

**Teaching Development Unit  
School of Biological Sciences  
University of Sydney**

**Annual Report 2002**

The Teaching Development Unit (TDU) was established by the Head of School to develop interactive multimedia courseware for inclusion in curriculum of units offered by the School. The TDU is managed by a committee and is responsible to the Teaching Committee.

The School of Biological Sciences Teaching Development Unit completed several major projects during 2000-2002. Further, developments for other departments were commenced.

## **NEW DEVELOPMENTS**

### **Biology Today**

Biology Today was moved from the Biology WebCT server (Microsoft NT) to the central University WebCT (Unix) server. Problems were experienced with the move because of the case sensitivity of file names required by in the University Unix server. A substantial investment in Time and resources was require to alleviate these problems

As part of the ongoing support for Biology Today, TDU continued to assist Teaching staff with the delivery of the unit.

The majority of students surveyed in 2001 and 2002 consider the unit success with a few students identifying areas where the unit may be improved.

WebCT was chosen by TDU as the best cost effective delivery environment and student management system for the unit of study. The software has since been adopted by the University of Sydney in 2001 as the delivery system of choice.

### **Virtual Learning Environment (VLE)**

A review of the First Year Biology Virtual Resources Room in 1999 found it had outgrown its existing format. The TDU, in conjunction with the FYB Teaching Development Group, redeveloped it as the new VLE. The new environment separated learning resources into different rooms for each unit of study. This addressed the student confusion over which resources were relevant to the unit

of study they were studying. Similarly, discussion groups, notices and other administrative materials were individualised for each room. A major feature of the new VLE was the presence of cyber-entities to answer student questions. The previous VRR had only a cyber-tutor who answered admin, technical and academic questions, some of which would be asked repeatedly. The new VLE added Cyber Tech to handle technical questions and Cyber-Admin to answer administrative questions. Frequently asked questions (FAQ) were listed on each cyber-entity page.

The VLE was developed for all junior units of study and work commenced on the extension for intermediate and senior biology. Adoption of WebCT by the university caused the cessation of further developments to allow the direction of the VLE to be clarified.

### **WebTeach**

Following successful trials in 1999 with small focus groups in Living Systems (Biol1003), Charlotte Taylor expanded her controlled mediated discussion workshops in FYB to include all students enrolled in Concepts in Biology (Biol1001). A dedicated computer was configured to run WebTeach, a programme developed by staff at the UNSW education faculty. WebTeach allows tutors to control student discussions using a number of meditation tools eg brainstorming, questioning, voting, etc. Discussion topics included "Lecture buzz sessions", "Writing Skills" and "Exam Skills"

### **Reptiles**

Further development of the reptile programme included revision of the navigation system and inclusion of Quicktime movies for future delivery via CD-ROM. The internet version will not include the movies.

### **Mycology**

The Mycology website underwent further development using an external contractor. TDU investigated the use of Java applets and Mathematica to allow students to vary parameters of experiments and plot data. Sever-side Mathematica and Java applets were not cost effective so TDU used Javascript as an alternative.

### **Cardiovascular System**

This project was a collaborative effort between TDU and FYBTDG and was funded by a NEAMS trust grant of \$10k. Quick Time Virtual Realty and a virtual dissection of a cat were used to enrich the students learning experience.

### **CD-ROM of student software**

TDU produced an installation CD to provide students with easy access to plugins formerly obtained via the Internet. Students can borrow the CD over night to install browser plugins, Netscape 4.7 and Acrobat Reader™.

## **USYD WebCT 2000/2001**

The TDU began working on the University server in late 2000 liaising with the USYD Major Projects Group. Unit of study templates were created and finalised in discussions with the SOBS unit of study coordinators and executive officers. Learning resources were moved to the new unit of study early in 2001. These developments will continue.

<http://groucho.ucc.usyd.edu.au:9000/webct/homearea/homearea>

username-bioguest

password-bioguest

## **CONFERENCES & WORKSHOPS**

### **Apple University Consortium Conference**

TDU presented a paper in the Technical stream of the AUC Academic and Developers Conference 2000. "New Millennium, New Technology, New Worlds of Learning" <http://AUC.uow.edu.au>

"Raising the Dead: Reptiles recovered from the brink of disaster" discusses the pitfalls of lengthy multimedia developments and suggests project management procedures to avoid the problems experienced in its production.

[http://bugs.bio.usyd.edu.au/SOBSTDU/auc2000/AUC\\_RMW.AY.html](http://bugs.bio.usyd.edu.au/SOBSTDU/auc2000/AUC_RMW.AY.html)

### **JAVA Kitchen Workshop**

Aida attended a 3 day workshop held at Melbourne University sponsored by Apple Computer (AUC) learning JAVA programming language.

## **CONTRACT WORK**

### **Extra-departmental work.**

SOBSTDU worked on a number of projects external to the SOBS in 2000 for which they School benefited, in reputation and financially.

i)The Learning Assistance Centre used TDU as project consultants for a HTML/Javascript version of their Writing Skill programme for Chemical Engineering and Biochemistry.

ii)Sydney College of the Arts initially asked TDU to act as consultants for the Virtual Exhibition Project and later requested our services as developers of the project.

<http://thap.sca.usyd.edu.au/thap/>

iii)The Australian Graduate School of Management employed TDU to develop a WebCT template for the Hong Kong based Masters of Business administration course.

[http://129.94.5.30:8900/SCRIPT/AGSM\\_Template/scripts/serve\\_home.pl](http://129.94.5.30:8900/SCRIPT/AGSM_Template/scripts/serve_home.pl)

username-agsmstudent

password-agsmstudent

Reviews of the work provided to AGSM and SCA are available from TDU.

In addition to external contracts, the TDU has been approached by other departments for advice and help with their projects.

The funds raised from contract work are shared between TDU and the School. TDU spends this income on employing casual staff to complete simple tasks, purchase software and hardware and support for attendance at conferences. It is hoped that the quantity of contract work can be expanded

### **Recent Relocation to Macleay A12**

As of 17/4/2001 TDU will be located in Rm 208 in Macleay bldg opposite the Robert Brown Lab. The room has been refurbished to suit an expanded development unit, where it is planned the TDU will serve the School's IT in Education needs for the near future.

### ***TDU Staff***

Aida Yalcin

Rob Mackay-Wood

### ***TDU Management Committee***

Dr Peter McGee (Chair)

Dr Rosanne Quinnell

Dr Jenny Saleeba

Associate Professor Ove Hoegh-Guldberg (retired)

Mr Michael Joseph