



# Learning Design Initiative at Brunel University: Using a blended learning design approach to optimise the use of technology

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#### Abstract

Brunel University's aims for this initiative were for lecturers to demonstrate that:

- They have changed the way they think about learning design; they collaborate and share their design work
- 2. Technological choices are made in a pedagogically informed way
- Learning activities are linked to outcomes and assessment strategies; courses/modules are 'improved' in relation to learning and teaching

A series of interventions were developed and embedded, including: a mapping exercise of the university's Curriculum Design & Review processes, learning design workshops, the introduction of the Open University Learning Design Initiative (OULDI) Toolkit and the Brunel Learning Design Suite.

Overall the initiative resulted in added value; academics were encouraged to collaborate and share learning designs and from an organisational perspective, the initiative facilitated the development of relationships between the Learning Technology Team, the Quality & Standards Team and the Director of Academic Programme Development to embed and sustain programme development work from a Learning Design perspective.



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#### 1. Introduction

Brunel University participated in the e-Benchmarking Initiative of the Higher Education Academy, following the methodology of the Association of Commonwealth Universities / Observatory on Borderless Higher Education. For this project, an Institutional Review Document (IRD) was produced, which indicated the following situation analysis: The e-Learning Strategy of Brunel provides direction at the institutional level, but remains flexible. There had been a presumption that the tradition of academic freedom and autonomy in Schools should be respected. Although all Schools had engaged with e-learning to some extent, detailed consideration of the nature of effective e-learning activities and the eexperience of the students had not been generally evident. Thus action plans in Schools were somewhat limited in detail, leaving academic staff the discretion to use e-learning in ways that they decide – at times with insufficient e-pedagogic input and evaluation.

It was intended to address this gap in the strategic work at School level by implementing a change management Pathfinder Project, the major elements of which were a local evidencebase of the effectiveness of e-learning practices and a systematic series of conversations for change. A change management programme was developed, which was based on the Appreciative Inquiry (AI) methodology adapted for the higher education context.

As a result of the project, a set of educational (e-pedagogic) considerations were inter alia established to determine the effectiveness of e-learning practices. These considerations were widely disseminated to academics in Schools to serve as a reference for e-learning practice and reflection.

Excellent working relationships were established with the three other universities participating with Brunel University in Cluster C of Pathfinder, namely Cambridge, Reading and London South Bank. It was anticipated that cooperation in relation to e-learning would continue in future. In addition, the 'critical friend' of Cluster C, Prof. Gráinne Conole, indicated future cooperation opportunities with her institution, the Open University. This led to Brunel's involvement in the JISC funded Open University Learning Design Initiative (OULDI).

As part of JISC-OULDI, the use of the Open University's learning design methodology was subsequently trialled and explored with the four partner institutions, including Brunel University. The initiative maintains that there are many benefits to adopting a more rigorous learning design approach. These include, providing:



- Means of eliciting designs from academics in a format that can be tested, reviewed and contributed to by others
- Means by which designs can be more readily understood and reused
- Clearer understanding about when and how to provide guidance for academics within the process of design
- Facilitation of reflection on learning by the designer
- An audit trail record of design decisions
- A mechanism for continual improvement and highlighting policy implications for staff development, resource allocation etc
- Support to students to reflect on what and how they are learning.

A strategy of learning design intervention informed by the methodology was agreed with Brunel. The purpose of the pilot was to determine the transferability of the methodology to Brunel as a campus-based, research-intensive university. In addition, it was intended to obtain feedback about the tools and resources developed as part of the JISC-OULDI project.

#### 2. Context

The e-Learning Strategy of the University (agreed in 2005/2006) focuses on providing a 'blended' approach for teaching delivery to students. This Strategy has been subsumed in the University's new Learning & Teaching Strategy (2011/12 - 2013/14), as part of the overall strategic direction-setting for the institution.

It is evident that strategy in relation to learning and teaching at Brunel supports the implementation of blended delivery to combine the respective advantages of face-to-face teaching and e-learning, educationally-sound design of programmes, and meeting the range of institutional criteria for programme design (including quality & standards, efficiency & effectiveness, clarity & coherence, and resource implications).

#### 2.1 Brunel University

Brunel University is a research-intensive University situated in Uxbridge, West London and is the academic home to approximately 15,000 students from over 100 countries world-wide. The University received its charter conferring status in July 1966. The institution is named after Isambard Kingdom Brunel (1806 – 59), the famous Victorian engineer, bridge-builder, and ships' architect. Brunel's mission is to be a world-class creative community that is inspired to work, think and learn together to meet the challenges of the future.

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The University comprises eight academic Schools: Arts, Business, Engineering & Design, Health Sciences & Social Care, Information Systems Computing & Mathematics, Law, Social Sciences, and Sport & Education. These Schools each have a unique culture and atmosphere, and even sub-cultures associated with disciplines.

Brunel has a reputation as a quality university offering students outstanding employment prospects through its established links with industry and the professions. Students cite Brunel's community-feel and excellent student experience as reasons why they chose to study with the institution.

SITS & Learning Technology (S&LT) is a central support department that contributes to the achievement of the objectives of the University. The Learning Technology Team (LTT) promotes Technology Enhanced Learning (TEL) at the University; enhancing and supporting selected tools and technologies.

#### 2.2 Project focus at Brunel University

Blended delivery is now an accepted learning experience for most students at Brunel. While the use of TEL is not mandatory, academics are expected to enhance the learning experience for students. The LTT offers training and consultation to staff, to equip them to make use of TEL to improve communication, interaction and collaboration in their teaching, and to provide students with flexible access to learning activities, learning resources and formative assessments.

However, the quality of blended delivery has varied across the institution. Lack of coherent approaches across Schools may result in somewhat disjointed learning experiences for many students. Supported processes were needed to enable Brunel to drive forward enhancement strategically through effective design, approval and review of teaching programmes and modules. Furthermore, support should be provided 'just in time' to staff at the times when they need it.

The prime focus / concern of Brunel's initiative involved the following:

- Blending face-to-face teaching with e-learning within the context of student needs, the characteristics or requirements of the programme, the teaching style of the lecturer and available technologies - and encouraging lecturing staff to think profoundly about the best blend at the initial stages of the design process.
- Detailed consideration and incorporation of pedagogic principles into programme design outcomes-based learning, active learning, collaborative learning, being

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learner-centered, accommodation of a variety of learning styles, independent learning, provision of feedback, and learning by reflection - and how the incorporation of these principles could be facilitated by the use of technology.

- This process enabled the LTT to work closely with design teams within the Schools, with a view to providing timely support and advice. Once a programme is signed off, the advisers continue to provide support for the preparation and delivery of the approved programme.
- It is foreseen that the LTT will become more involved in the Annual Monitoring process of Schools over time. Advice and support will be provided to Schools depending on the outcome of the reviews.

**Success criteria 1** Lecturers demonstrate that they have changed the way they think about learning design; they collaborate and share their design work.

Success criteria 2 Technological choices are made in a pedagogically informed way.

**Success criterion 3** Lecturers demonstrate that learning activities are linked to outcomes and assessment strategies; courses/modules are 'improved' in relation to learning and teaching (better student feedback, results, and retention).

#### 2.3 Project barriers, challenges and enablers

The following are the contextual factors for the Brunel case study:

- At Brunel, the Pro Vice Chancellor for Teaching Quality assumes overall responsibility for learning design as detailed within the new Learning & Teaching Strategy. The Director of Academic Programme Development and the Head of Quality & Standards maintain the curriculum design & review processes at the University. Within academic Schools, the Deputy Heads assume responsibility for learning and teaching within the School.
- There currently appears to be insufficient ownership of the overall curriculum design process, which means it is a complex activity to drive, embed and sustain necessary change.
- Many academics within Schools are used to working on modules individually, rather than being involved in a team-based approach to design.
- Academics are in the main not inclined to visually represent their learning design work using technology and are procedurally not required to do so. Furthermore,

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they are not inclined to share their design work with other colleagues within and beyond their School.

- o The Brunel e-Learning Schools consultation initiative has identified that existing technology provision has affected academics' engagement with TEL initiatives. It is apparent, therefore, that an appropriate technological infrastructure is required before overlying structures, processes and initiatives can be embedded. Brunel is, in fact, now migrating to a new VLE as part of upgrading its learning technology provision.
- o Additionally, institutional factors such as a perceived greater emphasis on research versus teaching has somewhat undermined engagement with teaching-related initiatives. As a result, academics have often commented that they have less time to devote to learning design and TEL, which is symptomatic of the culture. Recently, however, there has been a renewed focus on learning and teaching, with the development of a new institutional Learning & Teaching Strategy.
- Institutional culture also affects the way in which learning design interventions are delivered. For example, key members of senior management, TEL champions and academics from Schools are invited to participate in workshops to ensure success and impact. Pitching sessions from the perspective of the new 'SR2' regulations (relating to Brunel's approach towards programme design) result in more participants who are generally more receptive.

#### 3. Methodology

The intention of teaching activity in Higher Education is to add value to the learning experience of the student. By combining the advantages of face-to-face teaching and technology enhanced learning, the maximum impact on student learning is achieved. However, the selection and implementation of sound educational considerations is essential in the design and development of this teaching approach. Eight such educational considerational considerations had been determined from a review of education theories and principles, according to their relevance for teaching in higher education (Alberts, P. P., Murray, L. A., & Stephenson, J. E. 2010: 185).

| Educational considerations | Examples of implementation by means of technol |  |  |
|----------------------------|--|--|--|
| Outcomes-based learning    | Provision of online study guide                |  |  |
| Active learning            | Learning tasks related to a range of Web links |  |  |

### OU Learning Design Initiative

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| Collaborative learning   | Group work via online discussions                   |
|--------------------------|---|
| Student-centred teaching | Online glossary of terminology                      |
| Feedback to students     | Summary postings on discussion tool                 |
| Learner independence     | Additional online learning resources (recommended)  |
| Learning styles          | Links to simulations to accommodate a 'doing' style |
| Reflection               | Personal blog postings                              |

The following questions were researched:

- a. Did the interventions promote...
  - 'Profound thinking' about technology enhanced learning?
  - o Collaboration and sharing in relation to learning designs?
  - Closer alignment between characteristics / requirements of the programme and available technologies?
  - o Awareness at individual / institutional level of the resultant impact?
- b. Is there evidence that the pedagogical integrity of blended learning programmes has improved as a result of the interventions? Are there more examples of implementation of the educational considerations?

#### 3.1 Methods of data capture

In this report we focus on impact evaluation. The methods chosen for data collection have therefore been selected to inform this evaluation at a number of levels: Individual practice | School process | Institutional process. We have captured data which may indicate why the impact occurred, or did not occur, and how it could be enhanced.

Because our interest is in capturing a rich picture of impact across the University, we have used a rich multi-method approach which includes video and audio recording, images and photographs, discussion dialogue from e-mails and the Cloudworks site, surveys and workshop evaluations.

#### 3.1.1 Individual practice impact

Use of semi-structured interviews, representations of designs, student feedback, programme performance data, workshop surveys, e-mail correspondence, Cloudworks discussions



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3.1.2 School process impact

Use of semi-structured interviews, documenting changes in School design processes

3.1.3 Institutional process impact

Use of policy documents and interviews

3.2 Analysis and reporting methods

Use of templates and narratives

#### 4. Overview of interventions and activity within the project

#### 4.1 Stakeholder Engagement

In order to obtain 'buy-in' to the project from Senior Management and key persons at Brunel, the initiative was introduced, reported on and discussed at meetings with the following stakeholders over the course of the project:

- o Pro Vice Chancellor Teaching Quality
- o Head of Registry
- o Director of Academic Programme Development
- o Senior Assistant Registrar for Quality & Standards
- o Director of the Academic Practice Development Unit
- o DASH Committee (Deputy Heads of School, Learning and Teaching)
- o e-Learning Steering Group
- o u-Link (VLE) Development Team

During these meetings, awareness of the project was achieved, as well as cooperation from the range of stakeholders and useful feedback (as time permitted). This contributed to the outcomes and benefits of the project on individual, School and institutional level (for example Derek Milligan, Director of Academic Programme Development, commented at the end of the project: "... the two workshops were very successful and fairly eye opening about what was possible").

#### 4.2 Mapping the Curriculum Design & Review Processes

A fundamental objective of the project was to encourage lecturers to think profoundly about learning technologies available at Brunel, and to seek insight and ideas about how these technologies can be integrated as part of their learning and teaching intentions at the preliminary stages of course design.

OU Learning Design Initiative

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In order to address this requirement, the project team embarked on an initiative to map the curriculum process at Brunel. The initiative aimed at reviewing existing curriculum processes at Brunel to discover how best to ensure in-depth consideration of learning technologies during quality approval and review (namely the Programme Approval, Review, Monitoring and Audit processes).

The methodology used for this investigation was an adaptation of Soft Systems Methodology (SSM) (Fig 1) – an Operational Research (OR) 'process of enquiry that leads to action' to enhance a given situation.



Fig 1: Brunel's Adaptation of SSM

The data-gathering for the initiative was carried out by reviewing source documents and conducting semi-structured interviews with 14 major stakeholders at Brunel. A Rich Picture (a visualisation technique used in SSM to represent the current and proposed system) was produced (Fig 2) and used during the interviews to engage the stakeholders in the discussion by clarifying their understanding of the process. Interviewees were also encouraged to identify 'touch points' within the quality life cycle where consultation and support by Brunel's Learning Technology Team (LTT) would be most needed.





Fig 2: Rich Picture of Brunel's Programme Life Cycle

A Road Map of the Quality System was later produced to outline proposed interventions (see Fig.3 below).

Suggestions for enhancement of the curriculum process at Brunel were identified from the interviews with the stakeholders, including the following:

- o Establish the principle of design teamwork within School context (possibly also a mentor for support if it is a new inexperienced team)
- o Involve the LTT in the provision of guidance and advice to programme teams within Schools; with specific reference to the availability of advice and support
- o More detail in relation to innovation and creativity, as well as delivery, in the design strategy document (for approval purposes)
- o More detailed section on alternatives for course delivery within the module specification outline



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- Offer induction sesions and 'how to' workshops on any aspect of the curriculum process, as well as resources e.g. forms / templates, showcase of examples, handouts / URL's (the LTT could participate in the provision)
- Annual monitoring to be seen as a quality improvement process and not a one-off event; Schools to have the opportunity to reshape questions during annual monitoring
- o Schools to invite their LTT adviser to participate in the annual monitoring process, or alternatively make reports available to the person
- o Schools to invite their LTT adviser to be an observer during their Academic Periodic Review events, or preparation for it, or alternatively make reports available to the person.



#### Fig 3: Road Map to Approval

These suggestions were forwarded to the Director of Academic Programme Development, and the Head of Quality & Standards. They were used to inform updates to the guidance and documentation provided by the Quality & Standards Team to academic staff in Schools, as well as the planning of workshops and other interventions during the curriculum process.

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Furthermore, the suggestions will inform future interactions between the LTT and academic / administrative staff in Schools.

A collection of internal and external design resources were identified for use by the LTT in their interactions with programme teams (including CompendiumLD and Cloudworks). Initially a range of about 30 resources were identified and categorised according to Curriculum Design, Implementation, or Evaluation. Resources such as Cloudworks, CompendiumLD, the Reap Project, Pedagogical Planners/Templates of the Institute of Education, PREEL e-Learning Research Base, JISC Design Studio, HEA Evidence Net, QAQE Toolkit, Epigeum, eLg e-Learning Guidelines, CABLE Project, Carpe Diem, REAQ were included. The list is continuously reviewed for the relevance of each resource for Brunel. The details of each finalised resource are made available in a guide for use of the resource, included in a Learning Design Suite (online flash object). The Suite is available on the web pages of the LTT:

http://people.brunel.ac.uk/~acsrwbl/learningsuite/

#### 4.3 Curriculum Design Workshop: Blended Design, November 2009

#### http://cloudworks.ac.uk/cloudscape/view/1912

Teams from each School were invited to participate in a *Blended Design* Workshop, based on the OU Design Challenge model. Resources, tools and activities were provided to the teams prior to the event, and support offered after the event, both through Cloudworks. During the Workshop it was important for lecturers to "think profoundly" and to reflect on their design work - visualising and sharing it. This was anticipated to have an impact on the quality of their designs. The Workshop was repeated during the project.

The Workshop aimed to introduce staff to new methodologies for learning design, and provide support and guidance for decisions about creating blended learning modules and learning activities. Participants had the opportunity to acquire appropriate new design skills.

Anticipated outcomes of the Workshop:

- Awareness of range of resources / tools / methods available to support learning design – including case studies of good practice, learning object repositories and learning design tools and methods
- o Experience of considering the blended design process from different perspectives via collaborative dialogue and engagement
- o Transfer of the experience gained from the design challenge to participants' own context.

Recommendations from the evaluation of this first workshop:

- Organise workshops at times when School teams are developing or modifying a programme, so that the workshop activities will be focussed on the development of the programme.
- Retain the format of the Workshop components that the participants found most useful, namely opportunity to 'try out' more creative or unorthodox ideas; working with colleagues on an activity; having support staff on hand to answer questions; learning about support/advisory services at Brunel.

#### 4.4 Curriculum Design Workshop: Tools for change, July 2010

#### http://cloudworks.ac.uk/cloudscape/view/2130

The aim of the second Blended Learning Design Workshop (July 2010,) was to provide course teams with an opportunity to review the design of their academic programmes, in light of the new freedoms within SR2 regulations pertaining to undergraduate programmes. The Workshop intended to promote a series of learning design tools and focused on a holistic approach to course level design.

The structure of the Workshop took its lead from the following strands as distilled from the SR2 regulations:

- o Programme and level learning outcomes
- o Rethinking level-based learning opportunities
- o Formative & summative assessment
- o Use of technology to enhance learning

Responses to the evaluation survey in relation to the Workshop indicated that the participants overall felt that their personal objectives for the workshop had been met. Cloudworks was used by all of the teams and CompendiumLD symbols were used by one of the programme teams according to the initiative of their team facilitator - two respondents indicated that they found the tool useful. In this regard it has to be noted that staff have generally not visualised their designs in the past, apart from possibly flipchart or pencil and paper efforts at times (due to the traditional nature of face to face teaching). They were introduced to CompendiumLD for the first time. The opportunity to reflect on the design of their programmes, their personal design practice, and the range and balance of topics as reflected on the agenda / programme for the day were generally commended.

It was decided to meet with the design teams after the workshop to continue supporting them, in order to develop and implement their designs further. Meetings with three identified programme teams followed. It was regarded as essential to obtain notification from the Quality and Standards Office in future about School requests for new / modified programmes. It was agreed that bespoke workshops would be organised upon School requests for customised sessions, to fit in at a time when a School course team is designing or modifying its programmes.

#### 4.5 Engaging and supporting new lecturers

Introductions and demonstrations on the use of Compendium LD and Cloudworks were provided to two intakes of PG Cert / PDAP (Professional Development in Academic Practice) participants. Due to the packed schedule, limited time was available to demonstrate use of the tools. Nevertheless at least three participants began using the tools.

#### 5. Case study narratives

#### 5.1 John Cossar

John Cossar is the course leader for Brunel's BSc Physiotherapy course in Brunel's School of Health Sciences & Social Care. This 3-year undergraduate course aims to prepare students for professional autonomy and excellence in practice. To achieve this aim, the course provides students with opportunities to acquire a sound scientific foundation, develop excellent clinical skills and a well-developed ability to clinically reason, which are essential in order to safely and effectively treat patients.

Despite the fact that the BSc Physiotherapy course has traditionally been well-received by students (including the teaching, feedback, study guides and technology enhanced learning provision), the Physiotherapy team was concerned that the increased provision of learning materials and support could lead to students becoming increasingly passive and taking less responsibility for their learning. The course design team therefore agreed that a change was required: students need to take more responsibility for their learning.

This course was considered a suitable candidate for the OULDI project given the fact that it is being redesigned for the academic year 2011/12 with a view to adopting Brunel's new 'SR2<sup>1</sup>, approach to design. The course team was therefore invited to participate in Brunel's Second Blended Learning Design Workshop (modelled on the 'OU Design Challenge').

<sup>&</sup>lt;sup>1</sup> SR2: Literally 'Senate Regulation 2' – A recently proposed institutional policy change from a module-based to a level-based approach to curriculum design







Physiotherapy Course Team and facilitators from Brunel's Second Blended Design Workshop

John Cossar and Alan Esnouf represented the Physiotherapy course team at the workshop in July 2010. They were given an opportunity to explore the 'Pedagogy Profiler' and the 'Course at a Glance' tools from the OU design toolkit, to facilitate the exploration of their chosen design (supported by a member of Brunel's Learning Design Team). The examples below demonstrate the ways in which they used the tools to provide alternative representations of their course provision. Additionally the Course Team engaged with Cloudworks in order to share and discuss their designs.



**BSC Physiotherapy: Pedagogy Profile** 





#### BSc Physiotherapy: 'At a glance' Course Map

John explained that the learning design tools presented to the Physiotherapy team gave

The day influenced our thinking about the course. We ... split our course into study blocks...We pulled everything apart and redesigned this. **29** 

John Cossar (Physiotherapy Course Leader)

them an opportunity to work together on that day and *"helped us to think about the course and viewing it from different perspectives"* (*Appendix 1: Interview with John Cossar*). This was deemed useful at an early stage of the course design process. Furthermore, John indicated that he found the discussions emerging from Cloudworks very interesting and useful.

However, the tools were not used in subsequent course design activities outside of the workshop. Although they were deemed useful, the use of 'educational jargon' (e.g. 'assimilative learning') was a deterrent in the further engagement with the tools and theories presented. They also represented an investment of time, which was already a scarce resource.

"We have not used any of the tools directly, but the principles have been used, including the ways in which we could structure and link teaching to assessment. This certainly influenced our discussion and the way we thought about the course. The tools were probably not the best approach for us, but indirectly we were able to use the underlying principles."

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Overall, the initiative gave the course team an opportunity to consider their learning design approach. Although the perceived lack of academic time to fully engage with the learning design tools, and the use of jargon were deterrents, they nevertheless served to set the basis for dialogue and facilitated the consideration of the design from different perspectives.

The short term impact of the tools was therefore experienced within the context of the workshop. However, the longer term impact was demonstrated in influencing the 'mindset' of the participants involved on the day, through utilising the principles from the workshop. The most tangible output from the workshop was the fact that it reinforced the decision of the Physiotherapy team to proceed with the use of PebblePad within their course provision, as John explains:

"[The consideration of the course design using the tools] triggered the thinking about IT backup for. We were thinking about PebblePad during that day. PebblePad fitted in with our needs very well. It allowed us to connect with students right through the course and up until and after they graduate, to encourage CPD, especially as part of professional requirements."

When considering the issue of technology enhanced learning provision, John suggested that *"although PebblePad for course provision was being considered earlier, the workshop reinforced the decision to use PebblePad"*. It appears therefore that the workshop played a role in helping to confirm earlier decisions regarding course design.

Collaboration was influenced *"Indirectly...not a great deal. The insights from the workshop certainly influenced how we discussed the issues."* John's explanation about traditional course team collaboration is insightful in this regard:

"I don't believe that there was anything wrong with the IT tools, but rather, the circumstances that we were in. It is difficult to get the programme team to 'buy in'. Programme redesign takes a lot of meetings, so you can get a lot of meeting fatigue and IT fatigue! Looking back, it took 7-8 programme team meetings to redesign the whole programme over 12-18 months... so not much time to introduce this new concept. To have to think about using new technologies as part of this process would have meant spending more time learning about them. It is hard enough to get the team along for a meeting....perhaps if we, as a team, had more time?"

Cultural factors (such as the perceived amount of time available and perceived investment of time) therefore appear to be a major factor influencing both collaboration and engagement with the various interventions. Certainly the time investment required for learning about the system represented a deterrent, as John explained, *"The programme team already use a variety of different systems and therefore having to learn about a new system prevented* 

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further engagement. Learning a new system also involves learning the language of the system". It comes as no surprise, therefore, that the 'pen and paper' approach to learning design was favoured in this instance.

Language used within the tools was also highlighted as a deterrent to the course team's engagement outside the workshop, as John explained:

"A lot of things we were trying to do in our own language mirrored what we wanted to do, but the jargon used during the day actually deterred us. This also applied to the theory and the systems used, which were inaccessible to the teams due to the jargon used."

Overall, however, the interventions influenced their thinking about the course, as John indicated that they were able to organise the assessed study blocks *"We pulled everything apart and redesigned this"*. The underlying pedagogical principles also enabled John to consider ways of linking teaching to assessment and although it has not affected the Physiotherapy team's collaborative working approach, it has certainly reinforced the importance of learning design.

Since the redesign the course has successfully undergone approval by the Health Professions Council, Chartered Society of Physiotherapy and the University. Indeed the Programme received the following commendations:

- 1. The Panel commends the broad consultation and detailed, thorough rethinking undertaken by the programme team in redesigning the programme.
- 2. The Panel commends the innovative application of the programme design freedoms provided by the new SR2 regulations.

Since the redesigned course is not being implemented until 2011/12, there is no student data available to support the impact on students. However, an initial survey of students (*Appendix 3*) reinforces the decision that the course design team should consider implementation of PebblePad at an earlier stage in the course.

#### 5.2 Mariann Rand-Weaver

Dr Mariann Rand-Weaver was Deputy Head of Learning and Teaching of the School of Health Sciences and Social Care at the time. She lectured and was the module leader responsible for the BSc Biomedical Sciences programme.

Mariann became involved in the OULDI project when she attended, together with three colleagues from the School, the 2<sup>nd</sup> Brunel Learning Design Workshop held on the 14<sup>th</sup> of July 2010. The course design team's specific intention in attending was to think about possible



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ways to redefine their programmes' assessment structure for mainly two purposes: to reduce assessment workload to staff whilst improving the quality of the teaching delivery, and also to improve the students' learning experience. The course team wished to explore further the possibilities within SR2 and also to share and discuss ideas with other participants.



#### Biosciences Course Design Team discussing new approaches during the Learning Design Workshop

During this one-day event, Mariann and the team from Biosciences were given the opportunity to review the design of their programmes. They were exposed to a series of learning design tools which included the 'At a Glance Course Map', and the 'Pedagogy Profile', to enable them to think of a holistic approach to Level design. The team had the opportunity to review the programme and level learning outcomes, rethink Level-based learning opportunities, discuss their current formative & summative assessment strategies, and explore which technologies could be integrated as part of the programme. A 'critical friend' was also assigned to Mariann and the team to provide constructive feedback on the various solutions under discussion. The following link points to documents that were produced during some of the activities conducted during the workshop, which kick-started their redesign of the Biosciences' assessment strategy. (http://cloudworks.ac.uk/cloud/view/4129).





**Biosciences: At a glance Course Map** 



**Biosciences: Pedagogy Profile** 

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Beyond the workshop, Mariann and the team continued working on the design initiated during the workshop with all the other lecturers within Biosciences. The end result is that the Undergraduate programme has been totally redefined, making use of the freedom offered by the revised SR2 framework, and Biosciences has moved away from the 'silo' module delivery approach to separate content (delivered in Study Blocks) from assessment (contained in separate Assessment Blocks). The intended outcome, as Mariann remarks, is that 'students should be able to integrate information better, have to engage more and be more critically thinking'.

The department now has reduced its summative assessments by two thirds and staff are spending some of the time which they would have spent marking in conducting formative activities to increase interaction between students and staff.

In hindsight, Mariann feels that the Biosciences team's involvement in the Learning Design Workshop instigated the process to this major redesign of the assessment. She thinks that the materials developed during the workshop activities, especially the session on reviewing the high level Programme outcome and reconstructing the level outcomes, were indeed the starting point.

Another added benefit derived from the workshop was the fact that participants had an opportunity to dedicate a day entirely to reflect and think collaboratively on ways to enhance their programme design and delivery methods. This, Mariann remarks, was something which no one had experienced previously. Collaboration and team work are vital to the success of implementing opportunities offered by the new SR2 framework, so having the opportunity during the workshop to work in a team was extremely useful.

"This changes how we work... so, whereas in the past, I could do my module and my assessment without any interference, now when assessments are going to cover several subject areas it means really cooperating with my colleagues and I will have a team of people doing the marking, so there is going to be challenges around consistency. So yes, it is having to change how we operate, how we do our teaching."

Sharing ideas with the 'critical friends' was also perceived as extremely valuable by the Biosciences team

"You are only as innovative as your brain allows you to be and if you are the only person doing it you will find yourself limited and if you are a small group of people who are always thinking in the same vein, then you are going to be limited. So having somebody from outside is actually really helpful."

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Mariann however, did not find the use of Cloudworks and Compendium very useful during or after the workshop. This is due to the fact that staff is constantly under pressure to do things, with very little time to experiment with new tools and/or '*thinking time*'.

On a positive note, the revised assessment design is closely aligned with student needs, programme characteristics and requirements and resources. In the past, students have complained about too many assessments. Now with this new approach, the assessment load is spread throughout the year.

"So we let students know at the beginning of the year what all their assignments for the year will be so they can plan and they can gather the information as they go along before they have to submit, so this will hopefully improve their workload as well. We also hope that this would give them a better experience because we will have more formative activities and thereby give them the staff-student interaction that they would like. I feel that what we are requiring them to do will challenge them in ways which will be appreciated by employers. So I think yes, there is better alignment between student requirements, resources and programme design."

So as Mariann indicated 'it is a win-win all round' for both students and staff.

Finally, it is worth noting that the Biosciences approach to implementing SR2 has not only proved successful within the department, but also across the School since other departments will follow suit in the coming academic year.

#### 5.3 Sweta Rajan-Rankin

Sweta Rajan Rankin is a lecturer at the Social Work division in the School for Health Sciences and Social Care. She is the module leader in Social Policy for the BA and MA programmes in Social Work and is involved in offering foundational lectures on welfare delivery, social policy provisions and linkages with front-line practice.

When Sweta started working at Brunel she was quite a novice in the use of blended learning technologies. She got involved in the Learning Design initiative along with other colleagues from the School of Health Sciences and Social Care (SHSSC) by attending the Blended Learning Design workshop in November 2009. The reason for getting involved in this initiative, as she remarked, was because she was 'quite interested in the notion of blended design, as any other student-centred lecturer would be ....to learn new skills and to decide how you can deliver your module to students in a way that really engages them [the students].'

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The School design team who attended the workshop consisted of inter-disciplinary team members from Occupational Therapy, Physiotherapy, Community Nursing, Bio-sciences and Social Work.

The common theme selected in the group was 'inter-professional practice' and concerns attached to 'ethical issues' in particular. During this one-day event, Sweta and her colleagues were given the opportunity to plan the design of a new short course and map out the key elements and 'flavour' of this new short course. The SHSSC team were also exposed to a series of learning design tools, the 'At a Glance Coursemap, 'Pedagogy Profile', the 'Design Decision Assistant', and the 'How to Ruin a Course', which can be used at various points in the process to represent, inform and reflect on learning designs.

The team also shared ideas about which technologies could be integrated as part of this short course design. Sweta took the opportunity to make extensive use of learning tools available during the workshop by uploading to Cloudworks a proposed module design (using blended learning methodologies) on 'Inter-Professional Ethics'.



#### Interprofessional Ethic: At a glance Course Map

Following her involvement in the Blended Learning workshop, Sweta continued to develop further her ideas to redesign the current methods and approaches of her teaching delivery. Her primary intention was to redesign her module using a blended approach 'to facilitate a

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*student-centred*' method of delivery which is essentially '*an effective method rather than a popular method*'. Sweta thinks that using the learning design tools at the Learning Design workshop, especially the 'At a Glance Course Map', has helped her in this process.

"I could see through the steps involved in looking at what type of resources we need to deliver our teaching, what type of information we are trying to share. Or, since this is social work or a professional course – what type of skills are we trying to develop."

Sharing ideas on inter-professional ethics with other colleagues from different course teams within the School has proved difficult during the workshop as the ethical frameworks and concerns varied across the disciplines. In Sweta's opinion, the blended learning workshop would have been more productive if it had been spread over two days: to learn how to use virtual learning environments and also have critical space to discuss its application with colleagues. The compressed nature of the one day workshop and the invariable differences between different disciplines presented a unique challenge to team working. However, Sweta thinks that the disagreements made staff realise that they had to talk 'about professional ethics more'.

"This is something that we need to do because we want to have inter-professional learning, to have different professions learn and teach together."

Sweta's experience of using 'Compendium LD' and Cloudworks was somewhat difficult although she managed to develop a visual representation of the new short course design during the workshop. She remarked for instance that technology should assist clear pedagogical intent and not replace the aim of teaching itself.

On a more positive note, Sweta thinks that by taking on board the pedagogical concepts disseminated during the workshop, she has now managed to make changes to her teaching delivery methods which have derived 'extremely positive feedback' from her students. As a result, she has succeeded in moving away 'from more didactic teaching to a more student-centred [approach] to teaching', thus giving the students the flexibility and independence to become more autonomous in their learning experience, and to be able to reflect and share ideas with their colleagues.

Finally, Sweta took the opportunity to share her newly-acquired experience on blended design approaches, tools and resources during the 11<sup>th</sup> Annual Learning Teaching Symposium at Brunel (Figs 1 & 2 below) to generate awareness and understanding of the pedagogical benefits that can be realised through these new learning design methodologies.



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### Figs 1 & 2: 'Changing the Metaphor' Presentation during Brunel's Annual Learning & Teaching Symposium 2010.

Sweta's presentation at the Symposium was very well received and presented interesting challenges about the future of using virtual learning environments in teaching professional degrees such as social work. By giving examples of using videos of patient experiences of end-of-life care, she demonstrated how these tools could be valuable for student learning, but also cautioned the importance of managing strain and emotional distress such visual aids could produce if not also managed by supportive and empathetic facilitation.

#### 6. Impact analysis

### 6.1 Success critera 1: The interventions promoted profound thinking about technology enhanced learning

There is strong evidence to suggest that in at least one case, a course leader discussed the synergy between educational considerations, continued personal development and professional requirements and highlighted the fact that the selection of the learning technology was justified as a direct result of the interventions. The decision to embed the TEL intervention was reinforced.

The interventions therefore led to 'application' according to the 'HEA 6-level Impact scale'.

### 6.2 Success criteria 2: The interventions promoted collaboration and sharing in relation to designs

It is apparent that culture was a factor influencing both use of and engagement with the interventions. To illustrate, the language used in the context of the interventions (terms such as assimilative learning) seemed to deter engagement to some extent. Furthermore,

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the perceived lack of time required to master the technological interventions was a deterrent.

However, a variety of evidence suggests that the interventions promoted collaboration and sharing of designs. In particular, the 'design challenge' workshops (rather than the technical interventions) set the basis for dialogue and facilitated the consideration of learning design from several perspectives.

Pedagogical principles introduced during the workshops influenced how learning design issues were considered by participants later on outside the workshop setting, thus an indirect influence.

Sharing ideas during the workshops was complicated by the mixed composure of some course teams, detracting from what otherwise might have been more fruitful discussion. However, one participant indicated that this had other benefits such as questioning the learning design from different perspectives. Indeed, the sharing of ideas with 'critical friends' promoted innovation in relation to learning design, and proved valuable.

The most prominent example of the way in which the interventions promoted sharing was in the case where the participant undertook to disseminate her experiences of the interventions to Brunel colleagues at the annual Learning and Teaching Symposium. The academic not only shared her design, but also advocated the way in which it was used to benefit her teaching practice.

Therefore, there were mixed levels of impact according to the 'HEA 6-level Impact scale', ranging from 'awareness' through to tangible 'effects on student learning' for this objective.

### 6.3 Success criteria 3: The interventions promoted clear alignment between student needs, characteristics/ requirements of the programme and teaching styles

The workshops influenced the mindset of participants through consideration and use of the underlying pedagogical principles. However, to a greater extent the pedagogical principles enabled one participant to consider ways of linking teaching to assessment and though it may not have directly affected the course team's collaborative working approach, it certainly reinforced the importance of learning design.

One participant found particular value in using the 'At a Glance Course Map' to identify support requirements for their course. This sentiment was echoed by another participant.

There is evidence of impact in one instance where the participant took on board the pedagogical concepts disseminated during the workshops and made changes to her

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teaching delivery methods which derived 'very positive feedback' from her students - thus adopting a more student-centred approach to teaching.

The materials developed during the workshop activities were seen as the 'starting point' for some, particularly the sessions reviewing the high level programme outcomes and reconstructing the level outcomes.

The interventions provided the opportunity for one participant to align assessment closely with student needs, programme characteristics and requirements and resources, through inclusion of more formative and less summative assessment activities, and assessments that address the skills required by employers.

Therefore, overall there seems to be mixed levels of impact according to the 'HEA 6-level Impact scale', ranging from 'awareness' through to tangible 'effects on student learning' for this criterion.

### 6.4 Success criteria 4: The pedagogical integrity of blended learning programmes has improved

There is less evidence to demonstrate that the pedagogical integrity of blended learning programmes has improved as an overall result. In one instance, however, a programme was redesigned and has since been approved by the Health Professions Council, Chartered Society of Physiotherapy and University. Indeed the programme received a variety of commendations, including 'broad consultation and detailed, thorough rethinking undertaken by the programme team in redesigning the programme'.

#### 7. Conclusions and recommendations

Overall in the context of Brunel University, it would appear that the interventions that were best received in this initiative were the Learning Design workshops. These workshops provided the academics with dedicated time and space to reflect on, discuss and share their learning designs. Academics generally perceive that they have a lack of time to dedicate to such activities; therefore, participating in events such as this provided the opportunity to set aside time for this purpose, whilst having access to 'experts' from supporting areas (e.g. the Learning Technology Team).

Furthermore, the role of the 'critical friend' was said to stimulate and drive innovation, considering input from a fresh perspective. This further resulted in value within the context of the workshops.

The technological interventions (e.g. Cloudworks, Compendium LD) were generally less well received given the perception that there is an upfront investment of time required to

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acquaint oneself with them, and it therefore did not fully meet the expected value. It would seem that any technological intervention needs to be promoted as a 'time-saving' and 'value driving' mechanism to increase uptake and engagement.

On the whole, Brunel obtained significant value from its participation in the initiative as a partner institution and the University will certainly take forward the lessons learnt, as well as selected interventions, as outlined in the sustainability plan below. There is a series of identified critical success factors that will be put forward as recommendations, based on Brunel's experience, as below.

#### 7.1 Critical Success Factors

#### Scheduling

The workshops should ideally take place at or near the start of the course design process, resulting in the most impact at a time when academics most require this form of support. This ensures a 'captive audience'.

#### Addressing the opportunity

Academics are more likely to engage with interventions when they are reviewing and redesigning their courses, i.e. when they have a specific need. Consideration of change in learning design approaches may be prompted by student feedback on the course, or identifying a need for students to become more autonomous in their learning, or even a concern to enhance their approach to learning design.

#### Avoiding jargon

The language used within the context of workshops and other interventions can strongly influence individuals' predisposition towards them and resultant engagement with them. For example, the use of terms such as 'assimilative learning' in the pedagogical profiler can mystify academics. It should not be assumed that academics necessarily share a common language with regard to educational terminology. Understanding of course design needs to be made more accessible to academics.

#### Linking to existing institutional change initiatives

Institutional change provides great impetus for introducing interventions for learning design. For example, relating the learning design workshops and tools to Brunel's new 'SR2' regulations on course design, made the interventions more meaningful and reinforced engagement, leading the way for greater sustainability.

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#### Shared Discipline

Various academic disciplines have their own approaches to learning design, as well as specific considerations relating to the subject in general. Working within a course team in the same discipline lends itself better to the learning design experience within workshops. Often initiatives are conducted at a School level without recognition of the plurality and diversity of disciplines.

Conversely, it was noted that the role of the 'critical friend' (who may not be from the discipline in question) is useful as this could stimulate innovative thinking in learning design.

#### 7.2 Recommendations for the institution

It is recommended that Brunel continues with the initiative, building on its experience and embedding it in institutional life, in order enhance the quality of learning and teaching at the University – see section 8: Plan for sustainability (page 33).

#### 7.3 Recommendations for the sector

Higher education institutions are encouraged to embark on similar initiatives and share their progress and successes in the sector

## 8. Plan for sustainability (embedding selected aspects of the Initiative in the future)

The intention for Brunel is to:

- 1. Select Learning Design Tools from the initiative, which will be suitably modified and embedded in Brunel's programme design and approval processes.
- 2. Utilise the format of the Learning Design workshops, as piloted at Brunel, in continuing support provided for programme developers in the Rethink Forum.
- 3. Promote the Learning Design methodologies trialled at Brunel via the Rethink Forum virtual presence.



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**Dr. Mariann Rand-Weaver,** Deputy Head of School of Health Sciences and Social Care (Learning and Teaching) to 2010 and subsequently Pro-Vice Chancellor for Quality Affairs

Dr. Sweta Rajan-Rankin, Lecturer in Social Policy

#### **Project resources and outputs**

- Project web pages: http://www.brunel.ac.uk/about/acad/apdu/researchprojects/ouldi
- o Brunel Learning Design Suite, including Map of Brunel Curriculum Design and Review Processes:

http://www.brunel.ac.uk/about/acad/apdu/researchprojects/ouldi/deliverables



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#### **References and Conference presentations**

Alberts, P. P., Murray, L. A., & Stephenson, J. E. (2010): Eight Educational Considerations for Hybrid Learning. In Wang, F. L., Fong, J., & Kwan, R. C. (eds), Handbook of Research on Hybrid Learning Models: Advanced Tools, Technology, and Applications. Hershey, New York: Information Science Reference.

Parnis, N., Alberts, P. P., Papaefthimiou, M. (2011): "Curriculum Design: An approach for successfully embedding Technology Enhanced Learning in the curriculum", 18th International Conference Alt C 2011, Leeds, UK (September)

Galley, R., Papaefthimiou, M., Alberts, P. P., Parnis, N., Brown, R., Amyas, P., Sharma, A. (2010): "Embedding learning design processes: Responding to context", 17th International Conference Alt C 2010, Nottingham, UK (September)

#### Appendices

#### Appendix 1 Interview with John Cossar (Physiotherapy Course Leader)

Date: 10<sup>th</sup> June 2010

#### Did you find the tools presented at the workshop useful?

I have not used the tools since the workshop. However, working together on that day helped us to think about the course and viewing it from different perspectives.

I have not really used Cloudworks and the other tools since the workshop, but I did find there were a lot of interesting and useful discussions emerging from them.

I found the educational jargon was somewhat tricky. From my perspective some of the jargon and concepts were difficult to translate and put into practice.

A lot of things we were trying to do in our own language mirrored what we wanted to do, but the jargon used during on the day actually deterred us. This also applied to the theory and the systems used, which were inaccessible to the teams due to the jargon used.



We have not used any of the tools directly, but the principles have been used, including the ways in we could structure and link teaching to assessment. This certainly influenced our discussion and the way we thought about the course.

The tools were probably not the best approach for us, but indirectly we were able to use the underlying principles.

#### Did you find the Learning Design workshop useful?

The session took place at the beginning of the process, which was a good time from our perspective.

I particularly found Derek's session regarding SR2 to be the most useful aspect of the session. This was explained really well and made us realise the opportunities for flexibility in our course design. A lot of the changes made to our course were as a consequence of realising what we could do with the opportunities offered by SR2. In fact, we presented our ideas for course design at the next panel and were commended for taking full advantage of the possibilities offered by SR2.

#### Any suggestions for improvement?

Indirectly the day triggered a lot of thinking and discussion.

A definite factor deterring further engagement was the time and investment required to learn about the technology. The programme team already use a variety of different systems and therefore having to learn about a new system prevented further engagement. Learning a new system also involves learning the language of the system.

I don't believe that there was anything wrong with the IT tools, but rather, the circumstances that we were in. It is difficult to get the programme team to 'buy in'.

Programme redesign takes a lot of meetings, so you can get a lot of meeting fatigue and IT fatigue! Looking back, it took 7-8 programme team meetings to do the whole programme redesign over 12-18 months... so not much time to introduce this new concept. To have to think about using new technologies as part of this process would have meant spending more



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time learning about the them. It is hard enough to get the team along for a meeting....perhaps if we, as a team, had more time.

#### Assessing the impact on your work

Has the initiative (workshop &/ or tools) influenced the following...

#### a) Changing the way you think about learning design

(as discussed)

#### b) Your collaboration with the course team/ sharing designs?

Indirectly. Not a great deal. The insights from the workshop certainly influenced how we discussed the issues.

#### c) Affected your choice of technologies?

It triggered the thinking about IT backup for this. We were thinking about PebblePad during that day.

PebblePad fitted in with our needs very well. It allowed us to connect with students right through the course and up until and after they graduate, to encourage CPD, especially as part of professional requirements.

Another important aspect influencing our decision was the fact that some course team members (particularly Alison Sherwin) were familiar with PebblePad.

Brunel's acquisition of PebblePad also took place at the appropriate time for us to take advantage of using the technology as part of our course provision.

Although PebblePad for course provision was being considered earlier, the workshop reinforced the decision to use PebblePad.

### d) Affected the way in which learning activities are linked to outcomes and assessment strategies?

The day influenced our thinking about the course. We managed to split our course into study blocks, identifying study blocks that are assessed.... We pulled everything apart and



redesigned this.

### e) The improvement of courses/ modules (e.g.: via student feedback, results and retention)

I cannot comment on this as the redesigned course has not yet been implemented. This will happen in September 2011.

#### Historical perspective

Looking back at the former course provision for BSc Physiotherapy, although the previous course was well-received (including the teaching, feedback, study guides and technology enhanced learning provision), there was a concern that students were becoming increasingly passive and less responsible for their learning.

The course design team agreed that students needed to take more responsibility for their learning.

The course was redesigned following an extensive exercise of feedback collection from students. A series of 'Programme Development Meetings' were organised with each cohort to discuss what aspects of the course required changes and what new practices the course team should incorporate. Student feedback was a highly influential factor in the redesign of the course.

As an example, the redesigned version of the 'Professional Development' module would now include the use of PebblePad for the collation of feedback and for the students to design an action plan to address their learning on the basis of that feedback (feed-forward). The onus will shift to the students.

#### Appendix 2 Interview with Mariann Rand-Weaver

#### Wednesday, 22nd of June 2010

Natalie: As one of the participants from the Biosciences Course Design Team, what were your experiences of the Learning Design workshop you have attended in July last year? What did you seek to achieve from attending this workshop?

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Mariann: We had a team of four people from Biosciences at this event, and essentially we were at that time looking to redefine our assessment structure for two reasons: a) to reduce the assessment workload for staff and b) improve the experience for students. We wanted to see whether we could assess students less without any loss of quality – in fact maybe improve the quality. So we had a very specific objective in mind and in particular we were looking at two things during the day. One was about what were the possibilities within the new SR2 (which were part of the day), and also to meet other people and get ideas for how we might possible go about it.

#### Natalie: And were your objectives achieved?

We have now redefined our Undergraduate modules and we have totally moved away from modules to study blocks and assessment blocks, which is encouraged within the new SR2 structure and in doing so this has allowed us to do more level assessments and more integrated assessments. So the students should be able to integrate information better, have to engage more and be more critically thinking, and we have managed to reduce the assessment by  $2/3^{rd}$  (summative assessments). What we have then done is take some of the time which we would have spent marking the assessments and put it into formative activities to increase student and staff interaction, helping students more in the learning process so that they can try out their ideas and thinking without it counting towards their degree. The final assessments then are possible harder and more challenging, and the students have to integrate information. We wanted to get away from the silo approach to learning.

## Natalie: So can you tell me, in what ways have the representations & design approaches presented during the workshop enabled you to reflect on your current teaching design methods and practices?

I have to say that we have not used them directly, but indirectly. There was one particular template for how you would assess throughout the programme, what skills you were assessing and making sure that you were covering everything, so that you do not do 10 of the same assessments but ensuring that there is a range, and this was very much in the background. So the templates that we were given to work on were actually quite helpful. We also did some activities around Level learning outcomes; starting with programme



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outcome and going down to Level outcomes was very, very useful and in fact we used what came out of those activities as a starting point. So that actually was a direct benefit.

Natalie: Can you elaborate a bit more on this? So do you think that this process has enabled you to start reflecting on possible solutions?

Yes, the challenges which we had to overcome in reducing the assessments is to decide what is it that you want to assess, what is it that you value in the degree? When you drill it down, what is it that Biosciences students should come out with? So we were reductionist, but at the same time got to an over arching learning outcome – they have to think critically, be able to integrate information, and show a breadth of knowledge over certain subject areas. So we have defined our assessments to fit in with those outcomes. The direct benefit was that we (four) started thinking, and it was quite challenging to get our heads around it. But having four people there really allowed us to kick-start the process, and having to go through the templates helped us a lot.

Subsequently we used the Benchmark Statement for Biosciences an awful lot in order to say how and where we were covering the attributes and skills that students should come out with from a bioscience degree.

Natalie: Did you find working with your colleagues on design activities useful? Was it the first time that you sat down as a team to discuss this?

We hadn't done anything beforehand. It helped having the three other colleagues there because that meant when we did start the work there were a few other people who were "on board" and who had had a day, away from their normal duties, to think about some of this, which definitely helped. We are quite a tight-knit group in Biosciences, whereas in other areas this could be a problem as there might be some resistance to change. You really need unity as what we have done is a whole-sale change. It is not easy for staff as this changes how we work: so whereas in the past, I could do my module and my assessment without any interference, now, when assessments are going to cover several subject areas, it means really cooperating with your colleagues and you will have a team of people doing the marking, so there is going to be challenges around consistency. When you've got one



person, whatever the marking is, it is consistent. When you have a team of people, you have to make sure there is internal consistency. So yes, it will change how we operate, how we do our teaching.

### Natalie: You also had a critical friend from an external institution working with you during the workshop. Did you find this useful?

It was actually very useful, as she was saying 'oh why are you saying that?' so yes, having someone looking at things from a different perspective really was quite useful and everyone in the team found that. You see, the danger is, and I think this is what hampers innovation in many cases, *is that you are only as innovative as your brain allows you to be, and if you are the only person doing it you will find yourself limited and if you are a small group of people who are always thinking in the same vein, then you are going to be limited. So having somebody from outside is actually really helpful.* 

#### Natalie: Did you find the use of Cloudworks helpful in your design initiative?

Not particularly. I think we had a bit of an issue getting it up on a computer, but subsequently - really I just do not have time. There is so much stuff out there, but having time to review it all, and read it all..... It would fall into what I call 'thinking time' and if you ask anybody, there isn't enough thinking time; we are all just pressured for doing things.

Natalie: So do you think that the knowledge you have acquired from attending the Learning Design workshop has enabled you to make an impact on your work as a lecturer and as a Deputy Head of Learning and Teaching?

I guess as a lecturer yes, because it is changing the way we are doing things in Biosciences. In the role of Deputy Head I again say yes, because I am now able to inform other areas in the School and say to those who did not attend what the possibilities are. So I think that has been quite useful. The School has benefitted, not just Biosciences. It has been a huge high level reflection on actually 'what are we doing' and also 'what actually do we want to do' and 'what do we want our students to be able to do'. So we have gone for the really high level stuff and seeing how we can change what we do to support students achieving this

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high level stuff that we want them to achieve. So hopefully we will improve the student experience, and we will make them much more employable because of the skills we are aiming to help them achieve.

### Natalie: Ok so during the workshop, did you use any visualisation techniques to represent your collaborative design effort for example, Compendium LD?

We did it a little bit in the workshop in a sense that we have put the learning outcomes in boxes and templates but we did not use any other type of software. I can see instances where visualisation techniques could be useful but we did not use it.

### Natalie: Is there any evidence that your revised approach has ensured alignment between e.g. programme design, student requirements and resource needs and constraints?

Yes definitely. The proof is going to be in the pudding; the first intake to this new restructured programme will be this year. Essentially as a staff group we got to the realisation that things get added, year on year there are new requirements, and so if we were going to manage and "improve" our workload, then we, as a unit, had to do something. Nothing from the outside is going to come and say, stop what you're doing, do it this way and your life will be transformed. So if we wanted to improve what we were doing it had to come from us, and this restructuring has been very mindful of that; not only for academic staff time but also admin staff time because with fewer assessments there are fewer marks to be entered into the system, so it is a win-win all round. Now, from the students perspective we often get complaints about too many assignments, they tend to bunch up and with best will in the world students are never going to be able to have all the time they want to do their assignments. Often with these assignments the deadlines are very close together so this is going to improve in the future as with fewer assignments we can spread them out better. We will let students know at the beginning of the year what all their assignments for the year will be so they can plan and they can gather the information as they go along before they have to submit, so this will hopefully improve their workload as well. We also hope that this would give them a better experience because we will have more formative activities and thereby giving them the staff/student interaction that they would like and I feel that what we are requiring them to do will challenge them in ways



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which will be appreciated by employers. So I think yes, there is better alignment between student requirements, resources and programme design.

At School level, Biosciences has made huge changes. Physiotherapy has recently had their programme approved with many changes similar to what we have done, so they also went to assessment blocks and more holistic, overarching assignments. Occupational Therapy will be reapproved in February 2012. At School level we are really 'advanced' in restructuring and looking at how we can apply the information that came out of that day. So yes, it has had a bigger impact than just for Biosciences.



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Appendix 3 Physiotherapy Student Survey

#### PebblePad use on the BSc Physiotherapy Course 🧄 SurveyMonkey

| 1. Gender |                     |                   |
|-----------|---------------------|-------------------|
|           | Response<br>Percent | Response<br>Count |
| Male      | 0.0%                | 0                 |
| Female    | 100.0%              | 5                 |
|           | answered question   | 5                 |
|           | skipped question    | 0                 |

| 2. Age         |                     |                   |
|----------------|---------------------|-------------------|
|                | Response<br>Percent | Response<br>Count |
| Up to 18 years | 0.0%                | 0                 |
| 18 – 21 years  | 60.0%               | 3                 |
| 21 – 24 years  | 20.0%               | 1                 |
| 24 – 27 years  | 20.0%               | 1                 |
| 27+ years      | 0.0%                | 0                 |
|                | answered question   | 5                 |
|                | skipped question    | 0                 |



| 3. How often have you been using your e-portfolio (please tick the option that is most appropriate) |                     |                   |  |
|---|---------------------|-------------------|--|
|   | Response<br>Percent | Response<br>Count |  |
| daily   | 0.0%                | 0                 |  |
| weekly  | 0.0%                | 0                 |  |
| monthly   | 0.0%                | 0                 |  |
| less frequently   | 80.0%               | 4                 |  |
| never   | 20.0%               | 1                 |  |
|   | answered question   | 5                 |  |
|   | skipped question    | 0                 |  |

#### 4. Please indicate to what extent you agree or disagree with the following statements

|  | 1 -<br>Strongly<br>Disagree | 2 -<br>Disagree | 3 - Neither<br>agree nor<br>disagree | 4 - Agree | 5 -<br>Strongly<br>agree | Response<br>Count |
|--|-----------------------------|-----------------|--------------------------------------|-----------|--------------------------|-------------------|
| I have found PebblePad easy to<br>use  | 0.0% (0)                    | 0.0% (0)        | 40.0% (2)                            | 40.0% (2) | 20.0% (1)                | 5                 |
| PebblePad has helped me to gather<br>evidence for professional<br>requirements         | 0.0% (0)                    | 0.0% (0)        | 40.0% (2)                            | 40.0% (2) | 20.0% (1)                | 5                 |
| PebblePad has encouraged me to<br>reflect  | 0.0% (0)                    | 0.0% (0)        | 60.0% (3)                            | 40.0% (2) | 0.0% (0)                 | 5                 |
| Incorporating PebblePad as part of<br>the module has been effective for<br>my learning | 0.0% (0)                    | 0.0% (0)        | 80.0% (4)                            | 0.0% (0)  | 20.0% (1)                | 5                 |
| Overall I have found PebblePad to<br>be valuable                                       | 0.0% (0)                    | 0.0% (0)        | 60.0% (3)                            | 20.0% (1) | 20.0% (1)                | 5                 |
|  | answered question           |                 |                                      |           | 5                        |                   |
| skipped question   |                             |                 |                                      | 0         |                          |                   |





5. Please indicate whether you have any suggestions for improving the way in which PebblePad benefits your learning.

Make it more user friendly, like Facebook

5/23/2011 10:23 PM

It is a good tool for helping me to keep my documents in one place. Other than that I don't really see any value

5/23/2011 10:20 PM

It could be used more in the course. I used it at the end so didn't get much of a chance to explore this

5/19/2011 1:03 PM

I think it is good that we got to use PebblePad. It would have been better if we had an opportunity to use this earlier in our course rather than 3rd year. I didn't use it very much as I was quite busy/ didn't always remember.

5/18/2011 10:38 PM