, the focus over the next few months will be on:

- Providing face-to-face support for academic staff developing new courses who are considering appropriate use of technology to deliver their course.
- Developing guidance and resources to support these activities.

5) Online payment and enrolment

The original design for the Department's online enrolment system followed a simple and fixed data architecture. The secure front-end of the online enrolment system was developed in PHP, a general-purpose scripting language (via https protocol – with a security certificate issued by Cybertrust Educational CA), and communicated with the Department's internally-built administration database, InfoSys, via the Open Database Connectivity (ODBC) protocol. To enable this, InfoSys, which is built on SQL Server technology, was split into a reduced web database and the original administration database, with a series of SQL procedures being written to trigger synchronisation between the two databases. The final piece of the online enrolment process, online payment, was taken by an external third party, WPM Education, and their online payment gateway – developed in ASP (and again using a certificated secure web front-end communicating, via ODBC, to a database built on SQL Server).

As more of the Department's courses take up the option of online payment and enrolment, this area is becoming increasingly important to the Department; with online enrolments essentially doubling in value during the project. As more courses switch to online enrolments, and with the average transaction increasing in value by nearly 50 per cent, the system has needed improvements to increase resilience, allowing enrolments to continue 24 hours a day, seven days a week, and major changes to the original data architecture, especially with the addition of the ability to book both catering and accommodation online.

Improved resilience has been achieved by making use of the Department's newly implemented Virtual Servers, which were installed during 2009, and by updating InfoSys to SQL Server 2008, which has enabled the inclusion of mirroring the database across a main and two witness servers (each server located at a different one of the three sites currently occupied by the Department), providing a much improved connection between the database and web front-end.

With the increased number of courses allowing online enrolment a number of issues with code enhancements and usability have been highlighted. The main issue raised by users is frustration that returning students need to enter their details each time they enrol on a course (some students enroll on four or five courses per year). To improve the user experience, a new online student login

functionality has been created; providing students access to manage their data and to help returning students register for courses online by removing the need to input their details again. This major shift in the data model used has required major development work in the following areas:

- InfoSys has been developed to populate the web database with a student's account as they login in and to provide mechanisms for this data to be updated and synchronised with the main administration database.
- Rather than attempt to add further developments to the existing code architecture, a decision was taken to rewrite this area of the web front-end using PHP Object-Oriented Programming (OOP) – requiring a number of new skills for the programmers involved. Classes have been created to represent the student and a course, allowing simple data retrieval (during the login process), reuse and manipulation.

  It is believe that the flexibility and code reuse offered by OOP will allow future developments and improvements to be applied to the online enrolments system more easily and ensure a more stable platform.

In addition to the student login functionality, work is being pursued in the areas of payment of invoices by installments; the development of a shopping basket feature to enable students to enrol on more than one course at a time; and postgraduate enrolments.

The specification for the payment of invoices by installments functionality has been written and shared with divisional managers. In the interim there has been a manual/administrative work-around that allows students to enroll online and for the Department's finance team to take payment in installments. This functionality has been available since September 2009.

Progressing the shopping basket functionality requires development both of our internal database, InfoSys, and the web front-end. During the reporting period, the initial InfoSys development was carried out to allow multiple enrolments to be associated to a single enrolment reference. However, the work required to the web front-end is reliant on the availability of the student login functionality before it can be progressed.

In the area of postgraduate enrolments the Department wants to co-ordinate with the system used by the central University for online applications for Oxford Graduate Programmes (https://apply.embark.com/grad/Oxford/13/). We need to understand how our developments fit into those of the wider University, which may take this work beyond the lifetime of the Cascade project.

Within this area of the project, the focus over the next few months will be on:
- Testing the new online login functionality with students.
- Finalising the process for payment of invoices by instalments.
- Developing and implementing the shopping basket functionality.
- Further exploring how the Department's online enrolment and payment system might integrate with the Oxford Graduate Programmes online application system.

Project level activities and progress

As well as work on individual focus areas, there have been many cross-project activities undertaken in the reporting period. In particular, further work has been completed in the areas of communications and engagements; evaluation; and embedding and sustainability; as outlined in later sections. More particularly, the focus over the next few months will be on:
- Communication project outputs and encouraging uptake within the Department.
- Consulting our stakeholders on sustainability priorities.
- Developing implementation and business plans for focus areas.
- Sharing outputs and achievements of the project with the wider University and beyond.

Section Three: Outputs and Deliverables

The project expects to generate a range of outputs in each of the five focus area, including:

- Evaluation documentation.
- Development code.
- Implementation plans and business cases.
- Guidance documentation and training materials.
- A summary documenting the development 'journey' of the focus area.
- Case studies.

as well as a range of project administration documents. All public outputs of the project thus far are available from the project website at: http://cascade.conted.ox.ac.uk/project-outputs, and we are currently liaising with JISC to make appropriate outputs available in the design studio.

Since the previous interim report the project has generated the following outputs:

- An initial version of the new assignment handling system (currently this is only available internally but once thoroughly tested, we will contribute the code to the main Moodle open source software development site).
- A demonstration 'dummy site' to support training in the use of the new assignment handling system.
- Surveys addressing online assignment submission and marking.
- An updated Communications and Engagement Strategy and Plan.
- An updated Evaluation Plan.
- A survey of weekly class tutors' use of technology.
- Internal project documentation to update key project stakeholders.
- A collection of generic content, stored as a repository in Moodle.
- Guidance documentation to support the VLE support for courses pilots.

The project is currently entering a phase where the majority of project outputs will be produced. As such, a key requirement is to ensure that what is produced meets the requirements of our stakeholders, both internally and externally. We are currently liaising with JISC to ensue case studies produced by the project are in a format that can be widely used by the community and we will undertake further consultation with internal stakeholders on their requirements for project outputs as part of the communication and dissemination activities planned.

Section Four: Evaluation

Evaluation of the project has made significant progress since the last report. In January 2010 we recruited a new external evaluator, Henriette Lundgren.

Prior to Henriette's appointment, we continued evaluation work on individual pilot activities including:

- Online surveys of students taking part in the VLE support for course pilots.
- Online surveys of academic and support staff addressing online assignment handling.
- Tracking the support requirements of all pilot activities.
- Pre-implementation testing of the online assignment submission system.
- A survey of technology usage of Weekly Classes tutors.

Since January, work has been carried out to develop a new Evaluation Plan (enclosed with this report) and considerable progress has been made on writing up the project's baselining activities (to be completed by the 30 April). The development of the new Evaluation Plan highlighted an issue between the timing of many of our project activities, which due to their nature are closely tied to academic terms, and the time available to evaluate and write up before the end of the project. As mentioned in Section 2, this issue has been addressed by requesting a project extension to enable us to fully report on activities dependant on the start of the 2010/11 academic year.

As with the project activities more generally, the project evaluation work has been divided into the five focus areas with each mapped against the primary and secondary aims of the project that it seeks to address. A brief summary of the evaluation activities in each focus area is provided below:

1) Online assignment handling
The primary aim of this focus area is to deliver efficiency improvements to the various processes involved in online assignment handling. Efficiency improvements in this area can be broken down into the following elements:

- IT support time
- Administration handling time
- Adoption rate

The secondary aim is to augment the service currently offered to students and academics. To evaluate this aspect of the online assignment handling project, data will be gathered in the following three areas:

- Service response time
- Customer satisfaction
- Ease of use

2) VLE Support for courses
The primary aim of this focus area is to deliver efficiency improvements by making VLEs more accessible and user-friendly for the various user groups. These efficiency improvements can be broken down into four areas:

- User friendliness
- IT set up and support time
- Adoption rate
- Usage rate

The secondary aim is to augment the service currently offered to students. To evaluate this aspect of the VLE support for courses focus area, we will gather data in the following two areas:

- Customer satisfaction
- User acceptance

3) Online delivery of generic content
The primary aim of this focus area is to augment the service currently offered to students and administrators. These service improvements can be further broken down into two areas:

- Customer satisfaction
- User acceptance

The secondary aim is to deliver efficiency improvements. Efficiency improvements in the context of online generic content delivery can be broken down into two elements:

- Usage rate
- Administration

4) Course design
The primary and sole aim of this focus area is to consider using technology, where appropriate, to improve the delivery of new and existing courses. These innovation improvements can be further broken down into three evaluation areas:

- Technology engagement
- Technology confidence
- Technology best practice

5) Online payment and enrolment
The primary aim of this focus area is to deliver efficiency improvements through online payment and enrolment. Efficiency improvements in this area can be broken down into the following elements:

- Administration handling time
- Adoption rate

The secondary aim is to augment the service currently offered to students. To evaluate this aspect of online payment and enrolment, we will gather data on customer satisfaction.

This analysis has been followed up with a detailed plan of evaluation activities, across each of the five focus areas, providing details of evaluation area, evaluation questions, timings, responsibilities, data sources, collection method, stakeholders, evidence gathered and measures of success for each activity. The detailed plans of evaluation activities are provided as appendices in the enclosed Evaluation Plan. Data collection across all the focus areas will take place with the relevant stakeholders and include a mixture of data collections approaches, including time motion studies, surveys and semi structured interviews.

Section Five: Outcomes and Lessons Learned

At this stage of the project most of the outcomes and lessons learned are formative in nature arising less from the original challenge, in which the project aimed to address the effect of the government's ELQ funding policy, and more from the approaches taken to address this challenge. The emerging themes of note are:

The use of technology is even more pervasive than expected.

Many of our stakeholders are from groups where low usage and significant hostility to technology might be expected. While this has sometimes proved the case, we have been pleasantly surprised by the high-levels of basic technology use (office tools, internet and email) and acceptance of the use of technology across many of our key stakeholder groups. While we still contend with an extremely vocal anti-technology minority, it is clear that they can present a skewed perspective on the silent majority who are happy to use technology for many activities.

Apparent hostility to technology can often be alleviated by active consultation with stakeholders.

Closely related to the above observation, is the extent to which much of the apparent hostility to change involving technology stems from fear of having technology "imposed" without consultation. Where initial negative reactions have emerged to rumours of change these have often dissipated extremely quickly with the evidence that nothing is to be implemented without extensive consultation.

Be aware of, and prepared to adapt to, the unintended consequences of innovation.

A continuing lesson from this project is the challenge of implementing any change that has the potential to impact on a large number of stakeholders in various ways. The team has undertaken stakeholder analyses and attempted to consult all the relevant people for each pilot study undertaken and area under investigation. However, inevitably there are unexpected consequences of all interventions which complicate the activities being explored. Researching these activities within the framework of Cascade has proved invaluable in identifying these complications and finding a way for the team to deal with them effectively.

Evaluate resources needed to support new activities to ensure sustainable approaches.

Nearly all of the pilot activities undertaken by the project have required greater support from the project team and our IT support services than initially expected. While this might have been anticipated, a clear requirement going forward is to take account of this in our future plans towards sustainability and embedding of activities to ensure that we manage stakeholder expectations and put in place appropriate support mechanisms to continue viable activities beyond the end of the project.

Section Six: Communication and Dissemination Activities

Communication and dissemination has been at a basic level during this reporting period as the project has been concentrating on technical development, planning and piloting activities. However, work in this area is planned to grow significantly in the next stage of the project as the project team look to increase engagement with the project and disseminate the project's activities more widely within the Department, the University and beyond. During the reporting period the project's Communication and Engagement Strategy and Plan was thoroughly reviewed and updated.

The team have continued to regularly update the project website (http://cascade.conted.ox.ac.uk/) and blog project activities (http://tallblog.conted.ox.ac.uk/index.php/category/projects/cascade/), where appropriate. The project's Steering Committee met twice during the reporting period, in September 2009 and February 2010, and these meeting proved a valuable chance to consult with key stakeholders within the Department, the University and more widely.

Within the Department, the team has maintained regular meetings with key collaborators as well as keeping staff informed about project activities through updates in the Departmental newsletter and termly reports at committee meetings. We have also given presentations on our work to key staff groups, such as the Weekly Classes tutors.

Within the wider University we have been engaging both through individual meetings with key members of staff (e.g. the head of the Information Technology Learning Programme[6], and staff from the Oxford Learning Institute[7]) and through participation in key committees and groups including OxTALENT[8] and continuing to attend the Fostering Learning[9] group. This has proved particularly valuable in the area of online assignment handling, where the team investigating this for the wider University has consulted regularly with us, and are already using some of our project outputs, such as process flowcharts, to inform their work in this area.

More broadly, communication and activities addressed at the wider UK HE audience include:

- Connecting the work of the Cascade project and the work of the Learning Design Support Environment (https://sites.google.com/a/lkl.ac.uk/ldse/) project.
- Contributing to a proposal for a symposium submitted to ALT-C 2010 (http://www.alt.ac.uk/altc2010/) "Great expectations: meeting the needs of learners and employers through more flexible and responsive curricula" focusing on the theme of responding to diverse learner needs.
- Preparing for participation in the Learning and Teaching Practice Experts meetings to be held on 13 July 2010 in Bristol.
- On a technical front, the team has continued to engage with the Moodle community via the Moodle website at: http://moodle.org/.

Note all presentations produced by the project team are available from the project website at: http://cascade.conted.ox.ac.uk/project-outputs.

On reflection, this period of the project has found that one-on-one communication with individuals and teams, either face-to-face or through email, has been the most valuable approach in terms of progressing activities, seeking consensus and providing support. As we move forward with

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[6]   The University of Oxford's IT Learning Programme (http://www.oucs.ox.ac.uk/itlp/)
[7]   The University of Oxford Learning Institute (http://www.learning.ox.ac.uk/)
[8]   OxTALENT is an interest group bringing together representatives from across the University of Oxford and acts as a steering group to raise awareness, promote interaction, and stimulate the use of IT in teaching and learning across the University (http://www.ict.ox.ac.uk/oxford/groups/oxtalent/)
[9]   The University of Oxford's Fostering Learning Group (http://www.ict.ox.ac.uk/odit/ITcoordination/fosteringlearning/)

implementing more consolidated approaches communication will be broadened considerably to include a wider selection of approaches, including workshops, and increased broadcast approaches directed at our external stakeholders. Further information about the project's planned communications and dissemination activities are provided in the enclosed Communication and Engagement Strategy and Plan.

Section Seven: Issues, Challenges and Opportunities

The original risk analysis in the project plan demonstrated a firm understanding of the most likely risks associated with this project. At this stage of the project, many of these risks have been faced and overcome, and while some are currently present in the project to a degree (as outlined below) there are none that present a serious threat to the project achieving its aims and objectives.

During the project, there seems to have been a growth of positive attitudes within the Department towards the potential of technology, probably assisted by the Department's record-breaking recruitment to online courses over the last two terms and the inclement weather experienced in January 2010, which demonstrated clearly the benefits of technology in a situation where many staff and students were unable to get to their regular place of work or study. Recent positive engagement with the project from many members of staff has proved very gratifying. However, we still face the challenge of bridging the gap between the willingness of staff to engage with technology and them finding time to do so in practice. This has shaped our approach to many of our piloting and engagement activities, so that where possible we have aligned these with priorities dictated by our stakeholders.

The online student recruitment mentioned above, while favourable to the project in many ways (it is hard to maintain that there is no place for technology in continuing education in the face of such large student numbers), it has proved less positive in others. In general, the strain on resources in terms of technical support and infrastructure has meant that certain key staff members have had less time to focus on the infrastructure aspects of the pilot studies, such as VLE support for courses, as hoped, which has affected our progress in these areas. However while this meant that initial scoping work was delayed, it has helped the project team focus on more appropriate and achievable approaches in this area, which is now progressing well.

For many of the activities in the online payment and enrolment focus areas, the issues have been less technical than administrative and process related. An example would be payment of invoices by installments, where the challenge has been getting agreement in the Department about how this should optimally work and then reconciling this with wider University requirements before undertaking the comparatively straightforward technical development associated with this development. While this continues to be a challenge going forward, the project has enabled the team to clarify its approach in this area which provides a process for similar innovations in the future.

In general, it has continued to prove challenging to manage a project with so many stakeholders and interested parties, who all engage with the project work to different degrees and levels. One area of particular challenge has been developing effective project management documentation to plan and track progress on the wide range of project activities being undertaken. The project team has put considerable effort into evolving practice in this area during the reporting period and is now managing the project using the following documentation, which is proving effective:

- Core project management documents (including the Project Plan, Workpackages, Evaluation Plan and the Communications Strategy and Engagement Plan).
- Tracking documents (including a Milestones document, which is a single A3 page representing the major milestones taken from the core project management documents organised into the five focus areas and a sixth area of cross-project activities, and a Weekly Update report which reports on progress with project tasks each week with a two-month horizon of upcoming tasks in the five focus areas).
- Focus area documents (including focus area templates and journey documents, which are working documents outlining details of activities being undertaken in each of the focus areas).

The latest copies of the core project management documents are available on the project website. As the tracking and focus area documents are working documents that changes regularly these are available internally only, but examples can be provided if these are of interest to a wider audience.

What the last few months have highlighted is the requirement to undertake and evaluate innovations in the wider context of Departmental activities. Any pilot study will only be truly successful if it is in a position to continue beyond the lifetime of the project. For them to succeed each requires a full implementation plan, including a business case to ensure that the ongoing resources can be correctly distributed to sustain the service; as such this is a major focus of activity for the remainder of the project.

Section Eight: Collaboration and Support

During the reporting period the project team attended the autumn curriculum design and delivery programme meeting, held in Manchester in October 2009; hosted a CAMEL meeting for our cluster in November 2009; and organised two project Steering Committee Meetings in September 2009 and February 2010, which were attended by our programme manager, Lisa Gray, and critical friend, Peter Chatterton. The team have also continued dialog with Sarah Knight, Sheila McNeill and Helen Beetham looking at outputs from current research and Phoebe in the context of the Design studio.

The information sharing session at the programme meeting proved valuable although, in real terms, the posters were more useful than the YouTube videos in terms of finding out about other projects' activities that might be of interest to us. In addition, the YouTube video required disproportionate development time for the information it provided.

More generally, interaction with our critical friend and cluster group has continued to be useful, although there has been less contact than during earlier phases of the project.