Cost Analysis

Costing is crucial in course design for assessing the feasibility of developing an online versus face-to-face course. This assignment was not as in-depth as required but met basic design needs. The lesson promotes student learning through collaborative or interactive group work in the virtual learning environment. Students demonstrated the benefits of asynchronous learning, the design criteria follows:

The scenario

The members of group 2 composed this course for graduates, offered at the University Of Maryland University College, in the use of technology in distance education. This college course offered to graduate students, presented new technologies for use in online course delivery to increase interaction between students, teachers, promote deeper learning and reduce integration costs to the university. The technology explored included print-based content, blogs and wikis to promote asynchronous and synchronous learning. An interactive program, opened to all users, using the basic tools is used for its efficacy and cost effectiveness--second life--an interactive learning environment with interactive activities and assignments. Second life was also used for its effectiveness in simulating real-life classroom scenarios.

The course presented alternative forms of technology to increase interaction between students and instructors. The group found as the demand for online classes increase, the use of various information and communication technologies (ICT) will provide more relevant methods of learning, and promote more interaction in distance education courses. Because integration continues to be a controversial issue in DE, the selection of technologies was based on its capability to either increase or decrease interaction, and cost and efficiency. The technology outlined below was selected based on its effects in motivating student interests, focusing on interaction in the virtual learning environment. The course design is: three credit course, required 150 hours of study time (15 weeks at 10 hours per week), and offered fall and spring semesters.

Technology

A wiki is a website that allows the creation and editing of any number of interlinked web pages via a web browser using a simplified markup language or a WYSIWYG text editor. Wikis are typically used collaboratively by multiple users. Wikis may serve many different purposes. Some permit control over different functions (levels of access). For example, editing rights may permit changing, adding or removing material. Others may permit access without enforcing access control.

A blog allows users to update with new content. Blogs are usually maintained by an individual with regular entries of commentary, descriptions of events, or other material such as graphics or video. Blog posts are interactive, allowing visitors to leave comments and even messages regarding the topic. Many blogs provide commentary on a particular subject. A typical blog combines text, images, and links to other blogs, Web pages, and other media related to its topic.

The Second Life technology allows multi-user interactions through use of communications software, websites and the virtual spaces. The SL instructional design supports student social and interactivity capabilities. Students will be able to create works and explore the virtual interactive classrooms using imbedded graphics, images, textures, photos, logos, sounds, music, video, audio, computer programs, applications, animations, gestures, text, objects, and scripts, can create regions for interactivity and social networking (www.secondlife.com).

Course material: the course is both print and virtual based. The course material is written by a renowned consultant who is an expert in the field. It consists of **four** study guides of about 20 pages each. Layout and design of the study guides and clearance of copy right will be produced in-house. The development process extends over **two** years and will require a **quarter** of the per annum staff-time of a course manager and **1/6** of a full time commitment of one secretarial staff.

The course will be offered for **four** years and is expected to attract **100** students per year. It is planned to update the course in year 2 and to present from year 3 onwards the re-developed version. In year 2 the course will be reevaluated for additional technologies that will be founded useful in interaction such as web 3.0 features.

Student support: Students are supported by a tutor. The tutor will extensively comment on and mark **three** essay-type assignments during the course. Additionally, students may ask the tutor for support by telephone, email, or correspondence. **Two 2-hour** weekend seminars are offered in the 4th and 12th week in second life. In the seminars students will be able to collaborate and share ideas with other students. They also will be able to have one-on-one and group sessions with the tutor to discuss views about new technology that could be used in future classes.

Assessment: The students will be assessed based on 3 essays, 1 group wiki or blog assignment and 1 group assignment created in the second life learning environment. In the group wiki project, students are asked to group by fours. Students will create a wiki regarding the use of technology in institutional interaction situations, personal and organizations and its usefulness in those arenas. The blog assignment will consist of a group of four student's blogging about a technology and how it can be utilized in higher education. In the second life assignment, students will separate in groups of five to create a virtual world classroom and explain the usefulness of second life in higher education. Second life will also provide real life assessments of assignments and provide feedback on assignments noting areas needing further development. Each essay will be an 800-word paper explaining each technology. Students should be able to explain the technology, uses of it and the effects of using that technology in higher education.

The following table lists specifications of the cost-analysis:

The ingredients and their costs

1	Input	Unit of input	Amount of input	Cost per unit of input
2	*Development*			
3	Course manager	per annum salary	1/4 of full-time post p.a. over two years of development	$55000
4	Secretarial support	per annum salary	1/6 of full-time post p.a. over two years of development	$20000
5	**Printed material**			
	Input	Unit of input	Amount of input	Cost per unit of input
6	Authoring study guides	per study guide (=20 pages)	four	$10000
7	Editing and design	per unit of 20 pages	eleven	$4000
9	Copyright clearance	per unit of 20 pages	eleven	$2200
13	**Assignment**			
14	Development of assignment	per assignment	three	$150
15	*Maintenance* (part of printed material only)			
16	Author	per study guide (updating)	three	$1200
17	Editing and design	per study guide (updating)	three	$4800
18	*Presentation costs*			
19	*Student support*			
20	Marking of assignment	per assignment	three	$35

21	Tutor	per hour of seminar of group size of 25	four	$50
22	Tutor expenses	per group of 25	one	$70
23	**Production**			
24	Production of study guide	per study guide	four	$6.00
25	Production of assignments	per supplementary unit		
28	Packaging and postage	per mailing	three	$9.00
29	**Income**			
30	Fee	per student per credit point	3	