Pathfinder Programme Project Plan

Kingston University (May 2007)

Rapid Reaction and Response (R^3):
The in-class use of mobile technologies to support diagnostic assessment.

1. Project Overview

1.1 Background

In the context of e-Learning, a Pathfinder institution should identify new approaches and applications that will inform the host institution and the wider community about practices that enhance student learning. This should build on expertise in the host institution, effective practice and the ability to evaluate and disseminate this knowledge in a manner that is applicable to a wide range of learning and teaching contexts. Kingston University has a track record in acting as a pathfinder in managing a culture of change focussed on achieving effective and appropriate blended learning on an institutional scale.

Kingston University implemented a new Learning and Teaching strategy in 2000 with a remit to transform its approach to learning and teaching through the effective and appropriate use of technology. This strategic development required a change in culture, and although the goal was the effective integration of face-to-face and online learning and teaching, the need for a number of intermediate stages was recognised. The initial stage, which was completed by 2004, involved the introduction of educational technology as a supplementary support to existing teaching. The focus of the second stage has been on implementing an integrated blended learning model across all courses in the institution. To support this strategic change, Kingston University has made considerable investments in its e-learning infrastructure and technologies, including the establishment of an institutional MLE and an Educational Technology Unit. The next development process focused on enhancing the student centred capabilities of its e-learning infrastructure through the introduction of a content system, a variety of Web 2 technologies, including Wikis, Blogs and other collaboration tools, and other technologies, such as Podcasting. This change culture was

further supported by the initiation of a two-year programme to investigate the role of educational technologies in supporting students from diverse backgrounds (Widening Access and Success Project funded by Atlantic Philanthropies for £300k) in 2002. As part of its current Quality Enhancement Strategy there is a requirement on each of University's seven faculties to formally develop a blended learning strategy by June 2007. Each Faculty will specify how blended learning will be developed, reviewed, and evaluated over the next 3 years, including a review of policies and procedures that will impact the strategy. One of the important institutional drivers for participating in phase 1 of the e-Learning Benchmarking exercise was to provide a key input into this strategy development. This strategic development at Kingston University has already been widely disseminated through national and international conferences, hosting visits to the institution and through invited papers and presentations.

Consistent with the strategic development, the University has also been reviewing its approach to face-to-face learning and teaching. Over the last 3 years, a range of classroom technologies have been introduced, including:

- Electronic Voting Systems (Wireless and infrared - 300 handsets)
- Interactive Wireless Graphics tablets
- Tablet PCs and Wireless data projectors
- Interactive podium screens

In addition, the university has developed two Flexible e-Learning Centres, open to all staff, and designed to support staff in both the face-to-face and e-learning elements of blended learning.

As part of its New University Project, the University is currently building over 10,000 square metres of new learning and teaching space, ready for September 2007. An important element of this new space is the use of flexible and configurable furniture as appropriate, multiple 'teaching' walls, the use of interactive technologies and support for collaborative learning.

1.2 Aims and Objectives

We will examine the effective use of in-class mobile technologies to enhance timely feedback and diagnostic assessment and aim to answer the following research questions:

1. Can classroom technologies be effectively used for diagnostic assessment?
2. What is the most appropriate use of each of the technologies for diagnostic assessment?
3. Which technologies are most efficient for diagnostic assessment?

4. Does diagnostic assessment impact students' attitudes toward the module?

5. Does diagnostic assessment impact students' conceptual understanding?

6. Does diagnostic assessment impact student test results?

7. Does the use of in-class technologies impact academic staff perceptions of the value of diagnostic assessment?

8. Do assessment practices improve as a result of using in-class diagnostic assessment?

9. Is in-class diagnostic assessment sustainable and what are the key issues?

10. Is the use of technology for in-class diagnostic assessment sustainable and what are the key issues?

1.3 Stakeholder Analysis

Stakeholders - Internal	Interest / stake	Importance
KU students	Learners require timely feedback on their learning, which we believe mobile technology can provide.	High
KU teaching staff	Equipped with new technologies, teaching staff will be better placed to implement exemplary approaches to assessment and feedback. This is likely to have a long term impact on teaching practices.	High
Kingston University	This project support and underscores the assessment strategies of the university and will form the basis of wider practice within the institution. Student' satisfaction with assessment and feedback could also increase.	High
Stakeholders - External	**Interest / stake**	**Importance**
HEA	The project will contribute to the broader sphere of activity HEA is engaged in relating to uses of mobile technology	High

Other Pathfinder projects	Through dialogue and collaboration with other pathfinder project, we can share lessons learned from the use of mobile technologies for assessment	Medium
Other HEA institutions	Through dissemination activities we can share lessons learned from the use of mobile technologies for assessment	Medium

1.4 Outputs and Outcomes

- Online resource available to the HE community on using mobile technologies to support in-class diagnostic assessment.
- Project Blog and Wiki describing ongoing developments through the lifetime of the project promoting communication but also contributions from the wider community.
- Bank of appropriate examples of diagnostic questions for use in the classroom.
- Evaluation report.
- Conference presentation at local, national and international conferences.
- Journal articles in peer-reviewed journals.

1.5 Risk Analysis

Risk	Probability (1-5)	Severity (1-5)	Score (PxS)	Action to Prevent/Manage Risk
Staffing (Staff leaving because of short-term research contracts)	1	2	2	Where possible allocate existing university research staff
Organisational (Keeping to timescale and meeting milestones)	2	3	6	Project advisory group to meet with the project management team once a month
Technical (Technical problems with the institutional infrastructure which inhibits development)	1	5	5	Involve a representative from central computing on the project advisory group

External suppliers (Communication and management)	2	4	8	Online project management module with discussion boards and project logs to manage communications with sub-contractors

1.6 Project Management

Project Manager	Ann Ooms Senior Lecturer, Academic Development Centre Kingston University Millennium House, Office 304 21 Eden Street Kingston upon Thames, KT1 1BL United Kingdom Phone: 020 8547 8807 Facsimile: 020 8547 7789 E-mail: a.ooms@kingston.ac.uk
e-Learning/Technology Advisor	Tim Linsey Associate Head Educational Technology Kingston University Millennium House, Office 304 21 Eden Street Kingston upon Thames, KT1 1BL United Kingdom Phone: 020 8547 7779 Facsimile: 020 8547 7789 E-mail: t.linsey@kingston.ac.uk
Learning, Teaching and Assessment Advisor	Marion Webb Associate Head Learning and Teaching Development Kingston University Millennium House, Office 304 21 Eden Street Kingston upon Thames, KT1 1BL United Kingdom Phone: 020 8547 7774 Facsimile: 020 8547 7789 E-mail: m.webb@kingston.ac.uk

Project Steering Group

Name	Job title	Project role
Mary Stuart	Deputy Vice-Chancellor Kingston University	Steering Group Chair
Ann Ooms	Senior Lecturer Academic Development Centre Kingston University	Project Manager
Tim Linsey	Associate Head Academic Development Centre (Educational Technology) Kingston University	e-Learning/Technology Advisor
Marion Webb	Associate Head Academic Development Centre (Learning and Teaching Development) Kingston University	Learning, Teaching and Assessment Advisor
Graham Bulpitt	Director of Information Services Kingston University	
Andreas Panayiotidis	Principal Lecturer Faculty of Business and Law Kingston University	
Graham Morgan	Head of School Faculty of Health and Social Care Sciences Kingston University	
Richard Hall	University e-Learning Coordinator De Montfort University	
Betty Collis	HEA Critical Friend	
Tatum Amankwah	Student Representative Kingston University	

2. Project Planning

2.1 Work Packages

WP	Name (short)	Brief description	Outputs/deliverables	Start date	End date
1	Project start up	1. Establish the project management team	1. Project management team 2. Established roles and responsibilities 3. Scheduled meeting dates	1 May 2007	31 May 2007
		2. Establish the steering group	1. Steering group 2. Established roles and responsibilities 4. Scheduled meeting dates	1 June 2007	30 June 2007
2	Recruitment of participants	1. Inform lecturers about project 2. Decide on selection criteria	1. 14 participants (2 academic staff	15 May 2007	30 June 2007

WP	Name (short)	Brief description	Outputs/deliverables	Start date	End date
		3. Select participants	members per faculty)		
3	Workshops	1. Plan workshops 2. Invite guest speakers 3. Decide on roles and responsibilities of project management team 4. Decide on content and format of workshops 5. Run workshops (10 September, 14 September, 30 October, 21 January) 6. Evaluate workshops	1. 4 workshops 2. Trained participants to use mobile technologies for diagnostic assessment purposes	30 June 2007	28 February 2008
4	Support	1. Decide upon support system for participants 2. Establish a support system for participants	1. Support system for participants	1 June 2007	10 September 2007

WP	Name (short)	Brief description	Outputs/deliverables	Start date	End date
5	Evaluation and Research	1. Develop evaluation plan 2. Develop data collection instruments and procedures 3. Apply for approval ethics committee at Kingston University 4. Appoint research assistant 5. Collect data 6. Analyse data 7. Interpret data 8. Disseminate evaluation findings	1. Evaluation and research	1 May 2007	30 May 2008

WP	Name (short)	Brief description	Outputs/deliverables	Start date	End date
6	Dissemination	1. Publish website 2. Use Helga 3. Use internal blog 4. Use CAMEL 5. Write evaluation report 6. Present internally and HEA 7. Submit proposal for conference presentations (national and international) 8. Submit articles for publication in journals (research and practitioners) 9. Kingston University Newsletter (Quarterly) 10. One day conference at Kingston University	1. Disseminated findings internally and externally	1 June 2007	30 May 2009

2.2 Quality

Output/outcome	Quality criteria	Policy or procedure	Technical standard	Evidence of compliance	Responsibility
Project start up	HEA project guidelines	Project management methods		Project Plan approved by HEA	Project management team
Recruitment of participants	Recruitment process defined by Project management team	Participation of participants approved by their line manager		Written agreement by line manager and participants	Project management team
Workshops	1. Organization of workshop by project management team 2. Invited speakers	Staff development guidelines		Evaluation of workshop by participants	Project management team
Support	1. Establish an internal CAMEL scheme	CAMEL guidelines		Evaluation of support by participants	Project management team

Output/outcome	Quality criteria	Policy or procedure	Technical standard	Evidence of compliance	Responsibility
	2. Create action-learning sets 3. Establish a mentor scheme 4. Organize peer observations of teaching				
Evaluation and Research	1. Evaluation by evaluation expert 2. Evaluation approved by Critical Friend	Evaluation and research methods		Evaluation report approved by HEA	Project Manager
Dissemination	Findings approved by project management team and participants			Presented at peer-reviewed conferences and published in peer-reviewed journals	Project management team

2.3 Evaluation

Evaluation Questions	Indicators	Baseline	Source of information	Collection method	Schedule
Can technology be used for diagnostic assessment?	Participants' perceptions	Unknown	Participants	Questionnaire and interview	January 2007 May 2008
	Assessment practices	Unknown	Assessment documents	Document analysis	January 2007 May 2008
		Unknown	Classroom observations	Classroom observations	1 September 2007 – 30 May 2008
	Students' perceptions	Unknown	Students	Questionnaire and focus groups	January 2007 May 2008
What is the most appropriate use of each of the technologies for diagnostic assessment?	Participants' perceptions	Unknown	Participants	Questionnaire and interview	January 2007 May 2008
	Assessment practices	Unknown	Assessment planning and tools	Document analysis	January 2007 May 2008
		Unknown	Classroom observations	Classroom observations	1 September 2007 – 30 May 2008
	Students' perceptions	Unknown	Students	Questionnaire and focus groups	January 2007 May 2008

Evaluation Questions	Indicators	Baseline	Source of information	Collection method	Schedule
Which technologies are most efficient for diagnostic assessment?	Participants' perceptions	Unknown	Participants	Questionnaire and interview	January 2007 May 2008
	Assessment practices	Unknown	Assessment documents	Document analysis	January 2007 May 2008
		Unknown	Classroom observations	Classroom observations	1 September 2007 – 30 May 2008
	Students' perceptions	Unknown	Students	Questionnaire and focus groups	January 2007 May 2008
Does diagnostic assessment impact students' attitudes toward the module?	Participants' perceptions	Unknown	Participants	Questionnaire and interview	January 2007 May 2008
	Students' perceptions	Unknown	Students	Questionnaire and focus groups	January 2007 May 2008
	Students' behaviour	Unknown	Classroom Observations	Classroom Observations	1 September 2007 – 30 May 2008
	Students' attendance	Attendance records previous year	Attendance records	Compare attendance records from this year with previous year	January 2007 May 2008

Evaluation Questions	Indicators	Baseline	Source of information	Collection method	Schedule
Does diagnostic assessment impact students' conceptual understanding?	Participants' perceptions	Ask participants at first day of workshop to identify challenging concepts in their courses	Participants	Questionnaire and interview (use list)	First day of workshop January 2007 May 2008
	Students' perceptions	Evaluation of modules of previous year	Module evaluations	Module evaluations this year	January 2007 May 2008
Does diagnostic assessment impact student test results?	Improved assessment results	Assessment results previous year	Assessment data	Compare assessment data from this year with previous year	January 2007 May 2008
Do academic staff' perceptions of the value of diagnostic assessment improve?	Participants' perceptions	Collect baseline data prior to workshop	Participants	Questionnaire and interview	First day of workshop January 2007 May 2008

Evaluation Questions	Indicators	Baseline	Source of information	Collection method	Schedule
Do assessment practices improve?	Participants' perceptions	Collect baseline data prior to workshop	Participants	Questionnaire and interview	First day of workshop January 2007 May 2008
	Assessment practices	Unknown	Assessment documents	Document analysis	January 2007 May 2008
		Unknown	Classroom observations	Classroom observations	1 September 2007 – 30 May 2008
	Students' perceptions	Unknown	Students	Questionnaire and focus groups	January 2007 May 2008

2.4 Dissemination

Timing	Dissemination Activity	Audience	Purpose	Key Message
All	Helga	HEA Pathfinders	Share experiences	Depends on findings
June 2008	Internal Evaluation Report	Kingston University	Sustainability	Depends on findings
June 2008	Evaluation Report HEA	HEA	Share experiences	Depends on findings
2008-2009	Present at national practitioners conferences	National practitioners	Share experiences	Depends on findings

Timing	Dissemination Activity	Audience	Purpose	Key Message
2008-2009	Present at national research conferences	National researchers	Share experiences	Depends on findings
April 2009	Present at American Educational Research Association conference	International researchers	Share experiences	Depends on findings
2008-2010	Publish in peer-reviewed journals	Researchers	Share experiences	Depends on findings

2.5 Sustainability and Further Developments

Project Outputs/Outcomes	Action for Sustainability
Staff development workshops	Use content and structure of the workshop in future staff development programmes
Increased diagnostic assessment practises across the university	Foster a positive experience and provide support after project Expanded community of practice
Increased use of technology for diagnostic assessment across the university	Foster a positive experience and provide support after project Expanded community of practice
Conference presentations and publications	Schedule time for writing