



RESULTS OF THE NEEDS ANALYSIS CONDUCTED AT HONG KONG POLYTECHNIC UNIVERSITY ON eLEARNING

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Executive Summary

The needs analysis reported here was conducted as part of the 3C Project, a 2-year initiative funded by VP(AD) to promote the use of blended learning at PolyU. Blended learning is the effective combination of different modes of delivery, models of teaching and styles of learning, whereby face-to-face and eLearning opportunities are optimised and integrated to maximise student learning. Promoting the wider use of blended learning is a specific objective identified in the University's Strategic Plan 2008/09-2011/12 (p 9). To achieve the desired goal of increasing the use of blended learning, it was considered essential to understand the current use of eLearning and blended learning for teaching at PolyU, as well as the factors that inhibit or promote its use. In order to gain this understanding, data was collected using a number of different methods from individual staff as well as from Deans of Faculties and Directors of Schools and their representatives. Across these different data gathering methods, very consistent messages were received. These include that:

- most staff are using eLearning for low-level teaching purposes such as the provision of resources to students, with some small pockets of innovation occurring around the University;
- there is acknowledgement by staff that eLearning and blended learning could enhance the student learning experience, but currently the impediments to adoption are greater than the facilitating factors;
- there is a lack of awareness of possibilities for incorporating eLearning into current teaching practices, which is compounded by perceptions about lack of support or assistance;
- the widely held view of staff is that traditional, face-to-face teaching is superior to other methods and preferred by students. This view is accompanied by a general scepticism about the benefits of eLearning, even when it is used to compliment face-to-face teaching;
- problems with the usability of WebCT and issues with network speed and reliability are both significant impediments to staff at PolyU using eLearning at present;
- many staff believe that they should focus on research not teaching if they wish to be rewarded with career progression and recognition.

Activities to be conducted under the umbrella of the 3C Project have been designed to respond to these perceived needs and include:

- provision of professional development opportunities such as workshops and seminars to increase awareness of eLearning and blended learning and to promote its use by staff;
- projects designed to address needs identified by Faculties and Schools that use blended learning to address specific challenges or requirements;
- recognition of the achievements of staff in adopting blended learning approaches through the Teaching and Learning Innovation Award, the eLearning Showcase and the Symposium on Teaching and Learning Innovation.

In addition, the 3C Project Team are developing resources to assist staff to adopt blended learning for their teaching, such as the eLearning Mapping tool¹ and an online resource for blended learning. These resources and activities will assist in raising awareness about blended learning possibilities as well as making it easier for staff to adopt blended learning in their teaching, which is the outcome the 3C Project is designed to deliver.

¹ The eLearning Mapping tool and the associated Learning Design Templates is a software application being developed that will assist staff in identifying opportunities for incorporating eLearning into their teaching to achieve desired learning outcomes, in support of particular teaching approaches or to address identified teaching challenges – see www.3c.edc.polyu.edu.hk/feature_eLearningMapping.html for details.

1 Purpose of the Needs Analysis

Overview

To-date the approach used to develop an eLearning culture at PolyU has been to support staff through the provision of funding for specific eLearning Projects, together with consultation, professional development and In-Kind support. The 3C Project also aims to enhance the (e)Learning culture at PolyU, using a three-pronged approach of collaboration, community and context. With this approach, eLearning cultural change is achieved through engagement with staff and the provision of resources appropriate to their needs and context.²

For an initiative such as 3C to be successful, it is essential to strategically analyse the successes, barriers and needs of staff in relation to enhancing their engagement with eLearning using a blended learning approach. To do this, a needs analysis was conducted of PolyU's existing eLearning practices as one of the deliverables of the 3C Project. This was seen as an essential first stage of the project in order to accurately identify current practice as well as areas of need / concern specific to the PolyU context and the enhancement of an eLearning culture. The information obtained through this needs analysis is necessary to ensure we are meeting the needs of academic staff in relation to professional development opportunities, special projects and other activities aimed at changing practice. Furthermore, it will assist in ensuring there is alignment with the activities for the 3C Project and the provision of appropriate resources.

2 Data Collection

How data was collected

Data for this needs analysis was collected using a number of methods, which together were designed to obtain a view of eLearning / blended learning at PolyU from a subject, School / Faculty and University level. The data collection methods used were:

- Faculty / School survey
- Online eLearning questionnaire
- Data mining from webCT
- Input from staff, including Deans and Directors of Faculties and Schools.

Rationale for data collection methods

Each of these methods is described in detail in other sections of this report. However, it is important to note that each had its own focus and the data obtained contributed to building an overall picture of the current status of eLearning and the use of blended learning at PolyU. It was important that all stakeholders were represented in the needs analysis and that the perspectives of individual staff, as well as the collective views of Schools, and Faculties were solicited. Furthermore, the data collected has been situated in the context of the University's strategic plan and the current policies and procedures relevant to teaching and learning at The Hong Kong Polytechnic University.

² See www.3c.edc.polyu.edu.hk for further information about this project.

Purpose of the Faculty / School survey

The first data collection method for this needs analysis was a survey of staff in Faculties and Schools. This survey was designed to capture information about how eLearning is currently used for teaching and learning and asked staff to respond to questions from their perspective within their Faculty or School.

Survey Description

Survey structure

There were six questions in total on the survey, four of which asked respondents to select those statements provided that they believed were applicable, and two open-ended questions. These four questions and the response options are detailed in Table 1. together with the descriptive statistics for each broken down by Faculty / School for those areas where six or more respondents completed the survey³. For each of these four questions an option called "Other" was provided where respondents could include additional comments in a text box.

Accessing the survey

An email was sent to Deans and Directors asking their assistance promoting this survey to staff. It was requested that they encourage staff to complete the survey to obtain feedback regarding the current use of blended learning in their Faculty / School by sending staff an email with the link to the online survey and advising that the survey could be completed over the following two weeks. In the email to Deans and Directors it was explained that information obtained from this survey would be used to inform the development of a strategic plan for professional development relevant to blended learning which would be customized to each Faculty and School's context. This in turn would assist in ensuring close alignment with the teaching and learning improvements targeted in the Faculty / School's Business Plan for the next triennium. Subsequently, staff were sent an email by their Dean or Direction with an explanation about the survey and a link to a website where they logged in to access the survey. The survey items were preceded with an explanation of the purpose for the survey, situating this data gathering exercise within the 3C. A definition of what is meant by blended learning was also provided for respondents.

Respondents

A total of 46 staff completed the survey online. The breakdown of respondents by area was:

Faculty of Applied Science and Textiles	19
Faculty of Business	1
Faculty of Construction and Land Use	11
Faculty of Engineering	5
Faculty of Humanities	3
Faculty of Health and Social Sciences	1
School of Hotel and Tourism Management	6
School of Design	0

³ Figures for the other Faculties and School are included in the total figures reported in Table 1.

Table 1. Survey Questions and Descriptive Statistics

Survey Questions	No. of respondents from each area selecting the option						Total /46	%
	FAST N=19	FCLU N=11	FE N=5	SHTM N=6	Others N=5			
In what way is blended learning useful or important to you, your subject, Faculty /Department/ School and why? Please select all statements that apply.								
- blended Learning is a teaching tool that everyone should use	2	2	2	2	2	10	21.7	
- I wouldn't be able to teach effectively without blended Learning	2	1	0	0	1	4	8.7	
- I use a blended Learning approach currently	8	5	3	3	3	21	45.7	
- students get a better learning experience with a combination of face to face teaching and eLearning	11	3	4	2	2	22	47.8	
- blended learning is not suitable for my subject	1	0	0	1	0	2	4.3	
- our School/Faculty/Department has a teaching and learning plan that includes blended Learning	1	1	0	2	0	4	8.7	
- PolyU has a strategic plan to improve blended learning in order to improve student learning	6	3	2	1	2	14	30.4	
How do you currently use eLearning? Please select all statements that apply								
- I currently use eLearning for administrative aspects of my teaching, such as timetable information, contact details and office hours	11	6	3	2	1	23	50.0	
- I currently use eLearning to provide materials such as class handouts, assignment instructions, and information about key dates	16	10	5	5	2	38	82.6	
- I currently use eLearning for communicating with students through discussion forums	4	4	3	2	1	14	30.4	
- I currently use eLearning for submission of student assignments and other work	4	6	3	2	1	16	34.8	
- I currently use eLearning for assessment	2	6	3	1	1	13	28.3	
- I currently use eLearning to supplement face-to-face teaching	6	4	4	3	2	19	41.3	
What do you feel are the barriers to blended learning at PolyU generally and in your Faculty/Department/School specifically? Please select all statements that apply.								
- not enough time	10	6	3	2	2	23	50.1	
- not enough resources	8	4	2	3	2	19	41.3	
- too few benefits	2	4	2	1	1	10	21.7	
- too much effort	13	5	3	0	1	22	47.8	
- don't know where to start	3	1	0	1	0	5	10.9	
- don't have the skills needed	3	3	0	0	1	7	15.2	
- no support from my School/Department/Faculty	3	1	0	0	1	5	10.9	
- students are not interested in blended learning	2	2	0	2	1	7	15.2	
- I am not interested in blended learning	1	0	0	1	0	2	4.3	
- technical problems make it too difficult	3	6	0	2	0	11	23.9	

Legend: Dark gray cells indicates 50% of more of respondents in this Faculty or School, or overall, selected this option as applicable.

Results

From the data presented in Table 1, it can be seen that almost half of the respondents report using eLearning for their teaching currently and a similar percentage believe that students get a better learning experience with a combination of face-to-face teaching and eLearning. However, the main use of eLearning is for administrative aspects of teaching and providing handouts and lecture notes. Approximately one-third of the respondents reported using eLearning for:

- communicating with students (30.4%) and
- assessment (28.2)

The barriers to using eLearning identified by almost half of these staff were:

- not enough time (50.1%)
- not enough resources (41.3%)
- too much effort (47.8%)

Nearly one quarter of respondents indicated that technical problems make eLearning too difficult and that there were too few benefits.

“Other” responses to questions

For Question 1 “In what way is blended learning useful or important to you, your subject, Faculty / Department / School and why?” additional comments included under “Other” were:

- “Don’t know what it is? How and Why we have to use it? Too much work already at this point of time!!! No Time to invest in it as Teaching is considered not important though no one officially admit it.”
- “Currently, for me; face to face teaching is still the most important part; and e-learning is still very limited (PPT and WebCT with my files only);
- “It is important to bridge theory to practice and this often cannot be done with classroom teaching only.”
- “In my opinion; PolyU students are not self-motivated enough for the use of significant e-learning. They expect to be spoon fed the material; and take very little responsibility for their role in the learning process!

For Question 3 “How do you currently use e_learning?” additional comments included under “Other” were that it was used for:

- Feedback on students’ work
- Showing videos, online demonstrations and other media
- To conduct online tutorials

For Question 4 “What do you feel are the barriers to blended learning at PolyU generally and in your Faculty / Department / School specifically?” additional comments included under “Other” were:

- “The eLearning platform is not user friendly and outdated.”
- “Having too many students in a class; and having several subjects to teach”;
- “Students lack the self-motivation and discipline to (sic) use extensive elearning. Also; I could use more guidance on how best to implement elearning in my courses”.

Responses to open-ended questions

The remaining two items on the survey were open-ended questions, which were:

- “Are there areas where **you feel** greater use of blended learning would be beneficial for you, your subject, Faculty/Department/School?” and
- “What kind of activities or professional development would assist your Faculty/ Department /School in achieving PolyU’s strategic goal of increasing the effective use of blended learning?”

The responses to these questions are summarised in Table 2.

Table 2. Summary of Open-ended question responses

Response	Example	No. of Responses
How to facilitate or overcome barriers to eLearning adoption		
Better resources, systems and platforms for eLearning	Upgrade WebCT Templates for eLearning Provision of computer labs for students in departments Customized online teaching platform Video recording teaching sessions Upgrade hardware and network speeds Resources and support (non-specific)	9
Leadership by management	Understanding and effective departmental leadership Advocacy by senior management	3
Professional Development	Workshops that demonstrate successful cases and how to implement eLearning Assistance developing eLearning materials	4
Applications for eLearning staff perceive as beneficial		
Communication	To facilitate peer discussions online	2
Laboratories / Tutorials	Lab instructions & tutorials Video demonstrations of lab classes Videos, simulations and visual aids Video recording of lectures for online access	5
Providing Resources	Case studies Updated information from journals, newspapers, RSS feeds, etc.	5
Assessment	Multiple choice assessment online	2
Interactivity	Interactive exercises and activities	2
University Initiatives	First Year Seminar Joint Faculty project for first year students	2

Additional comments of note from this survey are that:

- currently “heavy workloads and frequent changes in administrative policies are the major barriers to the effective use of blended learning”;
- PolyU needs to be “clearer about the acceptable use of e-learning to replace classes. There is a culture of learning/teaching only takes place in the classroom”;
- The “cost to benefit ratio is so large” and the benefits of technology more imagined than real, both of which are substantial barriers to eLearning being really useful.

Summary of Findings from the Faculty / School Survey

The results from this survey indicate the following:

- Staff are using eLearning in their teaching but mainly for administrative purposes and to provide handouts and other class materials to students;
- Very few staff believe that eLearning is not suitable for their subject (only 2 staff indicated that it was unsuitable) and almost half believe that including eLearning gives students a better learning experience;
- The time and effort involved in using eLearning is a significant barrier, as are the lack of resources and technical problems that are frequently experienced when using eLearning;
- The combination of high effort for low reward is a deterrent for significant use of eLearning beyond low level applications such as providing files and links to online resources.

Staff make quite concrete statements about the barriers to greater use of eLearning which include perceptions of upper level management’s views or support of eLearning and provision of resources and infrastructure that support efficient and effective use of eLearning in teaching.

4 eLearning Questionnaire

Purpose of the eLearning Questionnaire

The second data collection method was the eLearning questionnaire, an online survey that all PolyU staff were invited to complete. It was designed to capture data about:

- How staff leading subjects taught at PolyU are using eLearning, including self-report usage statistics for eLearning used for teaching purposes;
- The views of staff about eLearning, including measures of their beliefs about the benefits of eLearning and their attitudes towards its use in their teaching;
- The extent to which specific factors or support could positively impact on the use of eLearning at PolyU.

This questionnaire also included items that related to a benchmarking exercise conducted as part of the 3C Project. These items do not form part of the needs analysis for the project and the results from this part of the eLearning questionnaire are described and discussed in the Benchmarking Report for the 3C Project.

Description of the eLearning questionnaire

Structure of eLearning questionnaire

The eLearning questionnaire consisted of five parts with the following structure:

- Parts 1 and 2 were designed to be completed by staff teaching a subject. Items in these two parts measured use of eLearning for their subject;
- Part 3 collected data about views on eLearning together with items relating to the benchmarking exercise – only the data on staff views about eLearning are reported here;
- Part 4 which was about how the 3C Project can help staff with eLearning.
- Part 5 where respondents could make comments or suggestions about eLearning / blended learning at PolyU.

Accessing the eLearning questionnaire

Staff were sent a global email inviting them to complete the questionnaire online and informing them that that everyone who completed the questionnaire would go into the draw for a prize, which was an iPod Touch. The questionnaire could be accessed via a link in the email and was available for approximately three weeks.

Respondents

A total of 131 staff responded to the eLearning questionnaire. The breakdown of the sample by area is given in Table 3.

Table 3. Breakdown of respondents by area.

Area	Frequency	Percent
Faculty Applied Science and Textiles (FAST)	15	11.5
Faculty Business (FB)	6	4.6
Faculty Construction and Land Use (FCLU)	8	6.1
Faculty Engineering (FE)	20	15.3
Faculty Humanities (FH)	12	9.2
Faculty Health and Social Sciences (FHSS)	31	23.7
Other ⁴	32	24.4
School of Design (SD)	2	1.5
School of Hotel Tourism and Management (SHTM)	5	3.8
Total	131	100.0

⁴ This category includes all other areas in the University, including the Library and ITS

Excluding the 32 respondents classified under “Other” departments, the total number of respondents from academic departments was 99. This represents 2.7% of the total number of staff employed in academic departments at PolyU (which, according to PolyU’s Management Information and Support Office was 3647 in 2007 / 2008⁵. If it is assumed that only staff employed at an academic grade completed the eLearning questionnaire and the 2171 staff employed at Research, Administrative, Technical and General Grades are assumed not to have participated, the sample represents 6.7% of academic staff employed in Faculties and Schools. It is not unreasonable to assume that for the Faculties and Schools only academic staff responded to this survey, as all staff from these areas completed Parts A and B of the questionnaire which related to subjects the respondent taught at PolyU. However, it is possible that some of the staff who responded were employed at a Research grade, which means that the sample represents 3.9% of academic and research staff.

Results

Information about subjects taught

Most of the respondents reported teaching at an undergraduate level, with two reporting teaching at a certificate level and 16 at the diploma level. Participants reported teaching classes with between 20 to 60 students, with a mixture of full- and part-time students being taught. Only three respondents reported teaching at CyberU.

With regard to mode of delivery of subjects taught:

- Three respondents reported that they were only teaching face-to-face;
- 34 said that they were teaching face-to-face and with eLearning,
- 14 reported using a mixed delivery approach, where face-to-face classroom instruction was supplemented with significant eLearning and
- 7 reported using blended learning with substantial eLearning components replacing part of the face-to-face classroom instruction

This indicates that only 7 of the 131 respondents (approximately 5%) report using a blended learning approach currently in the subjects they teach at PolyU.

Only 41 of the 131 respondents indicated having a website for their subject, most of whom were using WebCT. Other platforms are being used in PolyU to support teaching and learning, with one person reporting using SMILE (from FAST), nine Moodle (two from SHTM and seven from FH) and four (one from FCLU and three from FHSS) reporting using some other platform.

Use of eLearning in subjects taught at PolyU

In Part 2, staff were asked to indicate what types of learning materials and learning activities they had online for their teaching. The major points of interest from this part of the questionnaire were:

- Approximately a quarter of the respondents reported having lecture notes, Powerpoint presentations, tutorial exercises, readings, and links to online resources;
- Almost one-third used email with their students while approximately 20% (n=26) used some form of online discussion;
- Very few reported having material for topic revision (n=9), self-paced online learning activities (n=12), online tutorials (n=3), online lectures (n=3), discussion online (n=10), or video and animations online (n=10);

⁵ See (http://www.polyu.edu.hk/miso/polyu_in_figures/euni_figure_0708.pdf)

- Very little online assessment was reported, with only 5% using formative quizzes (n=6), 11.5% using quizzes for summative assessment (n=15) and one staff member using group discussion for assessment.

Beliefs about eLearning

Items were also included in the eLearning questionnaire to measure respondents' beliefs about eLearning. Respondents were asked to rate statements about eLearning using a 5-point scale, where 1 = strongly disagree, 3 = neither agree nor disagree and 5 = strongly agree. Descriptive statistics for responses to these items are provided in Table 4:

Table 4. Descriptive statistics for responses to items measuring beliefs about eLearning

Item	Mean (SD)
A subject website is convenient for providing students with course materials.	4.17 (.852)
Information is disseminated to students faster via a subject website.	4.10 (.849)
eLearning provides students flexibility in when and where they study.	4.20 (.695)
Students' motivation to learn is improved with eLearning.	3.28 (.879)
A subject website can provide opportunities for self-directed learning.	4.02 (.685)
eLearning makes it easier to cater for different learning styles and learner backgrounds.	3.63 (.807)
The availability of learning materials online enhances students' learning opportunities outside of class.	4.07 (.715)
Teacher-student communication is improved with a subject website.	3.41 (.935)
eLearning provides students with greater opportunities to interact with other students.	3.31 (.952)
Incorporating eLearning can help develop my students' information literacy.	3.65 (.754)
Connecting students to a vast network of knowledge via eLearning can enhance learning.	3.82 (.739)
Students can develop a deeper understanding of the subject matter when eLearning is used.	3.47 (.835)
Peer and collaborative learning amongst students is promoted by the use of eLearning.	3.48 (.862)
Subject websites facilitate communication between students and teachers.	3.66 (.848)
eLearning encourages students to become more active and independent learners.	3.63 (.897)
Scale descriptives – Cronbach's alpha = .913 (standardised .914) Mean 55.9 Std Dev 8.3 N = 131	

Overall, respondents agree about the usefulness of a website for delivery of materials and that eLearning can provide flexibility for students in when and where they study, as well as providing opportunities for self-directed learning. Other than that, they are unconvinced about the benefits of eLearning.

Factors that could positively impact on the use of eLearning

Table 5 summarises the mean scores for respondents' rating of the extent to which the factors described would have a positive impact on their use of eLearning. A 4-point scale was used to rate each factor, where 1 = no impact at all, 2 = very little impact, 3 = some impact and 4 = great impact. As can be seen from Table 5, all factors listed were rated as having some positive impact on eLearning use, with faster network speed, improved network access and better computers, rated as having the highest potential impact, followed by more time, support and funding.

Table 5. Descriptive statistics for ratings of the extent of potential positive impact on eLearning use.

Factors rated for its positive impact on use of eLearning	Mean	Standard Deviation
Assistance to help me use eLearning in my teaching	3.11	.787
Greater support for using eLearning	3.20	.749
More time to be able to develop eLearning activities	3.24	.766
Funding to support eLearning development	3.24	.776
Incentives to incorporate eLearning into my teaching	3.02	.718
Better tools for eLearning	3.28	.816
Training in eLearning tools and approaches	3.14	.762
Faster network speed	3.34	.865
Improved internet access	3.35	.876
Better computers	3.32	.825

Other comments

At the end of the eLearning questionnaire respondents were given the opportunity to make comments about eLearning / blended learning at Polyu. The responses can be summarised as follows:

- Two participants indicated that sharing experiences about eLearning between staff in different Faculties and Schools was important to promoting eLearning, with one also commenting that promoting eLearning to the student body should also be a priority;
- Several commented (n = 2) on the need for a reliable network, better network speed, and more user-friendly and reliable platforms for successfully implementing eLearning at PolyU;
- Teaching and learning needs to be recognised and rewarded at PolyU and should not be considered secondary to research (n=3)
- One participant commented that before considering online learning, classroom teaching and learning should be made as good as possible and that there was no research showing the benefits for students from eLearning.
- The need to motivate students to use elearning was highlighted by one respondent who indicated that most students are still not ready to accept eLearning over traditional face-to-face methods.

Summary of findings from eLearning Questionnaire

Overall, the results from the eLearning questionnaire show a low level use of eLearning for teaching and learning, where staff mainly use an eLearning platform to provide students with access to materials. Factors that appear to be inhibiting the use of eLearning include:

- A lack of appropriate infrastructure (computers, eLearning delivery platforms, networks);
- The lack of reward and recognition of eLearning and teaching in general;
- A general level of scepticism about the benefits of eLearning.

5 Strategic Professional Development Plans for Blended Learning

Background

From April to June 2009, the 3C Project Team held meetings with each of the eLearning Advocates⁶ for the project and their Dean of Faculty (or the appointed designate) or Director of School to discuss how the 3C Project could assist the Faculty or School to promote the use of blended learning. An initial meeting was held to discuss the process for developing the Strategic Professional Development Plan (SPDP) for Blended Learning, as well as to answer any questions about the 3C project and / or the development of this plan that eLearning Advocates or the Dean / Director had. It was intended that the SPDP for Blended Learning should be developed so that it aligned with the School or Faculty's objectives for Teaching and Learning Improvement as set down in their Business Plan. Furthermore, where possible, activities for the SPDP were intended to help address challenges currently facing the University arising from things such as:

- Outcomes-based Education (OBE);
- the 3+3+4 changes and their impact;
- the introduction of Freshmen seminars
- Capstone Projects

Development of the SPDP for Blended Learning

An initial meeting was held between the Dean or Director and their eLearning Advocate and the 3C Project Team members. From this first meeting, agreement was obtained on activities or approaches to increase the use of blended learning in the Faculty or School, which then formed the basis for the SPDP for Blended Learning. Table 6 summarises the main outcomes from these first meetings. Following the first meeting, the 3C Project Team reported the outcomes to the Dean or Director and eLearning Advocates. A second meeting was then held between the 3C Project Team and the eLearning Advocates to develop the SPDP document from the agreed meeting outcomes.

From these plans, three broad categories of support have been requested by Faculties and Schools:

- Assistance with developing subjects with a blended learning approach;
- Professional development activities such as workshops and meetings to promote awareness of blended learning and the possibilities for its incorporation into subjects being taught at PolyU;
- Special project work relevant to teaching using a blended learning approach.

A consolidated list of activities and proposed workshops across the eight SPDPs for Blended Learning that have been developed can be found in Appendices 2 and 3.

⁶ Each Faculty has two eLearning Advocates and each School one eLearning advocate who meet on a regular basis to provide input into the activities of the 3C Project. Further information about this role can be found at http://www.3c.edc.polyu.edu.hk/feature_Advocates.html

Table 6. Summary of the activities proposed for each Faculty and School through the SPDP meetings with Deans and Directors of Schools.

Outcomes	FAST	FB	FCLU	FENG	FHSS	FH	SD	SHTM
<ul style="list-style-type: none"> Faculty-specific eLearning events 	Roadshow, seminars or workshops			Roadshow, seminars or workshops with CyberU showcase		Workshop on addressing teaching challenges with eLearning	Roadshow, seminars or workshops	Roadshow, seminars or Workshops on virtual classrooms
<ul style="list-style-type: none"> Incorporate a blended learning approach into an existing subjects or courses 		Foundation Seminar, Capstone Project				General Education subjects in 2012	Masters in Design Education	Higher Diploma courses in 2010, HR Management
<ul style="list-style-type: none"> Investigating ways that existing eLearning tools or learning objects (eg videos, pictures etc.) can be used more effectively and easily 		Videos online		Lecture videos online,	Lecture videos online, publishers' resources	CD or USB resource for students, eLearning website	Integrated platform for digital media, ways to promote reading, writing and spoken skills	
<ul style="list-style-type: none"> Application development to meet a specific Faculty need 		WIE online feedback system		WebCT shells, templates for problem-based approach	Mobile glossary, WebCT shells	iPod resources, WebCT shells, database of learning objects	Mobile glossary, WebCT shells	
<ul style="list-style-type: none"> Feedback from staff on current eLearning status 	FLT & DLT meetings		Interview LSGI staff & then meet with Dean again		FLT & DLT meetings	Interview a representative sample of staff		
<ul style="list-style-type: none"> Outside engagement 				Link teaching innovation to feedback from HK Institute of Engineers				eLearning session at APCHCRIE 2010 conference

Views of Faculty teaching staff

As part of the process for developing a Strategic Professional Development Plan (SPDP) for Blended Learning for the Faculty of Construction and Land Use (FCLU), the 3C Project team conduct a review of the eLearning experience and activities in the Faculty. The purpose of this review was to gain an understanding of current use of eLearning, together with what activities could be undertaken as part of the SPDP.

The approach determined for gathering this information was for the 3C team to interview individual staff in one department within the Faculty - the Department of Land Surveying and Geo-Informatics (LSGI) - to find out about their current use of eLearning and their views about the value of eLearning for their teaching. These informal interviews provided staff with the opportunity to share with the Project Team their views about eLearning and blended learning, to show any eLearning activities they have developed and to discuss any problems or challenges they encountered in implementing a blended learning approach.

Data collection method

Data was collected in two ways. The first was via individual interviews with staff, where the interview was guided by a set of questions developed by the 3C Project Team for this purpose. The second was at an informal lunch meeting where staff in LSGI were invited to discuss eLearning and Blended Learning in the context of their teaching in this department. Content analysis was applied to the interview question responses and discussion during the informal lunch to identify broad trends across the interviews and discussion, together with commonalities of response and subsequent possible areas of support.

A global email was sent by the Dean of the Faculty to staff in LSGI advising them of these interviews and encouraging staff to participate. As a follow up to this email, each staff member in LSGI was sent a personalised email by the 3C Project Team asking them to set up a meeting time. Staff who did not respond to this email were followed up with a phone call and encouraged to make a time for an interview. A total of seven staff were interviewed, with another staff member responding to the interview questions via email. At the start of each interview, the staff member was given a brief description of the 3C Project's aims and objectives, together with a definition for blended learning. Interviews lasted between 30 and 60 minutes and at the end of the interview the staff member was given the contact details for the interviewer and some information about the 3C Project. All interviews were conducted by Dr Christine Armatas, Senior Project Fellow for the 3C Project.

In an effort to capture the views of the remaining staff in LSGI, all staff in the department were again sent a personalised email inviting them to an informal lunch meeting as well as individual phone calls in order to obtain the views of as many LSGI staff as possible. A total of four staff members from LSGI attended this lunch, together with Peter Duffy, 3C Project Leader and Christine Armatas, Senior Project Fellow for the 3C Project.

The responses reported here represent the views of 10 staff members in LSGI, which is just over half of the total academic staff in the department (19 in total). The breakdown of respondents by level of appointment is:

- Professor 2
- Associate Professor 4
- Assistant Professor 1
- Lecturer 1
- Instructor 1
- Tutor 1

Analysis of responses to interview questions

Use of eLearning / online resources in LSGI

All respondents indicated that they had experience using eLearning in their teaching, with some having used eLearning for a number of years. Almost all reported using an online platform (WebCT, Departmental Teaching Server or SMILE) for providing students with access to teaching materials. In addition, some staff who were interviewed had been involved in funded or in-kind projects to produce online resources, such as videos and online assessment. The impression gained from the description of online resources available to students studying in the Department is that they are extensive, innovative and of a good quality.

Types of blended learning approaches used in LSGI

The majority of resources available for students online identified within the interviews were course outlines, lecture and laboratory notes, and examination revision material. The provision of this type of material has been categorized by Harmon and Jones (1999)⁷ as "Supplemental" – the second of five levels in online course development. When courses have an online presence at this level, students can pass the course without having to access online resources, although they may have difficulty getting some materials, such as lecture notes, if they don't. The direction of online communication is predominantly from Teacher to Student. Consistent with this, few staff reported making use of discussion forums and described the function of the online site as providing students with access to materials, most of which were used in class.

Only a few staff talked about integrating online resources with their face-to-face teaching activities. Blended learning approaches that had been used in the Department included using videos of fundamental skills to provide students with opportunities to review and practice skills from practical classes and problem-based learning / case-based approaches which utilized materials students accessed online in the classroom. Some staff took a very broad view of blended learning, stating that they were already doing blended learning because they provide resources online and students do work experience outside the classroom. However, this definition of blended learning is quite general and does not fit with the type of blended learning that PolyU wishes to promote through the 3C Project.

The current view held by staff in this department is that face to face teaching is the most effective communication method. However, staff were interested in hearing about the benefits that other teachers have achieved using online communication methods such as discussion forums, such as providing

- one to many communication
- a record of sharing
- addressing some of the concerns students have about asking questions
- an effective means for managing large classes

⁷ Harmon, S. & Jones, M. (1999). The five levels of web use in education: Factors to consider in planning online courses. *Educational Technology*, 39(6), 28-32.

Overall, the Department can be characterised as using eLearning extensively to provide materials and resources for students, with face-to-face teaching still the preferred and dominant teaching method. Only a few staff are using a blended learning approach, integrating online resources with face-to-face teaching. However, these staff show great enthusiasm and commitment to teaching in the approaches they are currently using.

Challenges for staff in LSGI

Research shows that blended learning approaches can be used very effectively to address some common challenges teachers experience. For this reason, staff were asked about challenges they had to manage in their teaching.

Many staff indicated that the nature of LSGI students presented challenges for their teaching as they:

- Have varying levels of English language proficiency
- Come from different backgrounds and therefore assuming a basic level of knowledge or skill is problematic, particularly for students with an Arts background
- Are somewhat resistant to teaching innovations such as online assessment

Other issues that staff raised which they felt were impediments to their effective teaching include:

- Frustrations with many different platforms – WebCT is particularly problematic and so most staff make use of the LSGI platform, which is really only a repository. This in turn makes a blended learning approach more difficult as there is no discussion forum or other features commonly associated with a learning management system (LMS). Most LMS use is as a platform for delivering material, which makes it only good for dissemination. Students also find it confusing to have more than one option for accessing study resources online and would prefer only one;
- There is too much content that needs to be taught for the time allocated to a subject – this is one situation where blended learning is ideally suited to help manage students' independent study outside of class so that this additional material is covered;
- Lack of appropriate tools or inappropriate tools for their teaching. For example, there is a lack of software applications suitable for staff to use to teach specific concepts or skills and staff feel strongly that with such applications their students could achieve better learning outcomes;
- Tension between teaching and research and the perception that research is rewarded (e.g., via promotion) but good teaching is not;
- The demands placed on staff in managing the many changes occurring at the University.

Approaches staff in LSGI would like to adopt that would enhance the use of blended learning

Staff had a number of suggestions to enhance the use of blended learning including:

- Having a Faculty liaison person to provide assistance with developing blended learning approaches that incorporate eLearning and face-to-face teaching – the model used by the Library and ITS is considered to be a good one to follow;
- Using virtual worlds such as Second Life to provide an area for students to practice skills that they learn in class. There are pitfalls and legalities associated with replicating Hong Kong virtually that need to be avoided, however, some purpose-designed virtual space could be developed for this purpose;
- A mentoring scheme, where senior students assist first year students in their studies. Technology could play a role in facilitating these interactions;
- Better integration of content being taught across subjects, which can be facilitated by online resources and alignment between laboratory classes and lectures;
- Sharing of resources already developed and approaches that have been used successfully

Assistance the 3C Project could provide

Three broad areas where the 3C Project could provide assistance emerged from the interviews with staff. These are:

Workshops tailored to the Department / Faculty on topics such as:

- How to use new tools, such as Facebook and Twitter, effectively;
- Highlighting the best use for different systems and platforms such as Moodle, WebCT and Second Life;
- New approaches for staff to try, including what activities to give students to do outside of class;
- The benefits of a blended learning approach for different subject areas which staff may not be aware of – for example, how eLearning can assist students to learn mathematics and programming;

A forum for informing staff about:

- best practice for blended learning;
- how to avoid traps and pitfalls from the start when adopting a blended learning approach;
- how to evaluate teaching interventions;
- tools that they can access to make blended learning easier;

Practical assistance and support on specific projects. Some examples suggested by staff were:

- Provide assistance with creating high definition, high quality videos and DVDs of things such as fundamental skills, construction sites, surveying practice etc, which also embed other tools such as Excel for calculations etc.;
- Help to develop specialised tools such as a program to geometrically model the relationship between a camera and the environment to provide a 3D image;
- Assistance creating animations;
- Assist with subject developments in the Department, such as a new subject that will adopt a problem-based learning approach;
- Assisting with an initiative in the Department where practical work outside of class is increased while decreasing lecture contact time and using a blended learning approach to support this.

Summary of Findings from Interviews

The analysis of the interviews and lunch-time discussion with LSGI staff repeat many of the messages from the Faculty / School survey and the eLearning questionnaire. In particular these staff emphasise:

- The need for support and assistance to use eLearning with a blended learning approach;
- There is tension between research and teaching,, with staff perceiving that research is valued more highly than teaching and therefore a higher priority;
- A lack of reward and recognition for teaching innovation is a barrier for the adoption of blended learning;
- The issues associated with the suitability of WebCT as a platform of delivering eLearning in their teaching.

Systems at PolyU

Although there are many tools that can be used for eLearning, by far the most important eLearning tools are those that provide a delivery mechanism such as Learning Management Systems (LMS) like WebCT, Blackboard and Moodle. A good LMS can provide staff with a means to author and deliver content online easily and efficiently, and can deliver useful features and functions such as:

- Online discussion forums
- Online assessment tools
- Monitoring of student progress through Gradebooks and usage data
- Password protection for online content

Given that WebCT is the officially supported eLearning platform at PolyU it was considered necessary to examine how it is being used currently. The importance of understanding WebCT in the PolyU context is underscored by the negative comments staff make about WebCT. Added to this is that there are other systems being used by staff including Moodle, SMILE and some platforms that have been developed in-house.

From discussions with staff, it seems that many have abandoned WebCT due to usability problems and that when they do, they either use nothing or they turn to another LMS platform. In some areas of PolyU, other platforms such as Moodle have been adopted and customised to meet the teaching and learning needs of specific areas, which usually requires the establishment and maintenance of a dedicated server and the employment of technical support staff. This in turn creates a disincentive to upgrade the LMS as there is no central support for doing so.

Usage statistics on WebCT

To be able to work effectively with PolyU staff to increase the use of eLearning and to adopt blended learning approaches in their teaching, it is necessary to understand how WebCT, the institutional LMS, is being used currently. In addition to the data collected from staff, it was intended to analyse usage data from WebCT to provide additional, quantitative information about how staff and students are using different eLearning tools at PolyU. This information could then be used to establish a baseline against which to compare changes in the use of eLearning systems and tools over time. It would also allow identification of patterns of usage amongst staff and students to inform the professional development strategies used to enhance the use of eLearning and blended learning in Faculties and Schools.

To this end, the 3C Project Team approached ITS to assist with obtaining usage statistics to address four main questions:

1. What is the extent of eLearning use at PolyU?
2. What type of eLearning systems and tools are staff using?
3. What eLearning tools are students using?
4. When are eLearning tools being used?

It was hoped to be able to obtain archival data for the period 2004 - 2009 to show any usage trends over the last few years. Data would be analysed at the University, Faculty, Department, School and subject levels and patterns of use or lack of use described. Unfortunately, the current version of WebCT is not amenable to extracting this level of usage data easily. What ITS was able to provide was the month-by-month direct login

statistics from September 2008 through to May 2009, broken down by Departments and Schools (see Appendix 1.).

Given the nature of the data ITS have been able to provide, it is not possible to provide any conclusions about the current use of WebCT by staff and students at PolyU. This is unfortunate as usage data can be very useful for understanding the current use of WebCT for teaching and learning and for identifying gaps, professional development opportunities etc. Some uses for this type of data to inform the activities for the 3C Project are detailed in Table 7. Consideration should be given to ensuring that this sort of usage analysis is able to be conducted easily and efficiently in the future in order to be able to make best use of WebCT and to ensure decision making is based on valid and reliable data.

Table 7. Usage data that could be analysed to address questions about eLearning usage

Usage Question	Data Source
Extent of eLearning use	<ul style="list-style-type: none"> • Audit of type of eLearning systems in use <ul style="list-style-type: none"> • Broken down by Faculty, Department & School • Feature sets⁸ of each system • Number of student users per subject • Average number of sessions⁹ per subject • total number of pages/files online for each subject • total number of staff using each system • Average number and duration of staff sessions per subject for the system
Types of eLearning tools staff use	<p>For each feature set in an eLearning system provide data on the following broken down by Faculty, Department & School</p> <ul style="list-style-type: none"> • total number and type • average number per subject of <ul style="list-style-type: none"> • online discussion fora, • journals, assessments, • assignment submissions • use of gradebooks and student tracking across subjects
Types of eLearning tools students use	<ul style="list-style-type: none"> • profile of tools students use to provide a picture of what sort of material they are using and the activities they are completing when online for their subject e.g., <ul style="list-style-type: none"> • number of discussion postings per student per subject • number of online tests completed per student per subject • number of assignments submitted per student per subject • number of pages visited per student per subject • number of files accessed or downloaded per student per subject
When eLearning tools are being used	<ul style="list-style-type: none"> • Usage statistics including peak times of the day, week, month and semester for system tools for whole of subject as well as for individual components such as online assessments, discussions and assignment submission.

⁸ Feature sets include tools such as blogs, journals, discussion rooms, and online assessment

⁹ A session is defined as one log in instance

Challenges and opportunities

The purpose of this needs analysis was to collect and analyse data to gain an understanding of the current use of eLearning and blended learning at PolyU. The data collected provide the views of individual staff, as well as representing Faculty and School perspectives. Although the samples collected for this analysis are relatively small, the messages from each are remarkably consistent.

From the viewpoint of individual staff, although some benefits for using eLearning for teaching and learning purposes are acknowledged, most staff are sceptical about its value for them, their career paths and for their students. Common across the needs analysis are the following messages:

- Staff are using eLearning in their teaching but mainly for administrative purposes and to provide handouts and other class materials to students;
- Most staff believe that eLearning is suitable for use in the subjects they teach and most believe that including eLearning gives students a better learning experience;
- Staff do not like using WebCT for reasons such as its usability and performance speed and this is a barrier to the increased use of eLearning and the adoption of blended learning approaches;
- The time and effort involved in using eLearning is a significant barrier, as are the lack of resources and technical problems that are frequently experienced;
- Providing resources such as templates, examples and support is needed for staff adopting new teaching approaches as these can help those who are using eLearning for the first time to avoid making mistakes and can assist them in using eLearning tools in an efficient and effective manner;
- The combination of high effort for low reward is a deterrent for significant use of eLearning beyond low level applications such as providing files and links to online resources.
- Support needs to be visible and practical – many staff appear not to be aware of what is currently available by way of support, training and professional development for eLearning, despite an extensive program being available through eLDSS;
- Given the competing demands on staff, unless staff perceive that there is real support from senior management for promoting the use of blended learning at PolyU, staff will focus their efforts on those things they see as being promoted as priorities by the University and which they perceive will benefit them personally and professionally.

Overall, the results from the needs analysis show a low level use of eLearning for teaching and learning, where staff mainly use an eLearning platform to provide students with access to materials. Factors that appear to be inhibiting the use of eLearning include:

- A lack of appropriate infrastructure (computers, eLearning delivery platforms, networks);
- The lack of reward and recognition of eLearning and teaching in general;
- A general level of scepticism about the benefits of eLearning.

Where 3C can make a difference

Across all methods of data collection for the needs analysis was a call for mechanisms for delivering support for using eLearning and blended learning at PolyU. The 3C Project is a strategic vehicle that can provide this support. Staff seem to be willing to engage with the eLearning and blended learning agenda, despite their obvious scepticism about the benefits for them and their students. However, their genuine interest in ensuring that students have the best learning experience possible, combined with a belief that technology can have a positive impact on learning, they are open to exploring possibilities.

Table 8. shows how the various activities planned for the 3C Project will address needs identified through this needs analysis. In addition to this program of work, the 3C Project Team will also seek to address staff concerns by:

- Working with senior management to promote teaching and learning generally and blended learning more specifically at PolyU;
- raising the issues with infrastructure and technical support with ITS and working with them on ways they can be addressed;
- Assisting in development of policies and procedures associated with the use of blended learning at PolyU;
- Contributing to the development of a rollout plan for the introduction of Blackboard 9.0 as the replacement to the version of WebCT currently being used at PolyU, to ensure a smooth transition to the new platform and to promote maximum uptake and effective use.

In this way it is hoped to achieve maximum impact from the 3C Project over the project's life. It is also hoped that the 3C Project can serve as a model for the future so that PolyU is able to continue to support its staff in the pursuit of teaching excellence and innovation.

Table 8. Mapping of 3C Project activities to identified needs.

Activity	Identified Need Addressed	Areas Impacted			
		Individual Staff	Faculties and Schools	University	External
Professional Development and Training through workshops and seminars <ul style="list-style-type: none"> • Workshops as described in Appendix 3 • Subject development (see Appendix 2) 	<ul style="list-style-type: none"> • Promote awareness of possibilities for using a blended learning approach; • Provide support and expertise to help staff adopt blended learning in their teaching; • Move from low level use of eLearning to a blended learning approach 	✓	✓		
Specific project work conducted in co-operation with eLDSS and Faculty / School Staff	<ul style="list-style-type: none"> • Specific needs identified by Faculties or Schools 	✓	✓		
Development of resources for blended learning: <ul style="list-style-type: none"> • eLearning Mapping tool and associated eLearning Design templates* • Blended learning website • Other resources (see Appendix 2) 	<ul style="list-style-type: none"> • Lack of resources or support staff to adopt blended learning; • Making the incorporation of blended learning easier, more efficient and more streamlined; • Promote awareness of the possibilities for using eLearning and blended learning 	✓	✓	✓	
Promotion of blended learning <ul style="list-style-type: none"> • eLearning Showcase* • Teaching and Learning Innovation Award* • Symposium on Teaching and Learning Innovation* • 3C monthly eNewsletter 	<ul style="list-style-type: none"> • Promote awareness of the possibilities for using eLearning and blended learning • Reward and recognise excellent and innovative teaching where a blended approach is used • Demonstrate the applications and benefits of blended learning 	✓	✓	✓	✓

* Indicates a deliverable for the 3C Project from the original project documentation.

Appendix 1. WebCT CE4 Log Analysis Direct LogIn September 2008 – May 2009

WebCT CE 4 Log Analysis - Direct Login		Sep-2008	Oct-2008	Nov-2008	Dec-2008	Jan-2009	Feb-2009	Mar-2009	Apr-2009	May-2009	Total	
Total (Staff and Student)		983,264	798,254	744,706	485,535	609,826	707,802	767,606	658,866	307,934	6,063,793	
Staff Contribution		24,836	20,486	18,900	12,826	20,267	22,201	22,666	17,966	9,463	169,611	
Student Contribution		958,428	777,768	725,806	472,709	589,559	685,601	744,940	640,900	298,471	5,894,182	
Staff Contribution Break Down												
ABCT	bc	Department of Applied Biology and Chemical Technology	473	571	459	136	391	624	547	387	131	3,719
AF	af	School of Accounting and Finance	4,449	3,787	3,271	2,475	3,534	3,352	3,794	3,299	1,872	29,833
AMA	ma	Department of Applied Mathematics	569	486	347	184	413	507	550	437	154	3,647
AP	ap	Department of Applied Physics	410	333	268	175	304	322	251	197	71	2,331
APSS	ss	Department of Applied Social Sciences	931	635	487	225	574	693	470	396	264	4,675
BRE	bs	Department of Building and Real Estate	348	154	149	168	528	408	346	171	100	2,372
BSE	be	Department of Building Services Engineering	267	158	160	107	253	117	158	124	42	1,386
CBC	cb	China Business Centre	13	52	12	9	34	32	33	14	4	203
CBS	ch	Department of Chinese and Bilingual Studies	130	230	87	138	79	190	51	184	58	1,147
CC	cn	Department of Chinese Culture	0	0	0	0	0	0	0	0	0	0
COMP	cs	Department of Computing	1,477	1,729	1,459	1,186	1,308	1,740	1,915	1,482	859	13,155
CPBE	cp	Centre for Professional and Business English	0	0	0	0	0	0	0	0	0	0
CPCE	pf	The College of Professional and Continuing Education	0	0	59	1	4	1	2	0	0	67
CSE	ce	Department of Civil and Structural Engineering	478	494	385	260	434	526	590	329	187	3,683
CYBU	cu	Hong Kong CyberU	0	0	43	28	146	100	107	84	48	556
EDC	et	Educational Development Centre	113	80	71	89	120	214	416	194	53	1,350
EE	ee	Department of Electrical Engineering	104	101	58	22	161	153	144	40	16	799
EIE	en	Department of Electronic and Information Engineering	525	503	438	235	363	557	673	535	429	4,258
ELC	ec	English Language Centre	1	0	1	1	18	6	3	1	32	
ENGL	eg	Department of English	1,224	1,082	1,092	788	706	629	765	576	381	7,243
FAST	sc	Faculty of Applied Science and Textiles	3	1	0	0	0	1	0	0	0	5
FB	fb	Faculty of Business	42	3	2	0	2	43	22	6	1	121
FCLU	cl	Faculty of Construction and Land Use	0	0	5	0	0	0	0	0	0	5
FENG	de	Faculty of Engineering	8	16	17	7	4	15	15	8	0	90
FHSS	dh	Faculty of Health and Social Sciences	28	9	6	2	0	5	0	2	0	52
GEC	ge	General Education Centre	229	242	171	186	243	403	328	250	144	2,196
GSB	gsb	Graduate School of Business	184	97	88	69	131	101	168	56	106	1,000
HKCC	cc	Hong Kong Community College	13	7	6	1	10	12	8	8	1	66
HTI	ht	Department of Health Technology and Informatics	637	396	395	192	340	536	406	337	87	3,326
IC	ic	Industrial Centre	645	421	596	157	212	308	334	183	157	3,013
ISE	mf	Department of Industrial and Systems Engineering	748	428	328	253	973	958	1,096	761	298	5,843
ITC	tc	Institute of Textiles and Clothing	735	600	567	407	648	707	838	695	536	5,733
ITS	it	Information Technology Services Office	724	203	223	228	389	176	130	178	105	2,356
LMS	lgt	Department of Logistics and Maritime Studies	1,118	993	970	719	923	1,132	1,237	1,067	685	8,844
LSGI	ls	Department of Land Surveying and Geo-Informatics	26	146	138	4	6	1	11	7	0	339
ME	mm	Department of Mechanical Engineering	388	306	311	187	141	152	184	101	32	1,802
MEDC	md	Management and Executive Development Centre	1	4	47	71	55	66	33	34	36	347
MM	ms	Department of Management and Marketing	1,601	1,180	1,155	569	1,330	1,291	1,310	1,290	592	10,318
RS	rs	Department of Rehabilitation Sciences	1,208	749	859	787	894	657	532	444	311	6,441
SD	sd	School of Design	14	12	6	0	11	12	12	22	11	100
SHTM	hm	School of Hotel and Tourism Management	1,942	1,572	1,407	727	1,255	1,973	1,609	1,035	237	11,757
SN	hs	School of Nursing	1,861	1,195	1,139	535	1,245	1,232	1,126	837	263	9,433
SO	so	School of Optometry	282	103	110	56	152	123	59	66	10	961
SPEED	sp	School of Professional Education and Executive Development	1	0	1	0	3	0	0	0	0	5
		miscellaneous	886	1,408	1,507	1,442	1,947	2,114	2,390	2,127	1,181	15,002

Appendix 2 Activities for 3C Project arising out the needs analysis conducted for the project

Activity	FAST	FB	FCLU	FENG	FHSS	FH	SD	SHTM
Incorporate a blended learning approach into an existing subjects or courses								
<ul style="list-style-type: none"> • 3 subjects in Higher Diploma course + 1 subject in HR Management 								✓
<ul style="list-style-type: none"> • General Education subjects 						✓		
<ul style="list-style-type: none"> • Foundation Seminar, Capstone Project 		✓						
<ul style="list-style-type: none"> • Masters in Design Education 							✓	
Development of Resources								
<ul style="list-style-type: none"> • Mobile device learning resources 						✓		
<ul style="list-style-type: none"> • Chinese Character input methods 						✓		
<ul style="list-style-type: none"> • LMS templates 				✓		✓		✓
<ul style="list-style-type: none"> • Learning object repository 						✓	✓	
<ul style="list-style-type: none"> • WIE Website development 				✓		✓		
<ul style="list-style-type: none"> • Statistics Simulators 	✓		✓		✓			
<ul style="list-style-type: none"> • Research Project online resource 	✓		✓		✓			
<ul style="list-style-type: none"> • Notebooks for students 						✓		
<ul style="list-style-type: none"> • Faculty / School websites 						✓		
eLearning Roadshows or discussion forum								
<ul style="list-style-type: none"> • Lunchtime session / Showcase / Demonstration 	✓	✓		✓		✓	✓	✓
<ul style="list-style-type: none"> • LMS templates 				✓		✓		✓
<ul style="list-style-type: none"> • Learning object repository 						✓		
<ul style="list-style-type: none"> • WIE Website development 				✓		✓		
<ul style="list-style-type: none"> • Statistics Simulators & Online resource for Final Year Research Projects 	✓		✓		✓			

Appendix 3 Possible workshops for Faculties / Schools / Staff as part of the 3C Project

Activity	Title
1. Blended Learning	
a) Introduction to Blended Learning	Orientation to Blended Learning
	Blended Learning: Benefits and Challenges (3 Part Course) – Part 1
	Finding the right Blend: Simple Teaching strategies – Part 2 Encouraging Interaction in Blended Learning Courses – Part 3
b) About blended learning	Learning 2.0 Meets Teaching 2.0: How web technologies are shaping educations
	Blended Learning and OBE – the best of both worlds
c) Approaches to blended learning	Communicating Online
	Interactions online – Motivating students for learning
	My del.isio.us Facebook: Exploring the Impact of Social Networks in Education
	Communication – clarity and community
	Group work for success
	Tools, Tricks and Teaching 2.0
	Web 2.0 – Implications for Education 2.0
	Google-eyed Education
d) eAssessment and evaluation	eAssessment – 3 Part workshop series
	Respondus and StudyMate
	Surveying online
2. Technologies and Tools	
a) mobile learning technologies	Mobile Learning and U
	The iPhone and iPod Touch as Educational Tools
	Learning from eLearning Innovation – Turning Mobile Devices into a Mobile Quiz Platform
b) video and animation	Educational uses of flash / interactive media
	Media – Motivational and Meaningful
	Using YouTube – Strategies four new media in Teaching and Learning
c) podcasting, blogs and wikis	Podcasting
	Blogging 2 Learn
	Wiki 2 Learn
d) modeling and simulation	Second Life – 3 Part Certificate Course
	Play to Learn: The creating and use of computer games for students to learn
e) Learning Management Systems	WebCT or Moodle – SCORM's the answer
	LMS – A look at different systems
	An Introduction to Blackboard 9
f) Presentations & lectures online	Adobe Suite of tools – Presenter, Capture & Captivate

Activity	Title
3. eLearning / Blended Learning to Address Teaching Challenges	
a) Overview	Learning design to address teaching challenges Rich resources for eLearning
b) Issues	Copyright issues
	Plagiarism
	A roadmap for success – Connecting OBA and eLearning
	eLM - A practical approach to Blended (e)Learning within Outcomes Based Education
	Creating a Teaching ePortfolio
	Out There: ePortfolios beyond language development
	Strategies to Develop Students' 21 st Century Digital Literacy
c) Approaches	Critical thinking and argument mapping
	Developing analytical thinking with authentic cases through blended learning
	Developing analytical thinking in online cases through group peer assessment
	Getting instant feedback to improve Teaching and Learning
	Helping your students to learn effectively: Embedding Library eResources into course content
	Researching online