

6 EDUCATIONAL RESOURCES

6.1 Physical facilities

STANDARD 6.1.1

The medical school has sufficient physical facilities for the staff and student population to ensure that the curriculum can be delivered adequately.

UNSW operates a centralised system of teaching facility provision on the Kensington Campus, known as “CATS” – Centrally Allocated Teaching Spaces. Facilities available to the Faculty are of variable quality although, overall, through a substantial building and renovation program over the last 6 – 8 years, many of the spaces have seen substantial improvement.

Plans are currently entering final phases of approval for complete rebuilding of the medical school facilities. This has arisen through sustained activity on the part of the Dean in advocating for new facilities through the prior Vice-Chancellor’s process of determining priorities – the Campus Development Workshops. In 1998, the Dean presented an original concept plan for the redevelopment of the entire medical precinct. In the last two and a half years, significant energy has been expended on developing a plan for a major biotechnology facility between University of New South Wales and the Prince Henry/Prince of Wales Hospital/Sydney Children’s Hospital/Royal Hospital for Women campus. Property development firm CRI Australia, have been contracted in a partnership between the NSW Government and the University of New South Wales to conduct a feasibility study regarding the development of the Sydney BioHub. This work was completed in early 2002, and strongly suggests the viability of such a proposal. A four member planning team have been seconded from CRI to the University of New South Wales to conduct the next stage of planning to bring to fruition a capital financing plan, finalisation of government commitment to the project and the development of governance structures. It is anticipated that the UNSW Faculty of Medicine will be completely rebuilt within the Sydney BioHub. At the time of submission, a closed competitive tender is being released to three architectural planning firms to develop a detailed brief for design of the new medical school.

Pro tem, the existing facilities will be used for the launching of the new curriculum. The design of the new curriculum, with enhanced emphasis on small group interactions, will significantly stretch the existing facility but, preliminary plans indicate that deployment on the time scale indicated in this document is achievable using existing facilities. This however, will mean some dispersion of small groups into other parts of the campus. The following paragraphs describe the current situation with regard to UNSW facilities. The education facility in the new medical school, discussed above, will be purpose built for the new medical course. In the meantime, negotiations will be made through the CATS service, to ensure access to suitable rooms for small group activities. It is anticipated that modest renovation of existing teaching lab spaces for conversion to small group teaching rooms will be necessary. These matters are being examined at the time of submission.

The lecture theatres listed below are located on the Kensington Campus and are an additional resource available to the Schools.

Clancy Auditorium

Seating Capacity	945 (5 with wheelchair access)
Audio Visual Facilities	Video/data projection, visualiser or OHP
Other	Extensive lighting and sound facilities Fully air conditioned

Central Lecture Block Theatre (8 Lecture Theatres)

Seating Capacity	3 by 110; 2 by 118; 2 by 232 and 1 by 500
Audio Visual Facilities	Video projection, data projection Cassette play/record PA system Slide projection OHP
Other	Powered audio injection loop system Fully air conditioned

Biomedical Theatres (A-F)

Seating Capacity	2 by 89; 1 by 150; and 3 by 240
Audio Visual Facilities	Video production (D only) Cassette play/record PA system Slide projection
Other	Extensive lighting and sound facilities Fully air conditioned

As noted above, a complete renovation of all the Biomedical Theatres was completed in 2000. In addition to attractive renovation of the lecture rooms, replacement of seating etc, the entire audiovisual facilities have been replaced enabling facile use of computer projection etc to occur.

Other CATS Teaching Spaces used by the Faculty of Medicine

A number of tutorial rooms of variable size accommodating between 10 and 30 students are available throughout the buildings used by the Faculty of Medicine.

A listing of examples of other teaching spaces provided by CATS and used for undergraduate Medical student classes is provided below.

The Mathews Building

Thirteen teaching rooms of different seating capacity – ranging from 18 to 75, are available for use of Medical Program classes. Each is a basic facility with now air-conditioning and no audiovisual capacity other than an OHP. Otherwise rooms are equipped only with chalkboards, desks and chairs

Bio Sciences Building

Two teaching rooms are available in the Bio Sciences Building and these are also basic facilities. They are not air-conditioned, have only chalkboards and basic seating.

Vallentine Annex

A 24 seat teaching space in the Vallentine Annex is of higher quality though it has no windows. It is air-conditioned, has a chalkboard and white-board, audio-visual equipment, a PA system and OHP as well as a rear projector.

Civil Engineering

Two teaching spaces in the Civil Engineering Building are used by the Faculty for teaching. These are not air-conditioned, have basic chairs and tablets, chalkboards and OHP. One has a seating capacity of 38 and the other seats 113.

Heffron Building

Two lecture theatres are used in the Heffron Building, one holds 168 and the other has a seating capacity of 180. These are higher quality facilities having good seating, chalkboards, white-boards, Web facilities, PA system, OHP, audio-visual facilities and are air-conditioned.

Morvern Brown

Two teaching spaces in the Morvern Brown Building are used by the Faculty for teaching. These are basic facilities with white-boards, OHP and audio-visual equipment. They are not air-conditioned. The smaller of the two has a seating capacity of 26 and has poor lighting and ventilation.

STANDARD 6.1.2

Library facilities available to staff and students include access to computer-based reference systems, supportive staff and a reference collection adequate to meet curriculum and research needs.

UNSW Biomedical Library – Physical Facilities on Campus

The Biomedical Library was extensively renovated in 2001. The Ground floor (Level 2) provides a number of core facilities including group study desks, study carrels, computer workstations, reference desk service, and a lending and loans return service. General facilities are now good, although some of the furniture, especially old study carrels, need to be replaced.

It is hoped to replace and upgrade furniture in 2003 and 2004.

Facilities available for students include: -

Level 2

- Pentium Computer Laboratory
 - 20 computers provide access to online course material, online databases and e-journals, multimedia programs and Office software eg Word
 - All medical students have swipe card access whenever the library is open
- Macintosh Computer Laboratory
 - 15 Imacs with free access to the information resources as listed above.
 - Access and access hours as above.
- UNSW Wireless network
 - Allows students to access the web using their laptop.
- Group Work Areas
 - Certain areas are set aside for group study: - 11 desks on level 2, 4 on level 3 and 4 on level 3. It is planned to increase the number of desks available for student group work and to experiment with different learning spaces, particularly on the second floor.
- Photocopiers
 - These are located on all three floors of the Biomedical Library. Scanning facilities and colour photocopying services are available on level 2 in the Main Library.
- Reference Desk/Enquiry Desk Service
 - Specialist library staff are available for consultations and assistance 7 days a week in session, and 6 days a week in non-session.
- Serials Display Reading Area
 - The latest issues of print journals are displayed.
- Reference Collection
 - The print reference collection is shelved on level 2.
- Digitisation Service
 - The library will digitise journal articles and book chapters required for courses, and ensure compliance with Copyright legislation.
- Interlibrary Loans Service
 - This service allows academic staff and postgraduate students to obtain journal articles, books, theses etc not held by the Biomedical Library. The service, wherever possible, delivers requested documents to the user's desktop.

Level 3

- **Monograph Collection**

Books and videos are shelved on the third floor of the Biomedical Library. The Biomedical Library has approximately 13,000 medical books and videos (plus several copies of some titles, so this is an underestimate of the total number).

- **Serials Collection 1991+**

Print journals from 1991 to date are arranged alphabetically on level 3.

Level 4

This floor contains the main serials collection up to, and including 1990 issues.

Other Facilities

- **Study Carrels**

Study carrels are available on all floors; 66 on level 2, 57 on level 3 and 60 on level 3.

- **Computer Workstations for Web/Database/Course Material Access**

These are available on three floors: - 24 on level 2, 3 on level 3, and 3 on level 4.

Biomedical Library Information Resources Supporting Teaching and Research

The Biomedical Library subscribes to online reference books, major core electronic textbooks (only a few titles at present) and approximately 750 biomedical e-journals.

- **Electronic Reference Resources**

At present the library subscribes to some key online reference resources such as the Encyclopedia of Life Sciences, Encyclopedia of Virology (see a list of online books and reference works at the web address below):-

http://www.library.unsw.edu.au/~biomed/subject/General_Med/medtext.html

It is planned to increase the number of online reference resources and web textbooks, to maximize access for staff and students wherever they are located.

- **Journals**

The library subscribes to approximately 1,000 biomedical journals. Most of these titles are available as electronic journals. (Whenever possible, the library has cancelled print journal subscriptions and moved to online access only). This has greatly improved access for students and staff located in hospitals and research centres.

- Databases

Staff and students have access to all the major medical and biomedical databases, both international and Australian. A list of the Biomedical databases is located on the following web page <http://www.library.unsw.edu.au/~biomed/liblinks.html>

All of the Biomedical Library databases are provided via the web and are thus available to staff and students off-campus and on-campus.

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- Curriculum Support using the Web

Biomedical Librarians collaborate with academic staff to develop web subject guides.

Some of the web guides support a whole program i.e. Sports Medicine

http://www.library.unsw.edu.au/%7Ebiomed/subject/Sports_Medicine/sportsmedicine.html

and some support a particular course e.g. Population Health HEAL9422

http://www.library.unsw.edu.au/%7Ebiomed/subject/Pop_Health/pophealthmain.html

These subject guides are particularly important resources for distance students enrolled in the School of Public Health and Community Medicine postgraduate distance courses (many of which are delivered using WebCT).

The Biomedical Library is also working with the Faculty, to embed online, fulltext, learning resources within the new medical curriculum

Information Services for Staff and Students On Campus and Off Campus

- Reference Desk Information Service

A librarian is rostered to assist students and staff seven days a week during session, and 6 days a week in non-session. Biomedical Library staff have specialist knowledge of medical and biomedical information services and resources, and are there to answer questions and assist medical students and staff.

- Live Help

Live Help is the UNSW Library's new online interactive information service delivered via the web. This service is particularly useful for medical staff and students who are off campus and need online assistance.

- Email and Phone assistance

Students and staff can also obtain assistance via email, the phone, use the "ask a librarian" help facility on databases, the "ask a librarian" option on medical Webct course pages, and seek help via the help option on the library's web pages.

- Biomedical Library External Service

The Biomedical Library provides a special document delivery/interlibrary loan service for staff and postgraduate students located off campus, including postgraduate students enrolled in distant courses, and academic staff and research staff working off-campus in hospitals and research centres. Journal articles and books are supplied either from the Biomedical Library collection itself or from other libraries.

<http://www.library.unsw.edu.au/~biomed/remote.html>

This service is also available for School of Rural Medicine UNSW staff and students (including undergraduate students).

- Textbooks for Hospital Libraries

The Biomedical Library purchases medical textbooks for each hospital library. The hospital librarians select the books they require.

Staff Resources to Support Student Learning

The Biomedical Library has 13.2 staff; including one senior librarian who is working in the Faculty of Medicine, assisting with the development of the new medical curriculum, and two librarians who manage the library service at the Garvan Institute of Medical Research.

Provision of Information Skills Training and Support

The library works in close consultation with the Faculty of Medicine to support student learning and teaching, and provide support for academic and research staff.

A growing number of classes are provided to ensure students develop the information skills necessary to develop lifelong learning skills. The classes for undergraduate students are usually provided in class time, tied to an assignment, with learning objectives developed in collaboration with academic staff. Classes are usually of 2 hours duration, are provided in a computer lab allowing each student hands-on training, and are integrated into the teaching program.

The library provided 78 classes for staff and students in the Faculty of Medicine in 2002.

Classes and workshops have also been developed for postgraduates, academic and research staff.

Classes are also provided off-campus for staff and students located in rural hospitals e.g. Wagga Wagga and Albury; UNSW teaching hospitals e.g. Liverpool Hospital; Research Centres such as NDARC (the National Drug and Alcohol Research Centre), the Garvan Institute of Medical Research, the Prince of Wales Medical Research Institute.

Biomedical Library staff are working with the Faculty on embedding the development of life long learning skills into the new medical curriculum. A new student-centred training program, using active learning techniques is being developed for 2004.

Online computer-assisted learning programs and new methods of assessment (related to the acquisition of self directed learning skills) are being developed for the new curriculum.

Biomedical Library Relationship to the UNSW Library

The UNSW Library serves the University community through the Main Library at Kensington, the College of Fine Arts library at the Paddington campus, and the Australian Defence Forces Academy Library in Canberra. The Main Library comprises

five special libraries, the Social Sciences and Humanities Library, the Law Library, the Physical Sciences Library and the Biomedical Library. The Biomedical Library provides services for both the Faculty of Medicine and the Faculty of Science.

Biomedical Library Advisory Committee

The management of the Biomedical Library is the responsibility of the Biomedical Librarian, with the Biomedical Library Committee (BLAC), acting as an advisory committee. Academic staff from both the Faculty of Medicine and the Faculty of Science are members of BLAC, as are senior library management staff from the UNSW Library. BLAC also has representatives from the teaching hospitals, teaching hospital librarians, and several student representatives. Associate Professor John Carmody, from the Faculty of Medicine, is the Chairman.

The Committee ensures that the Biomedical Library develops policies, services and resources to serve the information needs of the Faculty's staff and students.

Library Executive Group

The Biomedical Librarian is a member of the UNSW Library Executive Group, which develops library policies and procedures for the UNSW library.

Relationship with the Teaching Hospitals

The Biomedical Library has a very strong working relationship with the teaching hospitals through a number of formal and informal mechanisms, as follows: -

The Teaching Hospital Librarians Committee

This Committee meets approximately three times a year. It was established to coordinate and facilitate the delivery of services and resources to academic staff and students, located in the University's teaching hospitals.

The Committee comprises the librarian-in-charge of each of the teaching hospital libraries, namely the librarian from St Vincent's Hospital, St George Hospital, Liverpool Hospital, Bankstown-Lidcombe Hospital, Fairfield Hospital, McArthur Health Service, Royal Hospital for Women, Prince Henry/Prince of Wales Hospital, and the School of Rural Health Hospital Librarians.

Librarians from the Wagga Wagga Campus, Albury Campus and from Coffs Harbour and Port Macquarie attend these meetings whenever possible and/or participate in meetings via a conference phone hookup.

Membership of Hospital Library Committees

The Biomedical Librarian is a member of the St George Hospital Library Consultative Committee (quarterly meetings) and the St Vincent's Hospital Library Committee (held quarterly).

Off – Campus Workshops

Biomedical Library Staff conduct seminars and training in teaching hospitals and in research establishments located off-campus. It has been necessary to provide more and more such programs, due to the number and importance of new electronic resources, now available to off-campus staff and students.

In addition, Biomedical Library staff provide UNSW database and electronic resource training for hospital library staff so that they can, in turn, provide training and assistance to UNSW staff and students.

Curran Foundation Library

The Biomedical Library is funded by the Garvan Institute of Medical Research to provide a library service for the research staff and students located at the Institute.

The library, located in the central core of the building, provides quiet reading and study areas, and through it's connection to the Biomedical Library, access to the Biomedical Library research collection, both electronic and print.

One librarian (from the Biomedical Library) manages the library (two librarians share this position).

Rural Services

The Biomedical Library works closely with the UNSW Rural Health Unit, which organizes, for example, the Rural Hospital Librarians Medical Education Workshop. This two-day workshop has been a very successful way of providing training and assistance for all rural librarians, who can in turn, provide assistance and training for students and staff working in rural hospitals.

The library has also run hands-on computer training sessions for rural conjoint and adjunct staff, to ensure they have the skills to take advantage of the Biomedical Library information resources.

STANDARD 6.1.3

The medical school ensures that sufficient physical facilities are available for students on attachment to hospitals and other centres, including appropriate facilities for information exchange between sites.

A variety of facilities are available for use by UNSW academic and conjoint staff in each of the teaching hospitals as detailed below. The hospital campus at Randwick adjacent to the main UNSW campus has three major teaching hospitals redeveloped on one site – the Prince Henry/Prince of Wales Hospital, the Sydney Children's Hospital and the Royal Hospital for Women.

Teaching Hospital Libraries

Prince of Wales Hospital Library

The Prince of Wales Hospital, has an attractive library with good facilities for students. Extensions to the library are planned so that more space can be available for the collection. The library has computers and study facilities, and is heavily used by students. The collection includes 4,600 books and 398 journal subscriptions.

The Prince of Wales Library has a staff of 4 FTE, two librarians, 1 library technician, one clerical officer and one part-time clerical officer.

Teaching facilities at the Prince of Wales Hospital campus in Randwick are excellent. The Edmund Blackett Building houses a raked lecture room with full-audiovisual facilities and projection booth, a function room which is suitable for teaching in groups up to 75 as well as the refurbished Medical Library. In addition in the Clinical Teaching Unit, there is a computer laboratory for student use as well as a common room area. Other smaller rooms suitable for tutorials are located throughout the hospital complex. In the centre of the redeveloped Randwick campus, there is a suite of rooms which can be used for teaching in various configurations. This area is in proximity to the Professorial Clinical Suite. Sound proofed dividing doors have been deployed in this area to promote greater flexibility of the spaces in this teaching area.

When the Prince Henry Hospital site was at full-service, the University had a Clinical Sciences Building on the hospital site at Little Bay. This facility was constructed for support of UNSW medical teaching and research through DETYA funds. With the amalgamation of the Prince of Wales and Prince Henry Hospitals and relocation of the major clinical services to the Randwick site of Prince of Wales Hospital, UNSW has in effect lost access to a viable facility for teaching and research. The available space and resources for retrofitting of space at the Randwick site have not matched the amount of space UNSW has lost at Little Bay in the Clinical Sciences Building. The Dean continues to negotiate with the Executive of the South Eastern Sydney Area Health Service to garner a cash settlement for the value of the original capital outlay to construct the Clinical Sciences Building at Little Bay when part of the hospital site at Little Bay is turned over to long term residential lease usage. It is anticipated that these matters will be resolved with the NSW Health Minister and Department as a part of the development of the BioHub.

Sydney Children's Hospital

Teaching of Paediatrics at UNSW uses many facilities provided through the Sydney Children's Hospital. These include a large lecture theatre, seven tutorial rooms and a student reading room in the recently renovated main part of the hospital. The hospital has recently significantly upgraded the video teleconference facilities at the site.

Gordon Bradley Lowe, Library, Royal Hospital for Women

The library provides attractive, modern facilities for staff and students and provides access to an excellent specialized collection of journals and books in the areas of obstetrics, gynaecology, neonatology, midwifery, obstetric anaesthesia, women's health, and the history of women's health care. It is one of very few specialist collections in Australia on these subjects.

The Library has a computer laboratory available for student use.

The Museum adjacent to the Library houses numerous books and artifacts of historical interest.

One librarian manages the library.

In late 1997, the Royal Hospital for Women moved to custom built facilities on the Randwick campus adjacent to the Prince of Wales and Sydney Children's Hospitals. The new facilities include a large lecture theatre, lecture rooms, a clinical skills laboratory and tutorial room, all of which are regularly used by the obstetricians and gynaecologists for teaching of UNSW medical students. Additional informal teaching spaces are available on the patient floors in the Hospital.

St George J.V. Latham Health Library

St George Hospital Library moved into the new Research and Education building in January 2000. The new library provides excellent facilities for staff and students, including study carrels, reading areas, seminar rooms/multimedia rooms for group-work and training.

It is one of the largest UNSW teaching hospital libraries and provides first-rate facilities for students, researchers and library staff.

The library has a total staff of five - 4 librarians and 1 library assistant.

A new teaching and research building was completed in 2000 on the St. George Hospital campus. This facility has been developed at a construction cost approximating \$12M and includes an excellent new Library as well as tiered lecture room and multiple tutorial rooms. The upper two floors will house research areas. Adjacent to the lecture and tutorial rooms on the ground floor of the building, a student common room is located which has 24 hour per day access by card-swipe. UNSW has provided computers to the St. George Clinical School and these are deployed for student use in the clinical school and the Medical Library.

Clinical academic staff of UNSW occupy space for offices and teaching in the existing clinical school facility – the Pitney Building. These offices and laboratories have remained in place after the new Education and Research Building was completed.

Walter McGrath Library, St Vincent's Hospital

A 1\$ million dollar refurbishment of the Walter McGrath Library was completed at the end of 2000. The new facility now occupies two floors of the Clinical School building, with the Clinical School office located adjacent to the library entrance. The additional space has provided new and improved study areas for students and hospital staff, as well as enhanced collection capacity. A group study room, large conference table, computers (available for student use), and study carrels are provided. The library is staffed by 3 librarians, two administrative officers and 1 volunteer.

The majority of the campus of St Vincent's Public Hospital is undergoing redevelopment as part of a \$120M 3 year project. The Clinical School at St. Vincent's campus is based in the Cator Building. Facilities include a recently renovated Douglas Miller lecture theatre, the Medical Library, offices for the Clinical Teaching Unit and a common room for students which has several student computers. In addition in the O'Brien Building there is a teaching ward and tutorial area which is used for case presentations and clinical examinations. Additional teaching spaces are used on the floors of the clinical care units in the Hospital. The Medical Library has recently been upgraded and enlarged to provide facilities much more conducive to pleasant surrounds for reading and study by students and staff.

SWSAHS Clinical School Libraries

Liverpool Hospital Library

Liverpool Hospital Library, with excellent study and computing facilities, and a large, attractive space for the monograph and journal collection. The Liverpool Hospital Library also has excellent staff offices and work areas. It has several well-equipped seminar rooms, which can be used for student group-work, and has a training computer laboratory. Audio-visual equipment is available for use, such as TV/video units, cassettes players, slide projectors, overhead projectors and an LCD projector.

The Library holds a collection of anatomical models and charts, which are available for loan.

This library is one of the best and largest of the UNSW teaching hospital Libraries. It is the major information resource used by students when they are studying community medicine in their clinical years. The Library also has a large collection of population health materials, including posters and educational kits.

The Library Manager of Liverpool Hospital is a member of the Board of Medical Studies. Liverpool Hospital Library has a staff of 7 - 3 librarians, 2 library technicians and 2 clerks

Bankstown-Lidcombe Hospital Library

This is a modern, pleasant, library with excellent facilities for clients, staff and the collection. The library has a computer laboratory for student and staff use.

The library has a staff of 3 FTE - 2 librarians and 1 general library assistant.

McArthur Health Service Clinical Library

This library services staff and students located at Cambelltown Hospital, Cambden Hospital, and the Queen Victoria Memorial Hospital.

A new library is planned for August 2003, which will provide a computer laboratory for staff and student training, additional space and better facilities for students (the library has inadequate space in its present location).

The library has a staff of one librarian, one part time librarian (.5), and one library assistant.

Fairfield Health Service Library

Fairfield has a small, but very pleasant new library with good facilities for students, staff and the collection. Facilities available for UNSW student use include 3 computers with internet access and a area available for quiet study. The library has a staff of 1.2 FTE - one librarian and 0.2 library technician.

Southwestern Sydney Clinical School has excellent teaching facilities. Many of the rooms routinely used for teaching are located in the Thomas and Rachel Moore Education Building which is contiguous and connected to the main Liverpool Hospital. This facility houses a large amphitheatre style lecture room with modern audiovisual equipment. Multiple meeting rooms and seminar rooms are located in this building and can cater for 6 – 60 people. A separate room is set up for videoconferencing of small meetings.

There are excellent library facilities at Liverpool Hospital and students are also well supported with access to computers at each of the hospitals - Liverpool, Bankstown, Fairfield and Campbelltown and Bowral. The University specially funded these. There is an excellent common room at Liverpool with computer facilities and WWW access for students. The only area of concern in the SWSCS is the accommodation at Bowral Hospital which still needs upgrading. Plans for this have been developed and financing is likely to be committed through the Area Health Service

Wagga Wagga Campus Library

The newly renovated library provides quiet study areas, a computer laboratory, more space for the library's books and journals, and attractive facilities for study and research. The library provides access to a number of multimedia programs.

The School of Rural Health has purchased monographs and considerably improved the currency and depth of the collection. Student fundraising has also provided money for textbooks.

The Biomedical Library is supporting staff and students by purchasing key textbooks, which are added to the collection each year, and by providing database, and Endnote training.

One part time librarian (7) manages the library.

Albury Campus Hospital Library

This is a small, pleasant library. The library has study facilities, video access, and access to computers (and the Internet).

The Biomedical Library is purchasing textbooks, and providing training and support as above.

One full time librarian manages the library.

STANDARD 6.1.4

The learning environment for students is updated regularly to reflect developments in educational practices.

The Biomedical Library renovations have provided flexible space suitable for student group discussion and collaborative learning. The library has set aside areas designated for discussion and also areas for individuals to work quietly.

The teaching librarians are dedicated to incorporating active learning techniques and peer teaching within information skills sessions, and are encouraged to keep up to date with the professional literature. A fortnightly seminar series for Biomedical library staff provides an opportunity for sharing information, reflecting on experiences using new approaches and activities in teaching sessions, and provides a forum for keeping up with the key resources available in the disciplines.

Librarians from the Biomedical Library have been working extensively with academic staff to enable the embedding of library resources into online components developed for courses run within the faculty. Library subject guides are also regularly reviewed and updated. These reflect the areas of current research and interest as well as supporting courses offered through the Faculty.

6.2 Clinical training resources

STANDARD 6.2.1

The medical school ensures there are adequate clinical experience and the necessary resources, including sufficient patients and clinical training facilities.

The Faculty's Principal Clinical Teaching Sites

The Faculty has five Clinical Schools that are responsible for teaching and learning within clinical environments. Three of these (St Vincent's, St George, and Prince of Wales/Prince Henry Clinical Schools) are within the South Eastern Sydney Area Health Service and are relatively close to the main Kensington campus. Sydney Children's Hospital and the Royal Hospital for Women are also teaching hospitals for the Faculty and are co-located with Prince of Wales Hospital and together form what is termed the 'Randwick Campus Hospitals', immediately adjacent to the Kensington Medical School campus.

The fourth metropolitan School is the South Western Sydney Clinical School, based at Liverpool Hospital, with additional major teaching facilities at Bankstown-Lidcombe, Fairfield and Campbelltown Hospitals.

The Faculty's fifth and newest Clinical School is the School of Rural Health, which is administratively based at Wagga Wagga Base Hospital, but has additional major

campuses at Albury Base Hospital and Wodonga Regional Health Service, Port Macquarie Base Hospital, and Coffs Harbour Hospital.

The Faculty is also in the process of establishing a semi-autonomous teaching site in the Illawarra Area Health Service based at Wollongong and Port Kembla Hospitals.

The Current Clinical Teaching Program

The structure* of the current clinical teaching program is as follows:

Year 4		Year 5		Year 6	
Period	Activity	Period	Activity	Period	Activity
1 week	Campus Block	9 weeks	Paediatrics		
6 weeks	Medicine			6 weeks	Elective
6 weeks	Medicine	9 weeks	Obstetrics and Gynaecology	6 weeks	Medicine
6 weeks	Population Health			6 weeks	Flexible
2 weeks	Campus Block	9 weeks	Psychiatry	6 weeks	Surgery
6 weeks	Surgery			2 weeks	Campus Block
6 weeks	Surgery	9 weeks	Geriatrics, Primary Care, ENT, Dermatology	6 weeks	Rural
6 weeks	Medicine			6 weeks	Emergency
3 weeks	Assessments			3 weeks	Assessments

*Order of terms is one example only

The Faculty's four metropolitan Clinical Schools currently possess a significant degree of autonomy with respect to organization of the clinical teaching program in years 4 and 6, as does the School of Rural Health for their 18 month extended rural clinical experience (ERCE) in years 4 and components of either years 5 or 6. This provides certain advantages including flexibility for the teaching program to be designed based upon particular strengths and limitations of the case-mix and resources in each School, and encouragement of a sense of ownership of the teaching program by each Schools' clinical teachers (many of whom are 'honorary').

Notwithstanding these advantages, the Faculty recognises the AMC's concern expressed in the June, 2000 accreditation of a need for "improved Faculty coordination of teaching in the clinical years across the clinical schools" (page 39 of the AMC Accreditation Committee Report). The AMC Team's concern "about the organisation of attachments in years 4 to 6" with "year 5 seen as a separate experience poorly linked to the years before and after" (page 36, *ibid*) has also been acknowledged by the Faculty as one factor to consider in its design of the new program.

Transition of the Current Clinical Program into the New Program

As described below, the Faculty believes that introduction of phases 2 and 3 of the new Medicine program will (amongst many other things) address the AMC's concerns noted above. In addition to introduction of the new phase 1 for year 1 students in 2004, particular effort is currently being focused on restructuring the current year 4 experience and assessments, so that students who begin the current program in 2003 and continue in it until 2005, can transition into the new phase 2 program in their fourth year in 2006 and then finish in the new phase 3. The modular nature of the current year 5 will be gradually expanded into year 6, to facilitate transition of these years into the new phase 3. These initiatives will minimise the period that two programs are operating concurrently (see table 8).

Table 8 - Transition of students in the current program into the new program

Year	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
2003	New selection procedures Current program Trial SBL prototypes	Current program	Current program	Current program New continuous assessments Trial new modules (POWH) Trial Skills assessments	Current program Trial new modules in Elective Term	Current program Trial 'Preparation for Internship' experiences (SGH)
2004	New phase 1 (not vertically integrated)	Current program	Current program	Modified current program Expand continuous assessments Formal Skills assessments Trial more new modules	Current program Trial Skills assessments Trial new assessments	Current program Introduce some new modules
2005	New phase 1 (vertically integrated)	New phase 1 (vertically integrated)	Current Program	Further modifications to current program with more modularity and new assessments	Current program Formal skills assessments New assessments	Current program Trial new modules
2006	Phase 1 fully operational	Phase 1 fully operational	New phase 2 Independent Learning Project (ILP)	New phase 2 Not required to do ILP	5 x 8-week terms More phase 3 modules introduced	5 x 8-week terms More phase 3 modules introduced
2007	Phase 1 fully operational	Phase 1 fully operational	Phase 2 fully operational	Phase 2 and Phase 3 modules + ILP	Phase 3 fully operational	Phase 3 fully operational
2008	Phase 1 fully operational	Phase 1 fully operational	Phase 2 fully operational	Phase 2 and Phase 3 fully operational	Phase 3 fully operational	Phase 3 fully operational

In the shorter term, the Faculty has introduced a number of initiatives to improve coordination between the Clinical Schools and to introduce elements of the new phase 2 program into the existing year 4. These include:

- Revision of the membership and terms of reference of the Clinical Medical Education Committee (CMEC) to ensure closer monitoring of the programs operating at each Clinical School.
- A more active role for the CMEC in setting year 3, 4 and 6 assessments, including in 2002 establishing a cross-Clinical School team to set the year 4 end-of-year assessments.
- A complete review and revision of the mid-year Common Campus Blocks for students in years 4 and 6, including responses to feedback received from students.
- Appointment of two new Directors of Student Teaching at South West Sydney Clinical School and Prince of Wales Clinical School.
- Implementation of a common 6-week Population Health term with structured web-based and other teaching resources in year 4 that operates at each of the four metropolitan Clinical Schools, and is integrated into the year 4 School of Rural Health program. Elements of the new phase 2 Society and Health-3 course will be sequentially introduced into the Population Health term, to transform it into SH-3 by 2006.
- Trialing of integrated phase 2-like case-based (combined Medicine/Surgery) terms in year 4 at Prince of Wales Clinical School in 2003, with a view to expansion to other Clinical Schools in subsequent years.
- Trialing of an 'Intern Preparation' module at St George Clinical School, with a view to expansion to other Clinical Schools.
- Formalisation of the teaching and learning of 'procedural' clinical skills, starting with development of a common assessment of 14 skills in year 4, to be expanded into skills to be learned and assessed in years 5 and 6.
- Introduction of a continuous case-based assessment in year 4, starting in 2003 to be gradually expanded to become the proposed phase 2 major modular assessment planned for the new program.

A number of these initiatives represent deliberate steps towards creation of elements of phases 2 and 3 of the new program into the existing program, and are particularly directed at the existing structure of year 4. This will allow students, who in 2005 will be in year 2 (phase 1 of the new program), and year 3 (current program), to both enter phase 2 of the new program in 2006, although the latter will not be required to undertake the ILP, and their phase 2 program may be slightly modified.

Additional initiatives are planned for years 5 and 6. These include:

- Revision of the format and timing of the major clinical assessments (see Section 3).
- Introduction of continuous (module-based) assessments into year 6.

- Piloting of new phase 3 modules to volunteer students during the elective term (first pilot conducted in October, 2002)

Opportunities for Rural and Remote Clinical Experience

The Greater Murray Clinical School was established in 1999 and commenced its activities in January 2000. In July 2001, it was replaced by the School of Rural Health, which included campuses on the mid-north NSW coast. The School is funded by the Faculty through an agreement with the Federal Department of Health as part of its rural health initiatives. In this agreement, the Faculty has undertaken to train 25% of its HECS-funded student cohort in an extended clinical rural experience (ERCE) comprising 50% of the program's clinical learning. For UNSW, this equates to 41 students undertaking 18 months of years 4-6 (54 weeks) in the current program, and will be the equivalent of 7 x 8-week phase 2 and 3 blocks (56 weeks) in the new program. As currently structured, this represents all of year 4 and one half of either years 5 or 6.

The model of learning currently used in the School of Rural Health for students undertaking an ERCE is designed to make optimal use of a rich clinical environment whilst recognizing the fact that practicing clinicians are extremely busy and have limited time for traditional teaching in their clinics or at the bedside. The School offers integrated studies that cover, over the course of year 4, the same syllabus as that conveyed by the proposed learning modules to students in Sydney.

The School of Rural Health uses a unique approach to clinical teaching which is patient centred, but also student centred, as s/he builds on previous knowledge and experience and selects new material to learn according to need. The description below reflects current plans that may evolve as the new program is developed.

Students are attached to patients at various points of access, often starting in General Practice, and following them through several stages of health care. It is not always practical for the student to follow the patient through all stages of an illness; in this case s/he attempts to see another patient with a similar medical problem through further stages. These include visits to imaging and the whole spectrum of allied health facilities. Students are encouraged to reflect on their experience and to identify what they need to learn as a result. Their learning is recorded in an electronic learning diary. This patient-centred self directed learning is supplemented by teaching tutorials based on case presentations. Other tutorials are held in Pathology and a variety of other topics including epidemiology, evidence-based medicine, nutrition, and clinical pharmacology. Students are attached for short periods to rural practices in small and remote centres to study the health problems encountered and the different ways in which they can be managed.

The fifth year of the rural course offers two 18-week sessions, the first integrates paediatrics and reproductive medicine, with a short segment of dermatology, while the second comprises a substantial component of Psychiatry, Geriatric medicine, rural/remote General Practice and ENT. Options for year 6 comprise a pre-intern experience in a base hospital. The longitudinal patient model will again be used extensively, with students being attached to the emergency department and following patients who are admitted to the wards. To supplement this they will be attached to wards to clerk patients and learn details of the workings of a hospital.

In addition to the 25% of students undertaking an ERCE, all remaining UNSW students are required to spend a total of 8 weeks of clinical learning in a rural location. In the current program, this occurs in year 5 (2 weeks rural primary care) and year 6 (6 week rural term). In the new program, all students will be required to experience a minimum of 8 weeks of their phase 2 and 3 clinical learning in a rural location, supervised by the School of Rural Health.

Policy for Allocation of Students to Clinical Locations

(See Appendix 12, Vol 2)

Although the Faculty has had longstanding procedures for allocating students to its Clinical Schools, with the advent of the School of Rural Health, a formal policy has been developed and approved in June, 2002 by the Faculty Standing Committee. The aim is to make the process transparent and equitable, provide students the opportunity to indicate preferences, and allow the Faculty to match those preferences with its resources and responsibilities.

The number of 'placements' available for each segment of the program at each Clinical School is reviewed annually and adjusted if necessary. The following table shows allocation for years 4 and 6 in 2002 and 2003.

School	Year 4		Year 6	
	2002	2003	2002	2003
St Vincent's	33	30	47	42
St George	56	56	49	50
Prince of Wales	57	44	61	48
SWSCS	49	48	32	45
School of Rural Health	9	37	N/A	3
Total	204	215	189	188

Opportunities for clinical learning overseas

The enhanced flexibility afforded by the new phase 3 program is expected to increase opportunities for students to take overseas electives.

See also Sections 2.1 (Electives) and 6.5 (Educational Exchanges).

Opportunities for General Practice teaching

Currently students spend a minimum of 4 weeks attached to primary care practices; 2 weeks in a rural location and 2 weeks in an urban location. The requirements for the new phase 3 program (Section 2.1, page 58) include a minimum of 4 weeks experience in primary care to be taken during phase 2 and 3.

STANDARD 6.2.2

The school ensures the objectives and assessment of clinical placements are clearly defined and known to both students and teachers.

The overall objectives of phase 3 as stated in the handbook course descriptions (Appendix 5, Volume 2) include the following: - By completion of Phase 3, students will be expected to demonstrate an integrated achievement of the eight desired capabilities specified as appropriate for graduates to practice as interns. These include a thorough understanding of the biomedical science mechanisms and bio-social determinants that maintain health, contribute to illness, and underlie appropriate management strategies; application of a scientific approach to clinical medicine and medical practice; excellent communicative, teamwork, psychomotor and cognitive skills to assess health issues and patient problems and develop patient-centred management approaches; and demonstrated abilities to work independently, reflectively and within appropriate ethical and legal frameworks.

The descriptions of the elements that contribute to the eight capabilities, and definition of those that are to be achieved by the end of each phase (Appendix 2, Volume 2), forms the basis for delineating more detailed learning objectives for clinical learning in phase 2 and 3. These objectives are currently being developed as phase 3 modules are designed.

STANDARD 6.2.3

The school monitors the fulfilment of the objectives of clinical placements in hospital and community teaching settings.

As described above in Section 6.2, the Clinical Medical Education Committee (CMEC) has responsibility for ensuring that the objectives of the current clinical education program are achieved. In 2006, it is planned to replace this committee with a phase 2 and a phase 3 committee. These committees will have responsibility for monitoring the teaching and learning activities, and setting appropriate assessments for their respective components.

STANDARD 6.2.4

The school evaluates facilities for clinical training regularly for their appropriateness and quality.

As discussed in Section 7, monitoring and evaluation of the teaching program has not historically been centrally organised, and is largely organised on a School by School basis. The Faculty recognises the need to ensure that a more coordinated and systematic monitoring structure is established, and plans for such a system are described in Section 7.

Nevertheless, the following examples of evaluation activities indicate how the Faculty currently monitors the clinical learning program:

School of Public Health and Community Medicine

- Year 4 Population Health term and Year 5 General Practice/Specialties/Geriatrics have both been formally evaluated by student feedback for a number of years. - The analysis and reports are available for review

St George Clinical School

- Students complete written evaluation form at the end of each 6 week term in years 4 & 6.
- Clinical academics meet every 4 months to review the teaching program.
- Annual meetings to which all conjoint (honorary) teachers are invited

Prince of Wales/Prince Henry Clinical School

- Students complete written evaluation form at the end of each 6 week term in years 4 & 6. Form addresses organisation of the program, access to patients, acceptance as part of team, acceptance on wards, learning environment.
- Focus groups by Director, Clinical Teaching Unit with year 4 and 6 students mid-year
- Feedback to Director, CTU from term supervisors
- Monthly staff meetings of Clinical Teaching Unit to address issues raised from evaluation.

South West Sydney Clinical School

- Students complete written evaluation form at the end of each 6 week term in years 4 & 6.
- An additional anonymous student feedback form is completed by year 4 and 6 students and analysed by the Director of Student Education and the Faculty Curriculum Unit
- Year 3 students complete anonymous feedback form for 'Master class' sessions (monthly)
- Clinical School Teaching Committee meets second monthly to review issues arising from student evaluations

St Vincent's Clinical School

- Students complete written evaluation form at the end of each 6 week term in years 4 & 6.
- Meeting of students with Clinical Associate Dean at end of each term to discuss teaching and learning issues.

School of Women's and Children's Health

- Students complete end-of-term evaluation including nomination of best teachers which provides feedback of teaching at Sydney Children's Hospital and peripheral hospitals.
- Population Health component of Women's Health module formally evaluated for past 2 years.

School of Rural Health

- Ongoing student evaluation data of the evolving program has been collected over past 2 years and reviewed.

6.3 Information technology

STANDARD 6.3.1

The medical school has sufficient information technology facilities for the staff and student population to ensure the curriculum can be delivered adequately.

IT infrastructure to support the new medicine program

The Faculty currently has a well-developed IT infrastructure for students and staff, which will be used to incorporate IT into the new medicine program. The Medical Computing Support Unit (MCSU) provides IT support to all staff of the Faculty. There are a number of networked teaching laboratories within the Biomedical library and throughout the Faculty (including metropolitan teaching hospitals and some rural teaching hospitals). The Faculty is setting aside funds on a yearly basis to be able to replace teaching computers every three years.

The University also runs central IT services for students and staff such as:

- Student and staff E-mail systems
- Student support of Internet connection and e-mail via the DIS-Connect desk
- A pool of 600+ modems that can be accessed 24 hours a day for students to access the UNSW network and Internet.
- Web-CT servers

While the Faculty does undertake to provide a reasonable quantity of student computers, the University expects all new students to have off-campus access to a standard modern computer with CD drive and Internet connectivity, and standard software such as a word processor, spreadsheet program, Java capable Web browser, networking software for TCP/IP connection, email software, antivirus software, drawing/painting software, file transfer software (FTP protocol) and software able to read PDF (see:

http://www.secretariat.unsw.edu.au/acboard/approved_policy/information_technology_requirements.pdf).

Information resources available through the Biomedical Library

The Biomedical Library provides extensive IT resources and support to Faculty of Medicine staff and students. Following is a summary of the resources and services it provides:

Books, videos and other resources: the Biomedical Library has approximately 13,000 biomedical monographs and videos. Multiple copies of textbooks are purchased for on-campus students (a minimum of at least 2 copies for every 100 students). Copies of textbooks are also purchased for each teaching hospital library. The library has a policy of purchasing Web textbooks, providing they are of a high standard. Harrison's Online is

the first excellent example of a web textbook, available via the web to staff and students off and on-campus.

Print and electronic journals: the medical journal collection is undoubtedly one of the best in Australia. The Biomedical Library has approximately 1,700 biomedical journal titles and is one of the biggest suppliers of document delivery services to other Australian libraries, because of the strength of its collection. The library is rapidly developing an exciting electronic library service. In the medical area alone, the Biomedical Library provides academic staff and students with access to approximately 700 (this number is growing rapidly) biomedical electronic journals. The provision of these electronic journals is making possible the development of new flexibly delivered teaching and learning programs. It is also greatly improving information access for off-campus students and staff.

Electronic databases: the Library now provides all of its online databases via the web. This provides 24-hour database access to students working from home, from overseas or from a rural hospital. A list of medical databases available via the web is accessible through: <http://www.library.unsw.edu.au/~biomed/liblinks.html>

Web resources and services: the Biomedical Library delivers a first rate service to students and staff via the web: <http://www.library.unsw.edu.au/~biomed/biomed.html>

STANDARD 6.3.2

The medical school effectively uses and evaluates information and communication technology in the educational program.

Students will make use of electronic courseware throughout the curriculum. The complexity of courseware applications used will vary from simple text-based tutorials linked to image databases, to applications that allow students to control a simulation of a dynamic system, explore virtual environments, and participate in apparently real-life situations making decisions and seeing the consequences. Some applications will also exploit telecommunications technologies so that students can be linked to teachers or experts who are geographically remote, to distant databases, and not least to each other for asynchronous peer support in learning.

Developing Information & Communication Technology systems for the new medicine program

The Faculty plans to develop integrated educational and administrative IT systems for the new medicine program to ensure that all students and staff have access to a standard suite of information and communication technologies regardless of Faculty (Medicine or Science), School (campus or hospital-based) or location (on-campus or off-campus, metropolitan or rural area). The Faculty plans to provide the following ICT systems for staff and students in new medicine program:

- A web portal for the new medicine program
- An electronic curriculum map
- An online learning management system
- A learning resource catalogue

- A student portfolio site
- An assessment tracking system
- A booking and scheduling system

An information systems analyst is assisting the Faculty to identify the changed operational environment created by the new medicine program and the associated information technology required to support the new program.

A second project has been definition of a 'student life-cycle' that indicates the various points of contact a student has with the Faculty, the University central administration, and external agencies. The current draft is shown at Appendix 14. The intention of this project is to identify administration and information systems that students interact with, as part of planning new systems to support the new Medicine program.

The curriculum map has been identified as the system of highest priority at this stage. While there are some commercially available curriculum mapping/management systems (eg, CurrMIT, CATs, Rubicon Atlas) they require substantial customisation to meet the Faculty's needs. The Faculty is therefore developing a map prototype that will be trialled by staff in early 2003. This prototype will allow the Faculty to establish the feasibility of either customising one of the commercially available systems or developing its own. The prototype trial will also allow the Faculty to gauge the staff's level of acceptance and use of a curriculum mapping system, and therefore consider the often-ignored human aspects of ICT systems usage.

Developing IT resources for learning and teaching

A list of teaching software developed by Schools in the Faculty is available at: <http://notes.med.unsw.edu.au/curriculum/edtech.nsf>. A variety of electronic media and computer-based medical information is housed in the Biomedical library, and is accessible through their website at: <http://www.library.unsw.edu.au/~biomed/biomed.html>

The Faculty plans to make extensive use of electronic teaching resources developed elsewhere. While electronic resources developed within the Faculty will be used, the development of new courseware for the curriculum will be limited. Schools with expertise in electronic media development will collaborate in designing and developing electronic resources for the new medicine program as required. The Faculty will also use the services of the University's Educational Development and Technology Centre (EdTeC), which provides support in the use of Web-CT, an online learning management system used in the Faculty and University, and in the development of instructional media such as videos and graphics. Resources available elsewhere are being identified with the assistance a biomedical librarian with extensive experience in electronic media who has been seconded to the Faculty. Content experts are helping evaluate identified resources and establish their possible use in the new medicine program. A database with information about these resources is available at <http://www.library.unsw.edu.au/~biomed/MedCurricStuff/Chapters.html>.

Resources developed in-house will be catalogued and meta-tagged using a database such as the University's Learning Resource Catalogue (LRC).

STANDARD 6.3.3

Teachers and students are able and encouraged to use information and communication technology for self-learning, accessing information, managing patients and working in health care systems.

Developing Information & Communication Technology skills of students

Information and communication technology skills will be integrated into the 3-phases of the new medical curriculum. As students progress through the curriculum they will be revisiting information covered in the previous phase and learning new skills and concepts at increasing levels of complexity.

During the first block of Phase 1 (the Foundations for Learning block) students will be introduced to the fundamentals of information and communication technologies required for learning in the curriculum. These skills and concepts will then be revisited and applied in the scenario-based blocks of Phase 1. Information literacy skills that students will be expected to develop in Phase 1 include:

- Using standard software for word processing and presentations.
- Developing sound file management skills and backup procedures, and using antivirus software.
- Developing familiarity with ICT systems used in the new medicine program including the program's web portal, the curriculum map, student portfolio, WebCT and the University's student portal.
- Finding electronic information (eg, electronic databases, e-journals, e-books)
- Using the electronic databases accessible through the library (eg, Medline, Web of Science, Social Sciences Index).
- Using the Internet for learning and research (eg, using search engines, directories and portals).
- Using Web-accessible databases effectively.
- Evaluating the information found for credibility.
- Using advanced Internet research skills.
- Using a referencing tool such as EndNote.
- Respecting copyright and intellectual property law and privacy with digital documents and communications.

Information literacy skills in Phase 1 will be taught with the assistance of Biomedical library staff. Student learning in this phase will occur within contexts provided by the scenarios. Addressing the tasks raised in the scenario-based activities will require students to employ and develop their information literacy skills.

In Phase 2 of the curriculum students' ICT skills will be broadened to include the use of ICT in support skilled behaviours such as clinical reasoning and procedural skills. Students will have the opportunity to apply their IT research skills during their independent learning project terms. The use of information and communication technologies during this second phase will develop student skills in:

- Using evidence-based medicine (EBM) databases such as Cochrane.

- Clinical reasoning through active practice with a wide range of electronic case studies.
- Clinical and scientific procedures and evaluations.
- Using communications technologies to share knowledge (eg, via electronic discussion groups).

Courseware used in this phase will encourage students to draw on their basic science knowledge in order to address issues in clinical problems and experiences.

In Phase 3 students will be introduced to the use of ICT in the clinical setting, and to health informatics and telemedicine. Activities will focus student attention on the social and behavioural processes that affect and are affected by the introduction of IT in medical practice. Skills developed in this phase of the curriculum will include:

- Using integrated clinical information systems in the daily practice of medicine.
- Using medical information systems and telemedicine to improve patient care.
- Using clinical decision-support systems.
- Using medical information systems in clinical research.
- Meeting patient's information needs through the use of IT in the clinical setting.

The Centre for Health Informatics, which includes staff from the Faculties of Medicine and Engineering, will provide support to the new medicine program in the areas of health informatics and telemedicine.

Developing Information & Communication Technology skills of staff

The Faculty of Medicine's Staff Development Program provides IT training courses for Faculty staff, hospital staff with a direct role in supporting the teaching activities of the Faculty, and staff in other Faculties who teach in the Medical Faculty's programs. The Faculty's IT training program aims to increase the efficiency of staff by offering regular training opportunities in the use of computer software such as the Microsoft Office suite, Acrobat, Dreamweaver, FrontPage, Photoshop, Questionmark Perception, SPSS and Lotus Notes. The Faculty also plans to offer workshops in the use of ICT systems developed for the new medicine program such as the curriculum map, booking and scheduling system, student portfolio, assessment tracking systems and learning resource catalogues, as well as any stand-alone courseware (eg clinical reasoning courseware) selected for use in the new medicine program.

6.4 Educational Expertise

STANDARD 6.4.1

The medical school ensures appropriate use of educational expertise in the development of the medical course.

Educational Specialists

The new Medicine program has been developed predominantly using a 'bottom-up' process to ensure a sense of ownership of the Faculty in the final design. Emphasis has been placed not only on design of 'what' learning students engage in, but also 'how' learning occurs. Thus, the curriculum design has encompassed an organisational change approach to encourage academics to work together cooperatively and to reflect on their own approaches to teaching and learning. The Faculty has employed an organisational change consultant with experience in medical education to assist with this process (Dr Sybil Perlmutter).

A number of academics within the Faculty who have qualifications and experience in education have been centrally involved in designing the new program, as well as a larger number of basic science, public health and clinical academics who have post-graduate higher education qualifications. A list of those who have been involved is shown below:

Academics with Educational Qualifications	Current Involvement
Associate Professor Patrick McNeil (Grad Dip H.Ed)	Assoc Dean (Education), OME
Associate Professor Philip Jones (M.H.Ed)	Phase 2 Course Coordinator
Professor Philip Crowe (Grad Dip H.Ed)	ET Coordination Group
Professor Phil Waite (Cert H.Ed)	Phase 1 Course Coordinator
Associate Professor Stephen Lilioja (Grad Cert H.Ed)	Assessment Working Party
Dr Gary Velan (Grad Dip H.Ed)	Assessment Working Party
Dr Nick Hawkins (M.H.Ed)	Phase 1 Design Group
Dr David Sutherland (MClinEd)	Selection Working Party
Associate Professor Debbie Black (Dip Ed)	Phase 1 Course Coordinator
Dr Raj Gyaneshwar (M.H.Ed)	Phase 1 and 3 Design Groups
Ms Jo Travaglia (GradDip Adultd Ed (TESOL, M Ed)	Phase 1 Design Group
Ms Lilanthi Ambanpola (DipEd)	Phase 1 and 2 Design Groups
Dr Dzung Vu (GradCertH Ed)	Phase 2 Design Group
Educationalists	
Dr Peter Harris	Assessment Working Party
Dr Chris Hughes (Ed D)	Phase 1 Course Coordinator
Ms Sue Toohey (MA Ed)	Assessment Working Party, Phase 1 Design Group
Ms Leah Bloomfield (GradDip H.Ed)	Phase 2 and 3 Design Groups
Ms Eilean Watson (MPH Ed)	ET Coordination Group, Phase 1 Design Group, OME
Dr Sophie di Corpo (Dip Ed)	Phase 1 Design Group, ET Coordination Group
Ms Edna Koritschoner (Grad Dip Adult Ed)	Communication Working Party

Medical Education Unit

In mid-2002, the Dean established an Office for Medical Education (OME) as a unit within the Office of the Dean. This is headed by the Associate Dean, Medical Education (0.5 FTE) and is currently staffed by a 1.0 FTE educationalist (Ms Eilean Watson), a 0.5 FTE biomedical librarian (Ms Suzanne Mobbs, on secondment), and 2.0 FTE administrative officer/ assistants (Ms Kim Gillies and Ms Trish Riall). The OME was established to oversee development and implementation of the new Medicine program,

including preparation for AMC accreditation, and will take on a key management and operational role once the program begins operation.

The Faculty established a Curriculum Unit as part of the Office of the Dean in 1999 to provide educational support for the current curriculum, in particular on-going staff development for both campus based and clinical teaching staff and assistance in the areas of student assessment and educational evaluation. Members of the Curriculum Unit have been involved in assisting the various curriculum working parties and more recently the OME during the design process, whilst continuing with their academic activities in medical education, within the School of Public Health and Community Medicine. The Curriculum Unit and the School of Public Health and Community Medicine also administers a University-wide post-graduate program in Higher Education (Graduate Certificate in University Learning and Teaching).

6.5 Educational Exchanges

STANDARD 6.5.1

The medical school collaborates with other educational institutions.

UNSW is a member of the Universitas-21 Consortium and the Faculty of Medicine has participated in 3 international meetings of Deans and Associate Deans of Medicine. The aim has been to encourage co-operation and exchange in teaching, research and governance issues. The U-21 Medical School Consortium includes the Universities of NSW, Melbourne, Queensland, Auckland, Peking, Fudan, Hong Kong, Singapore, Glasgow, Edinburgh, Nottingham, Birmingham, British Columbia, Freiburg, Lund, McGill and Virginia.

In 2002, the Faculty established an exchanged with the University of Oslo to exchange year 5 students for 6 month combined Paediatrics/Obstetrics & Gynaecology exchange. The Agreement provides for up to three (3) students per annum from each institution. This number may be modified by mutual agreement and currently there are six (6) students from each university involved. Participants are enrolled as non-degree students at the host institution for a period not exceeding six months with credit being transferred back to the home institution.

Elective Students

There is a considerable amount of administration and liaison involved with the facilitation of electives.

The Elective Co-ordinator at UNSW has frequent contact with the following institutions:

Nagoya City University, Japan

An agreement exists between the City of Nagoya University and UNSW and currently up to three (3) students can be approved for a clinical elective attachment during each academic year.

University of Edinburgh, Scotland

In 2003 UNSW will host fifteen (15) students from Edinburgh.

National University of Singapore (NUS)

In 2003 UNSW will host 6 students from Singapore and the same number of our students will be hosted by NUS.

University of Manchester, England

In 2003 UNSW will host 7 students from Manchester.

University of London, England

UNSW receives more elective enquiries from this institution than any other and in 2003 we will host 28 students from its various Colleges of Medicine. In turn 11 UNSW students will be hosted in London.