Guidelines for Web-enhanced Student Learning Environments

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1.   Background

In the document 'Empowering Learning and Teaching with Information Technology'[1], the Education and Manpower Bureau (EMB) has announced their next strategies for eLearning in the coming few years. They will focus on the further integration of IT into the learning and teaching process and commission research into implementing Information Literacy programmes for students. In addition, EMB will commission studies on ways to benchmark the performance of schools in IT in education. This does provide an indication about our future students' IT skills and their expectations about our integration of IT into the education they will receive at CUHK.

In order to provide teachers with a clear direction of the eLearning development at the University, University could consider taking a leading role in establishing guidelines for web-enhanced student learning environments. In this paper, suggestions about the guidelines, implementation plan and time schedule are outlined to serve as a basis for further discussion.

2.   Details about the guidelines

Two levels of guidelines might be appropriate:

2.1 First level

Aim:
To ensure that students have access to clear and timely course information by enhancing information distribution and communication channels

Target:
All courses (required)

Details:
According to the report 'Study of eLearning at The Chinese University of Hong Kong 2004', of the 4,637 undergraduate and postgraduate courses offered at CUHK in the 2003–04 year with enrolments of ten or more students, 45% had a supplementary online course site. This indicates eLearning is still underutilized at the University. At the very least, students should have access to clear and timely course information through an effective channel.

In the 'Guide for Course Planning' in the University's teaching and learning policy document the 'Integrated Framework for Curriculum Development and Review' the following information is suggested:

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[1] The document referred to in this paragraph can be found at
http://www.emb.gov.hk/index.aspx?nodeid=1605&langno=1

1. Course title and description
2. Content, highlighting fundamental concepts
3. Learning outcomes
4. Learning activities
5. Assessment scheme
6. Feedback for evaluation

This information is consistent with the outcomes-based approach to education that the UGC has adopted.

It therefore seems sensible for the first level that at least a brief summary under these headings be provided for students. Other information which is eminently sensible to include is:

7. Course schedule (including lecture, lab, tutorial)
8. Teachers' or TA's contact details
9. A facility for posting course announcements

This information should be hosted on a course website that is easily accessible by all students in the course. Teachers are free to host their course websites on any platforms. Or they can host their websites at platforms supported by ITSC[2]:

- iHome
- CUForum
- WebCT

2.2 <u>Second level</u>

Aim:
To encourage further integration of IT in education by enhancing effective course management and collaborative learning

Targets:
All courses (recommended)

Details:
Since some existing courses should have already reached the first level benchmark, a second level guideline should be established in parallel to encourage further utilization of IT in education. To make sure the second guideline is beneficial to all courses regardless of the course objectives and learning design, two useful focuses are on enhancing effective course management and collaborative learning.

Teachers could consider integrating **some of** the following functions into their course websites where they are found to be **appropriate**:

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[2] More information about these platforms can be found at www.cuhk.edu.hk/wbt

Effective Course Management

1. Sharing of teaching and learning materials (these can range from static resources such as PowerPoint files to more interactive tutorials and simulations)
   - Teachers can easily upload their teaching materials for students to download inside the eLearning platform.

2. Collecting homework using an online assignment dropbox
   - This is a highly recommended and more efficient way to collect assignment instead of using email.
   - Assignments submitted through email can be easily mixed with hundreds of daily email and other mass mail. Teachers or supporting staff can easily overlook and delete a student's submissions. It is also hard to separate submissions from different classes and track the submission status.
   - In contrast, the online assignment dropbox in an eLearning platform can track and summarize the submission status, and handle multiple submissions automatically.

3. Setting up automatically marked learning exercises
   - This function supports different kind of question types such as multiple-choice, short answer, matching and calculations, etc.
   - Teachers can build a question bank and the eLearning platform can randomly select questions in making up different exercises to different students.

Collaborative Learning

4. Setting up forums to enhance teacher–student and student–student interactions
   - Instead of using email as a communication channel, teachers are recommended to build a list of FAQs. A FAQ list is accumulative, readable by the whole class and is searchable. This can save teachers' time in answering the same question repetitively.

5. Providing virtual working spaces for group work (file sharing, discussion forum, etc.)
   - Many courses require students to work in a group. Most eLearning platforms can provide students a virtual place for group work.

6. Providing a virtual environment for exchanges with other institutions, in Hong Kong or internationally
   - An eLearning platform can facilitate the transcending of physical boundaries. It provides a virtual space for teachers to organize inter-schools exchange activities.

7. Encouraging peer review among students
   - An eLearning platform allows students to easily view and give comments to each others' work.

Again, teachers are free to use their own methods to integrate the above functions into their course websites. Or they can use built-in functions at the following platforms supported by ITSC[3]:
- CUForum
- WebCT

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[3] More information about these platforms can be found at www.cuhk.edu.hk/wbt

3   Implementation Plan

Instead of pushing all courses to reach the levels all at once, it would be more effective to promote and assist teachers in a progressive fashion. This could be done through a timetable of selected departments, chosen to balance support for departments which have well-developed websites (where little support will be needed) with support for departments where there has been relatively little use of eLearning to date.

A few months ago, CLEAR and ITSC jointly submitted a proposal to Senate Committee on Teaching and Learning about establishing an eLearning Service for two years to visit individual teachers, departments and programmes to provide consultation services and limited eLearning technical support. This proposal has received TDG funding. It is entirely consonant with the aims of the eLearning Service for it to extend its responsibility to promoting the guidelines and assisting teachers in implementing them.

Other details about the targets, actions and time schedule are summarized in the table below:

Year	Targets	Actions
1 & 2	- All teachers should know details of the 2 levels of guidelines. - All courses should have reached level 1 standard. - Some exemplars should have been identified in each programme to start working on level 2.	- The eLearning Service, jointly formed by CLEAR and ITSC, could visit each department/ programme to help teachers to apply the guidelines. - At the end of the 2nd year, each department[4] should conduct a self-evaluation and submit for each course an assessment table for level 1 as in Appendix A. - The above submission is needed once only because the assessment may be integrated later into the course review framework.
3 to 5	- All courses should have adopted level 2 guidelines to some extent where applicable. - The assessment of level 1 and level 2 guidelines should have been integrated as one of the sections in the course review report.	- Since course review is done at least once every three years, it may be useful to target the achievement of the 2nd level guideline in three years and thus integrate the assessment into the course review report. - Discussion is needed with the Senate Committee on Teaching and Learning on the feasibility of integrating the assessment of level 1 and level 2 guidelines[5] into the course review report.

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[4] The term department includes programme committees and other units that might be responsible for academic programmes.

[5] Please refer the assessment tables to Appendix A.

Appendix A – checklist

Level 1 checklist		
Information available at course website	**Available (Y)**	**Not Available (N)**
1. Course title and description		
2. Content, highlighting fundamental concepts		
3. Learning outcomes		
4. Learning activities		
5. Assessment		
6. Feedback for evaluation		
7. Course schedule		
8. Teachers' or TA's contact details		
9. A facility for posting course announcements		

Level 2 checklist				
Item	**Not applicable in this course**	**Applicable but absent**	**Applicable but occasional use**	**Applicable and good use**
Course Management				
1. Sharing of teaching and learning materials				
2. Collecting homework using online assignment dropbox				
3. Setting up automatically marked learning exercises				
Collaborative Learning				
4. Setting up forums to enhance teacher–student and student–student interactions				
5. Providing virtual working spaces for group work (file sharing, discussion forum, etc.)				
6. Providing virtual environment for inter-institution exchanges				
7. Encouraging peer-review among students				