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School of Public Health  
and Community Medicine

**POLICY DOCUMENT**

***Policy on  
Using Educational  
Technology for Learning and  
Teaching***

*July 2004*



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# 1. Background

The use of educational technologies for learning and teaching in universities has increased rapidly in the years since the arrival of the internet. The School has embraced the use of internet and digital technologies to support learning and teaching, particularly at the postgraduate coursework level. The number of courses using some level of educational technology to support delivery continues to grow, so that a significant proportion of our teaching activities now draw to varying degrees on new technologies for delivery, particularly for external students.

In this context the School has recognised the need for ongoing reflection regarding the range of applications of educational technology used to support student learning and our teaching. In order to help keep abreast of and shape these developments at the School level, we have:

- Established the [Educational Technology Committee](#) (ETC) in July 2002
- Developed this policy on the use of educational technology across the School.

Deliberations of the ETC will inform future policy decisions, thus reflecting the evolution of the technologies and improvements to learning and teaching strategies.

## **Use of educational technology across the School**

A recent survey has shown that the use of educational technology has steadily increased in the School, with for example, the number of courses with an online learning component jumping from 0 in 1998 to 35 in 2003.

A range of technologies are currently in use including:

- Web-based classroom management tools such as WebCT and TopClass (Post graduate programs and the new Medical Program)
- Web (BioMed library subject guides, Health Care Game)
- CDRom (Geriatrics postgrad program)
- Video (Public Health postgrad program, undergraduate Gen Ed courses)
- Audio (Public Health postgrad program)

- Other technologies such as PowerPoint (to augment face-to-face teaching).

These technologies are used mainly to support postgraduate coursework programs, although the new Medical Program has recently adopted WebCT as a classroom management tool. Of all the educational technologies, by far the greatest use is made of WebCT with 40 courses having an online component in July 2004 (only 15-20 of these may be active in any one session).

These educational technologies are being used in the following modes:

**Adjunct** – in which the technology supplements a course of study offered principally face-to-face, for example when a face-to-face course has an online discussion or makes use of a Biomedical Library Subject Guide, accessed via the Internet or uses another web-based resource such as the Health Care Game.

**Mixed** – in which the technology partly replaces elements of traditional class interaction and is accompanied by print-based materials, for example when a course has a WebCT component to support discussion and/or provide resources, or uses another technology such as an interactive CDROM.

**Online** - to date no courses are offered fully online where all the content and processes of interaction are supported by technology. This reflects in part the needs of our students (many of whom still prefer to receive some print-based materials to support their learning), the learning outcomes of the course (as some may not lend themselves to the use of educational technology), and issues around staff development.

Both internal and external students access these modes.

## 2. Rationale for using educational technology

We use educational technology to enhance the learning and teaching experience of our students. Internal students are offered an enrichment of their courses through access to electronic resources, or presentations using technologies such as video or PowerPoint slides in class. External students benefit from easy access to materials as well as enhanced opportunities for interaction, discussion, engagement and reflection through the use of online classroom management tools such as WebCT.

Our use of educational technology:

- Provides students with more flexibility and choice as to when and how they will study. This enables them to fit their study around busy professional and personal lives.
- Provides students with additional opportunities for individual reflection and engagement and opportunities to link their courses with their professional practice and experience.
- Provides students with additional opportunities for collaboration and engagement with fellow students and their practices.
- Provides students access to relevant electronic resources.
- Provides staff the opportunity to explore innovations in teaching and learning.
- Provides staff the opportunity to work collaboratively.
- Maintains a marketing edge to our programs and courses.

### 3. Underlying principles of using educational technology for learning and teaching

Our use of educational technology is built on principles that support good teaching and learning. We draw on the body of theory in the adult and higher education literature to inform good teaching practices. While the needs of different groups of students find resonances in different areas of the literature, some overall generalisations can still be made.

See also UNSW Guidelines on Learning that Inform Teaching – (<http://www.guidelinesonlearning.unsw.edu.au>).

Constructivism is a useful framework for thinking about student learning issues. Constructivism views the student as an active participant in learning. Learning is seen as a process in which students construct and test their understandings and skills, alone and with others, in response to the problems they encounter and the experiences they have. Students are continually integrating new understandings and experiences into their existing cognitive structures, and they are continually growing their understandings. Much of the emphasis in constructivism is on the processes of engagement and learning rather than on curriculum content. Teaching approaches that encourage active engagement with content and with teachers and peers, problem solving, application to novel situations, the development of independent learning skills, and a critical approach are recommended.

For undergraduate students the student approaches to learning research has developed the concepts of deep and surface approaches to learning. Principles and practical suggestions for teaching aimed at encouraging a deep approach to learning in students have also been articulated:

- A positive motivational context that establishes student interest
- Concern and respect for students and student learning
- Appropriate assessment and feedback
- Clear goals and intellectual challenge
- Active engagement and interaction with others
- Independence, control over learning for students
- Staff learning from students
- Support for the development of a well-structured knowledge base. (Ramsden, P. (1992) *Learning to Teach in Higher Education*. London: Routledge)

Many of our postgraduate students are or have been in professional employment, and most are studying in programs that relate to their areas of professional practice. For these students the adult education focus on learning from experience and reflective practice is most appropriate. These emphasise supporting students in reflection on relevant professional practices in which they are engaged, and helping them to explore the application of course content to these practices. Reflection can be both an individual and social activity and can be supported by offering opportunities for students to discuss and analyse their professional activities with each other.

We seek to use educational technology to enhance the learning and teaching experience. Good practice is emerging across a range of courses. Some examples from the Master of Public Health postgraduate courses include:

- **Supporting the development of a well structured knowledge base** – for example, content rich/content heavy courses can take advantage of the wealth of electronic resources available. Frequently Asked Question files (FAQs) can also be used, and they can be updated after each session – see Epidemiology for Public Health.
- **Fostering active engagement with the ideas and processes central to each discipline area** - for example in courses in which the concepts are particularly complex, students can be given the opportunity to construct and test their own understandings in an online discussion area – see Management of Organisations.
- **Providing opportunities for interaction with other learners and the teacher/s** – again in discussion areas, either in designated groups or as whole class discussions – see Program Evaluation and Planned Change and Health Promotion.
- **Providing opportunities for reflection on the learning experience, on practice and on the application of the course material to practice.** Online discussion and small group work can challenge students conceptions and attitudes, and encourage them to reflect on their experiences. This can be done in an open and collaborative way – see Health Promotion and Designing Short Courses and Workshops.
- **Providing regular feedback and formative assessment.** Online quizzes and open feedback can provide levels of feedback to students that are difficult to achieve in face to face situations – see Influencing Health Beliefs and Health Behaviours.
- **Encouraging the integration of previous learning with the learning arising from present study.** Online discussions where students are asked to relate new material to their experiences and to apply the new concepts to their work practices or to new

situations can help address this. Setting problems for groups to address and discuss can also support students in the task of integration – see Program Evaluation and Planned Change and Health Promotion.

Courses with unavoidably heavy content loads, and courses involving challenging intellectual content can benefit from the appropriate use of educational technology. It must also be acknowledged however that there are some courses which will always be more suited to the face-to-face mode of delivery, for example those with a large component of physical skills and/or small group work.

## 4. Key issues

The key issues facing staff and students using educational technology include:

For staff:

- The pace of change
- Lack of adequate time, rewards and/or incentives
- Level of technical skill and support
- Preference for face to face interaction
- Working with outcomes that are difficult to address with technology
- Changes to working conditions, for example to be accessible via email at night and/or on weekends.

For students:

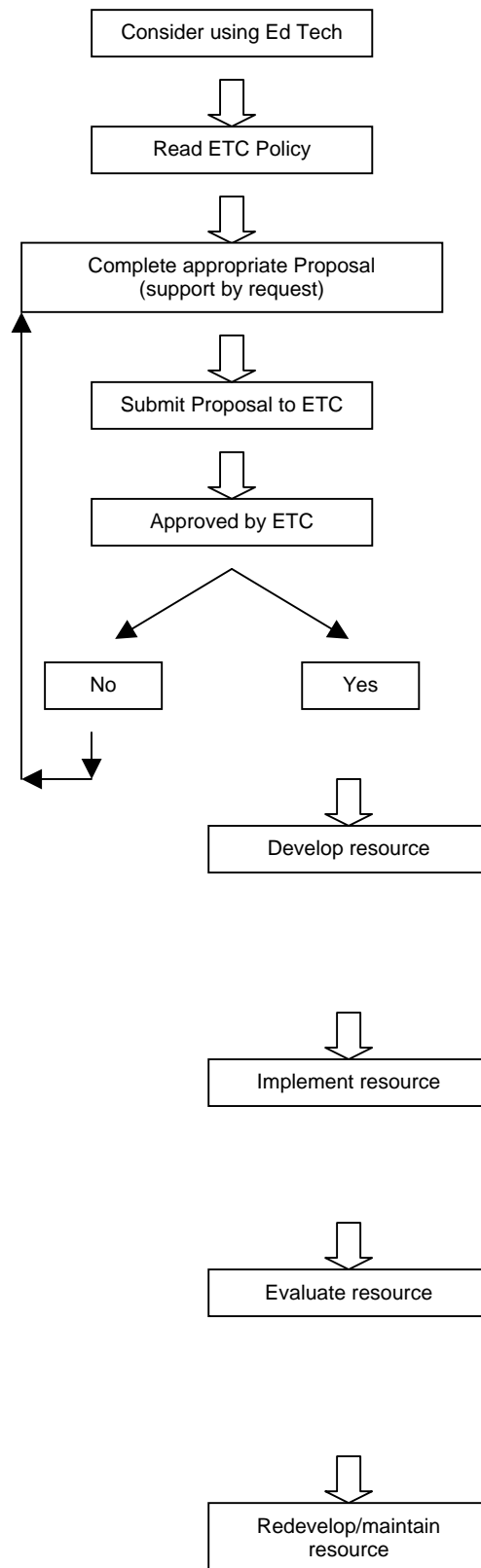
- Pace of change
- Level of technical skill and support needed
- Lack of adequate time, particularly for group-based online work
- Lack of incentives, eg assessment.
- Preference for face to face interaction.

In addressing some of these key issues, the School and the University offer specific support to both students and staff, outlined below – see also **6. Support for using educational technology.**

## 5. Procedures for using educational technology

In order to adequately support staff and students using educational technology across the School, we have developed a set of procedures and guidelines. These have been developed to help you think about and subsequently work through the issues involved.

The procedures for using educational technology are outlined in the flow chart below which also shows what resources are available to support you and your students:



**Resources Available**

- **Rich Media:** Proposal for developing a resource using rich media - [Appendix 1](#)
- **WebCT:** Proposal for developing an online component using WebCT - [Appendix 2](#)
- **EDTeC:** Teaching Quality Principles and Guidelines for the Application of Educational Technology - [Website](#)
  
- **Rich Media:** - In consultation with IT/Web Coordinator
- **WebCT:** Guidelines for using WebCT - [Appendix 3](#)
- [Biomedical library](#) subject guide
- [EdTeC](#) workshops and resources
  
- **WebCT:** - Guidelines for facilitating online - [Appendix 4](#)
- **Rich Media & WebCT:** - Guidelines on issues relating to digital copyright - [Appendix 5](#)
  
- **WebCT:** - Online course evaluation form - [Appendix 6](#)

## 6. Support for using educational technology

Currently the resources within the School allow different levels of support to be offered for the following educational technologies:

- WebCT
- Web
- CDRom/DVD
- Video
- Audio
- WebTeach (under consideration).

We have included as appendices to this policy, a number of practical tools you can use when using educational technologies for teaching and learning.

### For Students

Support (for students using WebCT only) is in the form of:

- **‘Introduction to WebCT’ tutorial delivered at the beginning of each session by IT/Web Coordinator**  
At the beginning of each session, the [IT/Web Coordinator](#) delivers a number of tutorials for students new to WebCT – see the [timetable of key dates](#) for each session to check when these are to be held to make sure your students can attend. If they cannot, contact the IT/Web Coordinator directly to make alternative arrangements.
- **Course level email/telephone support from IT/Web Coordinator**  
The [IT/Web Coordinator](#) provides students with contact details both at the face to face tutorial and online in WebCT – students can email or phone or come in person to the office of the IT/Web Coordinator during office hours.
- **Access support for email/telephone from ITS and EDTeC**  
These two University wide support services offer students *limited* support due to the sheer numbers they are dealing with – [ITS](#) are responsible for administering UNIPASSs.
- **EDTeC electronic resources for students**  
[http://www.edtec.unsw.edu.au/inter/dload/flex\\_ed/guides/studentV/index.htm](http://www.edtec.unsw.edu.au/inter/dload/flex_ed/guides/studentV/index.htm)

The pages, 'Guidance for studying online' give students some guidance on how they can make the most of their online study, including:

- Online participation guidelines
- What makes a good online discussion?
- Learning in groups
- Group work online

- **School website – electronic resources including downloadable user guides.**

Our school website has a number of resources and web links including:

- [WebCT Online Courses](#)
- [IT Requirements for UNSW students](#)
- [Educational Technology Subject Guide](#)
- [Instructional Development Team](#)
- [Beginners Guide to using the Internet](#)
- [WebCT EdTeC Student Support](#)
- [U-Connect@UNSW](#)

*Downloadable Publications –*

- [Introduction to WebCT & the Internet](#) (Published by SPHCM)
- [Full WebCT Student Orientation Guide](#) (Published by EdTeC)
- [Basic WebCT Student Orientation Guide](#) (Published by EdTeC)
- [Basic WebCT Tips](#) (Published by SPHCM)

For students using other educational technologies only:

- **By appointment with IT/Web Coordinator.**  
Students will need to make an appointment with [the IT/Web Coordinator](#) for technologies other than WebCT.
- **Information Skills Tutorial – Biomedical Library.**  
The Biomedical library has developed an online tutorial for medical students to help them locate different information - See <http://www.library.unsw.edu.au/~biomed/medtutorial/index.htm>

## For Staff

Support is in the form of:

- **A checklist to guide staff through how to plan for the development of a resource using rich media – see '[Proposal to develop a resource using rich media](#)', Appendix 1**

This checklist has been adapted from that developed for the Faculty to help you think through all the issues involved. These include educational, technical, administrative and financial. The checklist can be applied to any educational technology you may be thinking of using, such as audio, video, CD and Web. In completing the checklist you may need to speak to the instructional designer and/or IT/Web Coordinator. Once the checklist is complete, it is to be submitted to the ETC for approval.

You can [download the checklist](#) and fill it in electronically.

- **A checklist to guide staff through how to plan for the development of an online component to a course using WebCT see '[Checklist for using WebCT](#)', [Appendix 2](#)**

This checklist has been compiled to help you think through how you need to prepare for using WebCT in your teaching and learning. In completing the checklist you may need to speak to the instructional designer and/or IT/Web Coordinator. Once the checklist is complete, it is to be submitted to the ETC for approval.

You can [download the checklist](#) and fill it in electronically.

- **Workshops and/or self-paced instructional materials to help guide you through the process of course development and review to incorporate WebCT.**

There are some self-paced instructional materials available on course development that cover incorporating an online component using WebCT – you can contact the instructional designer to ask for these. Also see *Guidelines for Using WebCT* in [Appendix 3](#) of this policy.

- **Workshops to help guide staff through the process of using WebCT**

[EDTeC](#) runs regular workshops for different levels of use of the software – the introductory one provides a good overview of what the tools can offer so you are in a better position to think through how you want to use them to meet the educational rationale you have already identified.

- **Individual guidance on using WebCT**

If you have attended the EDTeC introductory WebCT workshop but still feel you need more help, you can make an appointment with the school [instructional designer](#) or [IT/Web Coordinator](#).

- **Individual guidance on technologies other than WebCT**

The school [IT/Web coordinator](#) can provide guidance on using audio, video, CDs, web but you will need to complete the 'Proposal to development a resource using rich media' – see [Appendix 1](#).

- **Guidelines for using WebCT**  
If you are using WebCT, you can use the written guidelines in [Appendix 3](#) to help you think through what your needs are and where to go for additional support. EDTeC also have some useful guidelines for students, but which are equally useful to staff see: [http://www.edtec.unsw.edu.au/inter/dload/flex\\_ed/guides/studentV/index.htm](http://www.edtec.unsw.edu.au/inter/dload/flex_ed/guides/studentV/index.htm)
- **Guidelines for facilitating online discussions**  
These guidelines, in [Appendix 4](#), describe what is expected of an online facilitator and/or tutor and provides some tips on how to have discussions using WebCT.
- **Guidelines on issues relating to digital copyright**  
These are to be found in [Appendix 5](#) and (will soon) include how to reference electronic items and strategies to deal with plagiarism.
- **Processes and criteria for evaluation**  
We have included an online evaluation form in [Appendix 6](#). This form can also be used as a checklist when developing your course/component and teaching online. Appendix 6 also includes how to look at the results of the completed online evaluations.
- **Opportunities to share and discuss educational practices within the School as one element of the formation of a learning community.**  
A list of staff currently using WebCT is included as part of the [Guidelines for using WebCT](#).

### **Additional support for staff facilitating online**

The School is working towards a system where teaching and other workloads will be shared more equitably, with the provision of additional resources being considered for academics teaching above the normal levels.

For those staff using Web-based classroom tools to provide **high** levels of interaction, additional tutorial support may be granted in the form of online facilitation. In general, the following criteria will be used when considering each application:

- The online component is to be used for online tutorials, that is the role of a facilitator is intensive and paramount to the success of the component
- The number of students enrolled in the online component is more than 40
- The course convenor has identified a tutor who has the appropriate background of the discipline and skills in online facilitation

- The course convenor has provided clear and detailed guidance as to what is expected of the tutor, before and during and after the course – see Guidelines for facilitating online discussions in [Appendix 4](#).
- The course convenor has provided clear evidence that facilitation of the online component of the course is at such a level that it cannot be absorbed into their overall workload. [The School is in the process of developing a policy on workload.]
- The course convenor has specified any additional support in relation to the assessment for the course if the online component is assessable and/or contributes significantly to the assessment.

Applications addressing the above criteria, **including a budget** for the proposed additional support, will be considered by the [ETC](#) and approved by the Head of School.

## 7. Evaluating the use of educational technologies

The evaluation of the use of educational technologies is incorporated into the overall evaluation and review of programs across the School. In addition, the following processes focus more specifically on the evaluation of educational technologies used for teaching and learning:

- Online course evaluation form, and how to look at the results of the forms (see [Appendix 6](#))
- Debriefing of staff using WebCT at the end of each session
- Informal feedback from staff during session
- Recording of all student queries
- Informal feedback from students during session.

## 8. Research and development of educational technologies within the SPHCM

Our school is committed to researching the value of different technologies and experimentation with them as part of our teaching and research activities. Research into educational issues is encouraged. We are also keen to share ideas and experiences – see school website, [research interests of staff](#) and [list of staff using WebCT](#).

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