

TDU REPORT 2005

Chair of Teaching Committee Copy

**TEACHING DEVELOPMENT UNIT
SCHOOL of BIOLOGICAL SCIENCES
UNIVERSITY of SYDNEY**

**Report to Teaching Committee for the period:
July 2004 - Aug 2005**

1. INTRODUCTION

During the year the Teaching Development Unit (TDU) continued to develop learning materials for students in the School of Biological Sciences (SOBS). These materials included both online and CD-ROM formats.

2. PROJECTS

New developments:

- **Plant Sciences:** The FAFNR and the SOBS will jointly offer three Intermediate / Senior units of study (Australian Flora, Plant Form and Function, and Plant Biochemistry) in Plant Science from 2005. A sum of \$40,000 has been made available under TIF grant to carry out the project. The developments in learning materials will be delivered electronically and will aim to provide integrated learning materials and include formative assessment using self-directed modules that are accessed electronically. During the process of choosing the appropriate content management system for the Plant Sciences project, the Fisher Library gained funding for a university-wide repository for learning resources and decided to commence work on an image repository. TDU liased with the library to make sure the development of the Plant Sciences project will be compatible with the library's system. Delays with the development of the Library repository have caused unintended delays on the project's completion but at the same time having parallel goals with the library guarantees that the project will be a sustainable system for future developments. The content management system under development will be transferable to the library's system.
- **BRAT – Biology Resources Administration Teaching:** Created a WebCT site for Biological Sciences staff as a teaching resource and virtual communication environment.

Ongoing developments:

- **Molecular Biology & Genetics MBLG 2002:** Three different sets of five paper based quizzes converted to WebCT quiz questions and

implemented for semester 2. Releasing the questions to certain computers was problematic with version 4 of WebCT. Password protected quizzes used instead.

- **Cellular Biology Lecture Resources BIOL2006:** The web pages containing printable version of images used in lectures were created.
- **Concepts Lecture Resources BIOL1901:** The web pages containing printable version of images used in lectures were created.
- **Microbiological Concepts:** The existing site of which graphical design was completed in 2004 was upgraded.
 - the content rewritten
 - animations were created and new images added.
- **Biology Learning Resources Web Site Upgrade:** A more efficient professional looking web site structure was completed.

First Year:

CD ROM

- The First Year Biology CD ROM was updated. New learning and self-assessment modules and latest versions of all software were included before the 2005 version was released. FYB CD ROM has received favourable acceptance by FYB students.

Computer – Aided Learning Module

- Excretion: Removal of Metabolic Waste: An Interactive Exploration was completed for Semester 2, 2004 (Human Biology)
- Immune System Quiz questions (15) are written and programming completed for FYBCD 2005.

Self-Assessment Modules (SAMs)

SAM templates used to develop the following new modules.

- Excretion for Semester 2, 2004 (Human Biology)
- Reproduction and Development for Semester 2, 2004 (Human Biology)
- Evolution for Semester 1, 2005 (Concepts and ETG))

Content received for two new SAM modules that will be developed in 2006.

- Human Evolution and Human Impact on the environment
- Special Senses

Interactive practice exams

- **File Transfer Protocol (FTP) approach was implemented successfully to access questions from the Biology server.**

The Human Biology practice exam for semester 2 is being modified to include the delivery software on the CD ROM (without questions). The questions and answers will now be accessed from the Biology server via the Internet at the appropriate time during the both semesters.

The Concepts practice exam for semester 1 2005 was rewritten and reformatted for web.

Living Systems practice exam for Semester 2, 2005 will be modified to be delivered via the Internet.

3. USE OF THE WEB

Continuing use of “Computer Based Learning Resources”

A new interface design was applied to the “Computer Based Learning Resources” for both senior and junior level including the VLE and relating online learning resource pages. Side scripts included to achieve a consistent appearance in different browsers and enable efficient maintenance of the pages server. General maintenance has been done throughout the year, with the functionality slightly modified.

VLE:

The VLE continues to be used for all first year biology units of study, except EDUH1016.

A Disclaimer notice was added to all front pages of Self-Assessment Modules and Learning Modules indicating that the content of the modules may not necessarily be consistent with the content of current units of study.

Copyright notice and last updated date were added to the front pages of all modules.

The Generic Skills area of the VLE were reviewed and updated.

The Database for registration of Poster peer groups and entering of poster marks was developed. A trial version was used for Biol1001 Concepts in Biology - Semester 1 and was then generalised to include other units. In semester 2, 302 groups, each group consisting of four to six students, registered online for Biol1003/1903 Human Biology and EDUH1016 Human Biosciences.

Continuing use of WebCT

WebCT continues to be used for the delivery of information and content for students in various units of study. TDU provided assistance to members of the School to develop and maintain their online student learning resources. Ongoing support for existing learning materials is also essential.

4. EXTERNAL CONTRACT WORK

CDDS: The Web site for the Centre for Developmental Disability Studies (CDDS) was completed on time. TDU developed two new WebCT units for CDDS by using the template TDU created earlier. Further developments are under discussion.

Publishers: Discussions have begun with both Pearsons and McGraw Hill for the TDU to become part of the development team used in the production of electronic textbooks.

5. GENERAL ACTIVITIES

New Developments – Raising Funds:

BioMedia Project: The grant application for Collaboration and Structural Reform (CASR) Fund completed in conjunction with Pearson Education, Publisher Company. The application for \$650,000 was unsuccessful, and further applications will be explored.

New developments – Funded:

- **Sipunculida Virtual Dissection:** The Learning resource was constructed using a template. Isabel Hyman provided the content and Anne Barko the photographs. Completed May 2005 and used in classroom. The program became finalist for “Voiceless Eureka Prize for Research which Replaces the Use of Animals or Animal Products”.
- **Human Biology Online:** Attended meetings, contributed on designing online unit of study and utilising WebCT tools to improve student involvement. Preparing learning objects – images for online. Prepared the poster titled “Re-engineering of Human Biology Course Content for WebCT-based Online Activities: HBOnline” for presentation in the HERDSA conference. Dealt with technical issues i.e. browser incompatibility problems. Answered student enquires related to computer (software & hardware) problems.

- **eFlora Interactive Glossary:** Attended meetings and received the definitions. Waiting for eFlora repository system set up to be completed to be able to create a database driven interactive glossary.
- **Senior Studies CD Development:** The learning resource for senior studies was converted to a new software version to make them compatible with new operating systems. Creation of a CD is under development.

Ongoing Developments – Funded

- **FYB SAM & Learning Modules Upgrade:** Upgrading of Authorware modules to version 7 started to make the modules compatible with Mac OS X browsers. The upgrade will be completed by the end of 2005.

New Initiatives:

Discussed with Su Hanfling, director of Sciences and Technology Libraries, the role of the TDU in the construction and use of a University-wide Learning Objects Repository.

Development of the Learning Objects Repository (image, sound, video, text etc – learning objects) will enable us to store and use our learning resources much more effectively. A Database search facility will add extra value to our digital assets. TDU initiated a sustainable system for storing electronic resources during 2004 - 05.

External Request for Training

Two senior lecturers, University of Kelaniye (SriLanka), contacted TDU via email requesting training on student centred learning methods. The Head of School gave in-principle support for TDU taking on a funded role in training.

Maintenance:

Mac OSX server Hardware Software upgrades
Maintenance of OS X server and BugsDb server

Consultation:

- Assisted staff with use of WebCT, Photoshop, Dreamweaver, pdf, html, video, streaming etc.
- Assisting in grant applications, including the Apple scholarship.

FYB Visiting high schools and gifted and talented students

Created password restricted web pages containing photographs of visiting students.

Showcase on ICT (Information and Communications Technology) - College of Sciences and Technology:

The poster titled “TDU” was presented on 13 August 2004.

Teaching and Learning Showcase - College of Sciences and Technology:

The poster titled " TIF Grant to Integrate Teaching: Has TIF money enhanced our teaching?" was presented on 3 November 2004.

TDU Staff

Permanent, full time: Aida Yalcin

Contract until 18/10/05 (Plant Sciences Project): Kathy Kuzmanovic

TDU Management Committee

Dr Peter McGee (Chair)

Dr Rosanne Quinnell

Dr Liz May

Mr Michael Joseph

APPENDIX 1

Financial Statement: 1 July 2004 – 31 June 2005

<u>Class</u>	<u>Description</u>	<u>Actuals</u>	<u>Commitments</u>	<u>TOTAL</u>
<u>July - December 2004</u>				
	Income			
	Operating Accum Funds C/Fwd	75,068.52		75,068.52
2711	Sales Material and Equipment	1,136.36	0.00	1,136.36
3202	CDDS web site development	5,200.00	0.00	5,200.00
3319	Internal Income from various projects	8,970.00	0.00	8,970.00
3401	Sale of Expense Assets	315.05	0.00	315.05
3602	Sale of heart animations	136.36	0.00	136.36
	Total income	90,826.29		90,826.29
	less Expenses			
	Salary Expenses total	21,630.34	0.00	21,630.34
5031	Materials-Electronic Items	272.15	0.00	272.15
5046	Electrical Supplies	39.09	0.00	39.09
5101	Plant & Equip Rep & Mtce	30.00	0.00	30.00
5102	Internal Chg Computer Maint	29.50	0.00	29.50
5302	Comp Equip \$1,000 to \$4,999 (computers)	5,219.00	0.00	5,219.00
5344	Computer Software & Licences	62.73	0.00	62.73
6302	Postage	9.14	0.00	9.14
6304	Internal Chrges Communications	33.19	0.00	33.19
6700	Advertising Plant Sciences Position	443.86	0.00	443.86
6717	M'Ships/Subs Computer Magazines	152.73	0.00	152.73
7024	Reference Material	161.09	0.00	161.09
7103	Internal Charges-Motor Vehicle	2.10	0.00	2.10
5043	Stationery/Office Supplies	177.96	0.00	177.96
7212	Internal Charges Photocopying	29.15	0.00	29.15
	Total expenses	28,292.03	0.00	28,292.03
	Balance at 31/12/2004	62,534.26		62,534.26
<hr/> <u>Jan - June 2005</u>				
	Income			
1810	Operating Accum Funds C/Fwd	62,346.12	0.00	62,346.12
2719	Sales Course Notes	31.00	0.00	31.00
3319	Internal Income General	1,000.00	0.00	1,000.00
	Total income	63,377.12	0.00	63,377.12
	less Expenses			
	Salary Expenses total	25,135.72	17,370.35	42,506.07
5043	Stationery/Office Supplies	181.71	0.00	181.71
5102	Internal Chg Computer Maint	31.38	0.00	31.38
5344	Computer Software & Licences	798.18	0.00	798.18
5414	Internal Charges Software Licences	187.00	0.00	187.00
6304	Internal Chrges Communications	2.23	0.00	2.23
	Total expenses	26,336.22		43,706.57
	Balance at 31/6/05	37,040.90	17,370.35	19,670.55

APPENDIX 2
EXTERNAL REQUESTS for use of RESOURCES

Request	Contact	Resource	Use	Income
Heart Animations	Sophia Wong Office Manager, Mitralign, Inc. 5 Industrial Way, Unit 1B Salem, NH 03079	Heart animations created in Macromedia Flash for "Cardiovascular Systems" learning module	Presentations: Company involved in repairs of the heart valve	Sold for US\$100

