I am delighted that this issue of Synergy has been devoted to the College of Health Sciences. The College is the largest and most comprehensive grouping of health disciplines in any University in Oceania, representing all major health and medical disciplines and professional groups. It consists of the Faculties of Dentistry, Health Sciences, Medicine, Nursing and Pharmacy. The College has committed itself to fostering greater communication, interaction and synergy among its Faculties, and among individual academics and research staff, and is keen to support the development of appropriate College-wide activities that enhance the quality of health and health care to the community.

Those educating tomorrow’s health care professionals are faced with a range of challenges. The Australian community has continuing high expectations for increased delivery of health services, which is likely to result in the growth of the resources invested in the health sector. Consumers now expect to be involved in clinical decision-making, with more demand-led care and shared responsibility for care. There is demand for public accountability and cost control in health service delivery which is evidence-based, cost-effective, and internationally benchmarked. Future developments in service delivery will be characterised as multi-disciplinary, providing both continuity and integration of care, with greater focus on prevention and rehabilitation, as distinct from the treatment and care. Rapid advances in knowledge and new technologies are likely to lead to innovations in service development and continuous changes in the delivery of health care. New national health priorities are emerging, especially the poor health and poor access to services of the indigenous, rural and remote populations. The rapid increase in the proportion of older people in the general population is another challenge.

The College has responded to this challenging environment in a proactive way. The first goal of the College’s Strategic Plan is “to establish a College-wide mechanism to foster educational development and cross-disciplinary developments, and to monitor teaching quality across the College”. With this in mind, a College Education Committee has been established to organise College-wide initiatives to improve teaching quality and capacity, and to promote innovative educational programs across the College. Currently the committee is chaired by Professor Joy Higgs and comprises representatives from each of the College’s five Faculties.

The Committee’s most notable achievement has been the Inaugural College Education Conference, Ed-Health: Collaborating for Quality Learning, which was held from 12 – 13 November 2001 on the Mallett Street Campus. The conference provided a forum to celebrate and showcase teaching and learning, within the College; promote collaboration and sharing across the College in teaching and learning; promote and report on research into teaching, learning and curricula within the College; address educational issues facing the College; and facilitate educational outcomes and developments within the College. Nearly 200 members of staff and postgraduate students attended the conference and the feedback received suggests that it was highly successful in achieving its aims.

This special edition of Synergy features abstracts and papers of some of the presentations at the recent College Education Conference. They provide thoughtful contributions to teaching scholarship within the health sciences context, which I am sure will be of benefit to all academic staff of the University.
Inter-professional teamwork

Interprofessional learning is currently an issue of international interest. Health professionals in general share a concern for their patients or clients in the context of their families and communities, a respect for other professional contributions, an acknowledgment of the importance of effective communication, and the need to limit error and misunderstanding. The knowledge base of the different practitioners is distinctive, enriching the outcomes, but making teamwork challenging. Although the boundaries and roles of the different health science professionals can be identified, at present there are few opportunities for shared learning.

Where can interprofessional teamwork develop in a geographically distributed College? I suggest that the best opportunities will come within teaching hospitals and community settings. Students from different health professions learn basic clinical skills together, in community or special settings. In recent years, patient-based conferences, workshops and ethical or professional sessions for a range of students can be mounted in clinical teaching sites. Imaginative possibilities include shared placements (in community settings, including rural), or even (as in Linköping), senior students could share the running of a ward.

We need not limit our thinking to undergraduates. By adopting a flexible, transferable approach to higher degrees, we can share expertise and enhance the understanding of their different roles and viewpoints. Such collaborative enterprises between the health professions enhance understanding of their different roles and viewpoints.

Maximising resources

Can we collaborate across the College to maximise our financial, physical and human resources and enhance staff/student satisfaction? Resources are somewhat unevenly distributed across the College, and sharing would be appropriate, despite the geographical spread. Opportunities exist for sharing expertise in the basic medical sciences, clinical skills, ethics, health care delivery, evidence-based clinical practice, IT and information literacy, collaborative research and in education. Options that might be explored include college-wide departments to service all faculties, loose coalitions and registries of interests/expertise, joint appointments, combined degree offerings (e.g. BMedsCeNursing) and educational research collaborations. It is worth evaluating critically, but with an open mind, all such possibilities.

Coping with educational change

One of the major challenges for teachers in the College is to cope with the need to develop appropriate educational strategies. Student expectations are changing; there is a perception that novel educational ideas pose the threat of higher workloads and decreasing time for reflection and development. Timely access to relevant educational information is not easy. Yet we need to ensure that learning outcomes can be measured and meet new goals for the changing conditions of practice, embrace methods to support self-directed and reflective learning, and meet some of the new challenges (information technology, inter-professional cooperation). One hope for the future should lie in the development of evidence-based education. We also need to evaluate on-line education and exploit the effective elements so that the students gain skills and confidence.

Conclusion

The commonality of educational interests within the College make it essential to explore ways to maximise educational resources by sharing expertise and skills. By working together, staff and students will gain a greater understanding of the different health professional roles and contributions.

Emeritus Professor Ann Sefton’s educational interests are in integrated curriculum development, flexible learning and education of health professionals. Her research interests were in neuroscience - in a former life! Ann is a recipient of a local Excellence in Teaching Award and an Australian National teaching award.
Addressing quality issues in Health Sciences curricula

Professor Jocaly Lawler, Dean, Faculty of Nursing

Introduction

I am going to highlight briefly in this paper some of the areas of tension that arise when, as professional disciplines, we are educating for a workplace that is itself under severe strain and where the same rationalist management sentiments are eating away at our beliefs about the central purpose of a health care system.

In nursing, there is a ‘crisis’ nationally and internationally. Recruitment is growing more difficult in many countries (particularly in those where socioeconomic improvements for women have occurred). The commitment of the nursing workforce to stay in the health system is being strained and there is growing concern about the exploitative effects of aggressive international recruitment – or ‘poaching’ of nurses from less developed nations to work in places like the UK and the USA. There are no emergent signs of a readiness to address the underlying causes of the current workforce difficulties in nursing beyond an intense effort to increase supply and some efforts to attract nurses back into the workforce. There has been no obvious willingness to address core workforce or workplace issues, nor any attempt to examine how the distribution of resources in health care affects nursing. In this context, we in the Faculty of Nursing have to simultaneously prepare new graduates to enter this industry and recruit existing professionals to commit to graduate study.

How the Faculty of Nursing approaches its quality agenda has direct implications for the health care system and vice versa. There is no internship in nursing and often little assistance to new graduates in the workplace, despite funds being made available to the health system at the state level to support new graduates. New registered nurses are expected and required to ‘hit the ground running’ when they start their professional careers. During the three years that we have them as undergraduate students, our efforts must be focused on using our time wisely and well to help them practise safely for their entry into the workforce.

Undergraduate nursing recruitment

When nursing was introduced to the higher education system in 1985 in NSW the Faculty of Nursing, in the form of its two predecessor institutions (the Institute of Nursing Studies in the former Sydney CAE and the former School of Nursing at Cumberland) was allocated the largest single quota of new undergraduate places. This single factor accounts for a number of the difficulties with which the Faculty now struggles and which it must resolve. And much has changed in the health and education systems since 1985.

The Faculty has been expected to continue with a large annual intake of new undergraduates, in part because the NSW Department of Health expects us to continue to supply workforce at previous levels. This is difficult to achieve, because, among other things:

- nursing still recruits about 90% women;
- the number of men choosing nursing as a career has been stable at 10-12% for the last decade;
- many more occupations are now realistically open to women;
- there have been affirmative action programs to increase the number of women in traditional male fields;
- the nature of nursing work is growing more intensive and complex which raises the minimum level of academic and other abilities needed for success.

However, because of the way that university funding mechanisms operate, reducing student load results in reduced income and then the need to reduce staff. This situation has resulted in much publicised industrial trouble, which the media reports in sensationalising terms. None of these matters contributes to a climate in which quality issues can get a fair hearing and the underlying causal issues are subsumed by the rhetoric that makes good headlines and feeds what Cohen (1973) called ‘moral panics’.

Some relevant data

Until 2001 the Faculty’s annual intake of new undergraduates consisted of approximately 50% who had completed high school (selected on the basis of a minimum UAI) and 50% from other people (e.g. mature age entry) who held a first degree or had partially completed a tertiary course or a trade qualification. Nursing has always been a means of upward social mobility and it has allowed people without formal qualifications to study and become independent. But where quality measures affect us when we are benchmarked and where shifts in performance affect income, maintaining a relatively open admission policy may have serious consequences for the Faculty.

For these reasons and for our own information the Faculty examined the performance of its undergraduate students and ask the following questions.

Do the performances of undergraduate nursing students differ according to the admission route and if so in what way?

The pass rates and distribution of grades shows that, in general, students who completed high school do better than those who have not. Those with a UAI out-performed those who did not complete high school.

Is the UAI a good predictor of success in nursing?

Our analysis showed that for students with a TER ≥85 there was a zero failure rate and that Year 3 students (the most clinically intensive) in 2001 performed at a very high level.

Students who had a TER of ≥75 also showed a similar pattern of performance with average grades of Credit or better and a negligible failure rate in each of the first two years of the course, with the failure rate rising to 5.9% in Year 3. These data are excellent for a quality agenda. The performance of the students whose UAI fall in the marginal area below the cut-off of 72, that is, with UAI’s in the range 69.00 to 71.99, performance drops sharply. In this group, 15% had an average grade of Fail, 61.5% had an average grade of Pass (many of whom scored a near 50%), 23.1% had an average grade of Credit and none scored an average grade above this level. However, the 2001 class of Year 3 students in this same UAI range level showed even poorer performances: 33.3% were showing an average grade of Fail and the remaining 66.7% achieved an average grade of Pass. In effect, these students ‘get stuck’ in Year 3.

What is the minimum level of entry ability for success in nursing?

On the data available to us there is a pattern that shows, in general, the lower the UAI the more the student will struggle and the more pronounced that pattern will
be in the senior year. If the Faculty of Nursing was to make a decision about its annual undergraduate intake only on the basis of the type of performance data reported here, it would set the minimum UAI at 75.00 or thereabouts, and the consequences of such a decision would be felt widely. The size of the intake would drop, income would fall, industrial action would inevitably follow and the University would be open to criticism. However, we cannot ethically and knowingly admit a student simply for the sake of filling a quota, now that we have examined how different student groups perform. We must also consider the public interest and the reputation of the University if we were to graduate nurses who are not safe to practise.

What do we know about the performance of students who are admitted under the flexible entry program?

The Faculty is continuing its analyses of the performance of those students who are admitted without having completed high school. This is a very mixed group and what our data show is that in 2001, the proportions of these students passing all units of study attempted across Years 1 to 3 were, respectively: 58.2%, 57.60% and 52.20%. These are not good data for any Faculty's quality performance measures, but there are some excellent students in this group. For example, students admitted as mature age applicants perform better as each year's pass rates are examined. In Year 1, only 54.9% pass all units attempted, and many discontinue at this time. Of those who progress to Year 2, 70.8% pass all units attempted and by Year 3, 90.9% pass all units of study attempted. While these performance data are excellent, the numbers are small, so we win on quality over time, but lose on quantity.

As a result of these data, the Faculty is reviewing its flexible entry program and working progressively to get a better and more predictive picture of the attributes that contribute to success in nursing at the Bachelor of Nursing level.

Concluding remarks

The challenge for the Faculty of Nursing is to find a balance between meeting expectations with respect to workforce supply while maintaining its standing in the university sector with respect to quality. The analyses that we are undertaking will help us to make wiser and more valid decisions about admission policies, to identify those groups (such as mature age students) who may need particular kinds of support in their first year, and it will inform many aspects of our teaching program. It will not help us, however, with the politics associated with a nursing shortage, except perhaps to better defend ourselves against claims that we are behaving irresponsibly.

Jocelyn Lauter teaches in the field of the nature and origins of nursing knowledge and practice, particularly as these relate to the hidden and taboo aspects of illness and nursing. In 1999, Jocelyn was appointed Dean of the Faculty of Nursing. She holds an Associate Diploma in Nurse Education and a Master of Education (Honors). Jocelyn chairs the Faculty’s Academic Practice Committee, which is concerned with broad issues in academic quality, staff and courseware development as well as Faculty policies for course delivery.

Addressing the Needs and Expectations of External Stakeholders

Professor Hal Kendig, Dean, Faculty of Health Sciences

Faculty of Health Sciences and Professional Diversity

The ten Schools of the multi-professional Faculty of Health Sciences, located on the Cumberland campus, have educated the vast majority of allied health professionals for the state. We offer a diverse and large number of courses (more than 60) mainly due to the large numbers of postgraduate offerings.

In understanding health science education, it is important to consider the variations and the commonalties across the professions that provide coherence for... improve the health and well being of individuals and populations. Areas where the health professions diverge include:

- Generic attributes, skills, and workplace context;
- Knowledge base/s and University history;
- Public expectations and constituency groups;
- Resource bases and service systems;
- Interrelationships of professions.

In understanding the commonalties and differences between the health professions it is essential for us to work together to be more responsive to the needs of our external stakeholders.

The Field of Health and External Stakeholders

Education needs to be based on a clear understanding of the broader field of health, as perceived by the general population at large, as well as by health practitioners. As acknowledged by the Faculty of Health Sciences’ Strategic Plan (1999 – 2002), this broad context is defined by the following features:

- Continuing high expectations and growth;
- Increasing consumer involvement, demand-led, and shared responsibilities for care;
- Multi-disciplinary: greater prevention and rehabilitation as well as acute care; focus on populations as well as individuals; delivery in the community;
- Health service delivery that is evidence-based, cost-effective, accountable, competitive, and continuity and integration of care;
- Continuing poor health of the indigenous population;
- Social change including rapid population ageing and increasing economic, ethnic, and family diversity;
- Rapid advances in knowledge of influences on health, technologies in practice, and health services;
- Increasing international demand in the Asia-Pacific region;
- Continuing pressure on government provided health resources.

We need to be responsive by anticipating the rapid changes that are occurring in the health field. It also is important to shorten the time gaps between the availability of new knowledge and its applications by the health professions.
The University of Sydney

Institute for Teaching and Learning

The Pharmacist’s role is changing. In response to community and healthcare system demands, pharmacists must now take a holistic view of health care and interpersonal communication both within and between professions.

In response to this changing practice, the Faculty of Pharmacy has introduced a new unit of study for its first year students – Social, Behavioural and Professional Pharmacy. The development of this unit of study during 2001 was the result of a collaboration between two faculties, Nursing and Pharmacy. We brought together our respective backgrounds in health psychology and pharmacy practice to make this unit of study relevant to pharmacy but with a focus on the patient perspective.

Educationally, we wanted to design a foundation unit of study that underpinned a cohesive programme of learning, and provided a logical progression to units in the healthcare milieu in general and pharmacy practice in particular, rather than as a generalist foundation unit.

The growth of the health care field over the coming decades, driven largely by rising expectations and an ageing population, will present enormous opportunities and challenges for professional education. The Faculty of Health Sciences has responded by initiating a range of education reforms which take account of the changing health care context. While we health professionals in the College each have our own particular missions, there are also opportunities for us to work closely together for our mutual benefit.

Finally, I wish to raise one of the most important and difficult challenges ahead, namely our advocacy and involvement with the broader public and interests beyond the University. Senior professionals who were hospital-trained many years ago have experience-based wisdom but they may have a limited understanding of the new evidence-based approaches that recent graduates know and use. There is great potential to advance health care when the experience of the established professionals is complemented by the energy of our graduates.

Accreditation is an important avenue for relating the professions to educational programs. For example, the process of gaining accreditation for our new Master of Occupational Therapy, as a graduate entry course, has enhanced the skill expectations of the profession across the country. External advisory committees continue this productive interchange on an ongoing basis with a focus on the core competencies required for professional practice.

The potential application of these theories and models to patient outcomes and pharmacy practices was also addressed. This was achieved not only within lectures, tutorial discussions and reading material, but also through the assessment tasks that were set for students. Students were required to interview a friend or family member who had experienced a significant health event (with some important caveats and criteria). The focus of the interview was the individual’s experience of taking medications, coping with their illness, their relationships with their healthcare professionals and on how their illness affected their relationships with other important people in their life such as family and friends.

These data were then pooled with another student’s data and displayed in poster form as a representation of one or more of the theories and models addressed in the lectures and readings. In preparation for the poster, time was spent in tutorials preparing and practising the interview schedules with ...

Conclusions

The potential application of these theories and models to patient outcomes and pharmacy practices was also addressed. This was achieved not only within lectures, tutorial discussions and reading material, but also through the assessment tasks that were set for students. Students were required to interview a friend or family member who had experienced a significant health event (with some important caveats and criteria). The focus of the interview was the individual’s experience of taking medications, coping with their illness, their relationships with their healthcare professionals and on how their illness affected their relationships with other important people in their life such as family and friends.

These data were then pooled with another student’s data and displayed in poster form as a representation of one or more of the theories and models addressed in the lectures and readings. In preparation for the poster, time was spent in tutorials preparing and practising the interview schedules with ...

Previously Professor Hal Kendig served as Director of an Australian Research Council Key Centre in Teaching and Research in Gerontology at La Trobe University. The Centre aimed to closely connect research-based knowledge to the education of health professionals and applications to practice and policy. A full version of the paper, including references, is available by e-mail from: h.kendig@fhs.usyd.edu.au

Responding to changes in Pharmacy Practice

Lorraine Smith, Faculty of Nursing, Dr Ines Krass, Faculty of Pharmacy

The completion of the unit of study, students would have a basic understanding of the links between psychological, social, behavioural and physical aspects of illness and injury, and acquired knowledge of the theories and models of health and illness.

The education and health sectors relate to Australian society more specifically through a network of external stakeholders. First amongst these must be the Governments that fund health and regulate services and hold direct responsibility for providing many of them. The divided responsibility between the Commonwealth (for directly funding education) and State Governments (for directly funding hospital and many other health services) has created serious anomalies. Political contradictions, for example, can have significant influence on the availability of nurses. On the positive side, governments can generate new opportunities for professionals to work in emergent fields such as aged care and rehabilitation.

One of our most important audiences are the employers, with whom our graduates will pursue their careers. Perhaps the greatest tension exists in the demand for our students to have both immediate practical skills and middle-term adaptability capacities. In three or four years it is very difficult to educate graduates who can assume a full professional workload immediately.

The tensions between established and emergent viewpoints are found within professional bodies and between professionals themselves. Senior professionals who were hospital-trained many years ago have experience-based wisdom but they may have a limited understanding of the new evidence-based approaches that recent graduates know and use. There is great potential to advance health care when the experience of the established professionals is complemented by the energy of our graduates.

Accreditation is an important avenue for relating the professions to educational programs. For example, the process of gaining accreditation for our new Master of Occupational Therapy, as a graduate entry course, has enhanced the skill expectations of the profession across the country. External advisory committees continue this productive interchange on an ongoing basis with a focus on the core competencies required for professional practice.

Our most significant stakeholders, of course, are members of the public and they are represented largely through consumer groups and various peak bodies. As we enter into public debates over resources, it is essential that we present as advocates for the people whom we serve, rather than for ourselves.

Conclusions

The growth of the health care field over the coming decades, driven largely by rising expectations and an ageing population, will present enormous opportunities and challenges for professional education. The Faculty of Health Sciences has responded by initiating a range of education reforms which take account of the changing health care context. While we health professionals in the College each have our own particular missions, there are also opportunities for us to work closely together for our mutual benefit.

Finally, I wish to raise one of the most important and difficult challenges ahead, namely our advocacy and involvement with the broader public and interests beyond the University. Senior professionals who were hospital-trained many years ago have experience-based wisdom but they may have a limited understanding of the new evidence-based approaches that recent graduates know and use. There is great potential to advance health care when the experience of the established professionals is complemented by the energy of our graduates.

Accreditation is an important avenue for relating the professions to educational programs. For example, the process of gaining accreditation for our new Master of Occupational Therapy, as a graduate entry course, has enhanced the skill expectations of the profession across the country. External advisory committees continue this productive interchange on an ongoing basis with a focus on the core competencies required for professional practice.

Our most significant stakeholders, of course, are members of the public and they are represented largely through consumer groups and various peak bodies. As we enter into public debates over resources, it is essential that we present as advocates for the people whom we serve, rather than for ourselves.

Conclusions

The growth of the health care field over the coming decades, driven largely by rising expectations and an ageing population, will present enormous opportunities and challenges for professional education. The Faculty of Health Sciences has responded by initiating a range of education reforms which take account of the changing health care context. While we health professionals in the College each have our own particular missions, there are also opportunities for us to work closely together for our mutual benefit.

Finally, I wish to raise one of the most important and difficult challenges ahead, namely our advocacy and involvement with the broader public and interests beyond the University. Senior professionals who were hospital-trained many years ago have experience-based wisdom but they may have a limited understanding of the new evidence-based approaches that recent graduates know and use. There is great potential to advance health care when the experience of the established professionals is complemented by the energy of our graduates.

Accreditation is an important avenue for relating the professions to educational programs. For example, the process of gaining accreditation for our new Master of Occupational Therapy, as a graduate entry course, has enhanced the skill expectations of the profession across the country. External advisory committees continue this productive interchange on an ongoing basis with a focus on the core competencies required for professional practice.
Comparison of two methods of training of undergraduate pharmacy students in asthma knowledge, confidence and skills

Dr Sinthia Bosnic-Anticevich,
Faculty of Pharmacy

This study compared the impact of an evidence-based asthma health promotion program (the Adolescent Asthma Action or Triple A Program) with an asthma problem-based learning (PBL) case on asthma knowledge, confidence and skills of final year pharmacy students.

A parallel study was conducted in which final year pharmacy students received asthma education either as part of their usual undergraduate PBL curriculum (Control group) or as part of the Triple A program. Prior to the training, all students completed questionnaires assessing their baseline asthma knowledge (AK) and confidence and skills (AC&S). Eight teams were allocated to groups per program (approximately 16 students per group) were then allocated either to the Control or Triple A groups. Both Control and Triple A groups completed their training in 3 x 1½ hour sessions, at the end of which students completed follow-up AK and AC&S questionnaires.

In all, 117 students completed the study. There were no statistically significant differences in students AK scores (mean=22.4, sd=4 and mean=21, sd=3 respectively) and the AC&S scores (mean=20, sd=7 and mean=18, sd=4 respectively) in the Control and Triple A groups at baseline. Although both models of training improved the AK and AC&S scores, greater improvements were seen in the Triple A group with respect to both AK scores (mean=26, sd=4 and mean=23, sd=3, p<.05) and AC&S scores (mean=25, sd=4 and mean=21, sd=4, p<.05).

An evidence-based asthma health promotion program which trains students as Triple A Educators is more effective than PBL in improving asthma knowledge, confidence and skills in final year undergraduate pharmacy students.
Paediatrics and problem-based learning: Preparing the physiotherapy professional
Adrienne Hunt, Genevieve Dwyer and Dr Roger Adams, Faculty of Health Sciences

A new unit of study (UOS) in paediatrics was introduced into the Bachelor of Applied Science (Physiotherapy) in 2000, and presented in a PBL framework. The changes were made to better equip graduates with confidence and competence specific to paediatric practice. Wider challenges in the workplace require a graduate to be flexible, team-oriented, responsible and creative in applying learning to new situations (Hunt et al, 1998). In PBL, the process of learning is emphasised as much as content knowledge. For this UOS, case studies were designed so that the broad range of paediatric clinical challenges faced by a future graduate would be addressed.

Students completed evaluations on various dimensions of their learning: meeting the learning objectives of each of 6 problem cases, changes in learner confidence and competence, a summative assessment of learning, and assessment of the clinical placement experience. Students’ confidence and competence improved over time, to allow an informed reflection, as students have undertaken two clinical placements since the completion of the UOS.

We have developed a conceptual model that juxtaposes the three fundamental knowledge domains used by practitioners across the health sciences: professional knowledge including reasoning, assessment and intervention techniques unique to a particular profession; basic foundational sciences that underpin the professional knowledge base and support methods of inquiry; and interprofessional perspectives directed to both collaborative health care and research. Each of these is understood by the process of reasoning that is engaged and the purpose for such cognition.

The model takes what is common to all three domains, inquiry, and relates this to evidence-based practice. Implications are drawn concerning inquiry-based learning as connected learning that firstly fosters the possibility of integration of the various disciplines, then enables the move to interdisciplinary learning and research.
The many faces of collaboration
Erica Sainsbury and Andrew McLachlan, Faculty of Pharmacy

An extensive body of literature attests to the benefits which can accrue through the use of learning collaborations between students. Collaborative approaches are common in all levels of education, including the tertiary sector. However, the concept of collaboration need not be limited to interactions between students in traditional formats such as group work, group projects, and tutorial discussions. We have developed a range of modes of collaboration in our teaching, and in this (Ed-Health conference) session we will share some of the forms which have proven productive. Using a number of case studies situated within the teaching of Pharmacy, we will demonstrate multi-level collaborations involving students, academic staff within the faculty, practicing professionals, other Faculties within the College, and organisations within the profession of Pharmacy. The primary objectives of this session are to engage participants in critical reflection about the ways in which they currently incorporate collaboration into their teaching, and to stimulate ideas for new avenues of cooperation and collaboration.

Acknowledgements

This issue of Synergy has been produced with the support and collaboration of the organisers of the College of Health Sciences Ed-Health conference (November, 2001), and the Education Committee of the College of Health Sciences (Chair: Professor Joy Higgs). Several of the authors in this issue would like to thank Diana Rancho (College Manager, International and Development) for her assistance with initial editing. I would also like to acknowledge the support of Diana and Stella Paffen (Faculty of Medicine) for their support in contacting authors, and in collating and co-ordinating the papers and abstracts for this issue.

Kim McShane
Editor, Synergy

Ed-Health Conference Abstracts

The role and teaching of Biomedical Sciences for students of Health Science professions
Jennifer Lingard, Faculty of Health Sciences

The study of Biomedical Sciences provides foundation knowledge for all clinical practice. The study of body system integration and dysfunction together underpin clinical reasoning and develop problem-solving skills and, as a result, these studies tend to be concentrated at the beginning of the students’ course. However, incoming students usually do not have clinical experience and a sense of the “bigger picture”. It is a challenge to present such material in a relevant manner to pre-clinical students so as to increase their motivation for learning.

These issues become more acute when superimposed on other aspects of adjustment to University education, some of which have been explored by researchers in the Faculty of Health Sciences who have surveyed students in relation to ‘The First-Year Experience’. The ‘front-end loading’ of basic material in the curriculum may seem logical, yet it also compounds the twin issues of perceived relevance and the first year experience.

We now focus more on how to encourage problem solving and we bridge the gap for the students with case studies and clinical reference material. This approach stimulates discussion both of potential additional strategies for increasing clinical relevance and the use of Biomedical studies for the development of other generic skills.

Sharing resources between faculties within the College of Health Sciences: curriculum development and implementation
Professor Ann Sefian, Faculties of Medicine and Dentistry; Professor Michael Thomas and Dr Debbie Cockrell, Faculty of Dentistry

In 1997, the Faculty of Dentistry reviewed its curriculum and developed appropriate goals and principles based on a thematic structure. Major concerns were to ensure that graduates be better prepared for changes in dental practice, with a focus on broader clinical knowledge and skills, problem-solving and the sophisticated use of evidence in decision-making. A review of the problem-based medical curriculum introduced in 1997 demonstrated considerable congruence of the aims of both groups. The Faculty of Medicine made available its well-documented curriculum processes and materials for the first two years, enabling dental staff to determine specifically the elements to be retained and those to be omitted or altered. All but four of the 70 medical problems have been retained, and both groups of students now attend most of the supporting lectures and practicals. Computer-based learning resources have been incorporated into a new dental educational website. Students share much of the written integrated formative and summative assessment as well as the processes of evaluation. Distinctive dental elements include web-supported skills sessions at the United Dental Hospital, an “oral relevance” resource on the website and one four-week oral biosciences block at Westmead. For five weeks, all dental and some medical students study haematology (year 1) and cancer (year 2) at Westmead. The sharing of goals, strategies and materials has brought medical and dental staff and students closer together. In the future, it is hoped that both students and staff will understand the other profession better. Meanwhile, scarce resources and expertise are used more effectively.

Synergy is up-dating its look!

With this issue of Synergy (No. 17), we complete our round of the University’s Colleges.

Future issues of Synergy will alternate between being generic and theme-based. The next issue of Synergy will also have a new style and format! Please consider contributing a paper before the deadline for submissions.

Key dates and themes for up-coming issues of Synergy

Issue 18
Online Teaching & Learning
Submissions due: 23 August 2002; distributed October 2002

Issue 19
(generic issue - papers on teaching and learning from all disciplines invited)
Submissions due 14 February 2003; distributed April 2003

Issue 20
Diversity and Inclusive Teaching
Submissions due 22 August 2003; distributed October 2003

Submissions

Synergy is an ideal forum for publishing early and on-going research into teaching and learning at the University of Sydney. A number of our Synergy authors have had published in refereed journals full versions of papers that were originally sketched up for Synergy. We invite articles that will foster debate and critique, book reviews and reports on research into innovations in teaching and learning. We prefer to publish either short pieces (of 500 words) or longer papers (of up to 1000 words). Academic referencing and citation are not necessary for papers published in Synergy. Please e-mail your draft paper (attached as a Word or .rtf file) by the relevant deadline to the Editor at: synergy@itl.usyd.edu.au.
ITL Bookshelf

In each issue of Synergy we review selected teaching and learning publications, including higher education research journals, which will be of interest to members of the University community. Materials reviewed in this and past issues of Synergy are available in the ITL’s Resource Room (Level 3, Carslaw Building, F07). University of Sydney academics are invited to visit the Resource Room and to consult with staff on their particular needs and interests (e.g. research questions, appropriate journals). This issue’s Bookshelf reviewers are Angela Brew, Rob Ellis, Kim McShane.

Higher Education

Re-thinking Science: Knowledge and the public in an age of uncertainty.
Cambridge, UK: Polity Press.

The relationship between science and society has become problematic. Science speaks to society by providing a flow of ideas and conceptualisations of the world; but society now ‘speaks back’ to science. Industrial bodies, governmental research agencies, funding councils and universities are all working within the conditions of what the authors call ‘Mode 2’ society, where there is “a high degree of uncertainty; there is no clear-cut direction, but many competing ideas, theories and methods, and no one is in overall charge (p. 115).” The authors argue that segregated, tightly-knit scientific communities with strong shared beliefs, and where scientists communicate almost exclusively with each other, are opening up and becoming more integrated within society. AB

Online & Flexible Learning

Flexible Learning in a Digital World.
London: Kegan Page.

Collis and Moonen provide a sound introduction to flexible learning in terms of the implementation of flexible approaches to learning and the supporting technology. The authors are internationally recognised and work as Professors in the Faculty of Educational Science and Technology at the University of Twente, the Netherlands. Betty Collis is especially well regarded and acknowledged as a pioneer in the area of flexible technologies. Chapter 5, entitled “Pedagogy - making a U turn” presents a novel twist on the process of embedding flexible learning activities in curricula. RE

Scholarly Journal

Taylor, P. (Ed.).
HERDSA and Corfus Publishing, Taylor & Francis Ltd.

Are you writing up an innovation in your teaching? Reflecting on the impacts of assessment policy on a curriculum which must acknowledge and include diverse groups of learners? Perhaps you have a conference paper on collaborative learning practices and international students? HERD journal is the ideal peer-reviewed forum for publishing scholarly research into practical, theoretical or discipline-specific aspects of your teaching. Many of the papers reflect a student learning focus, and book review articles, review essays, and critical notes/reflections will be considered for publication. Papers from specific disciplines or other specific contexts are welcome. For more information on HERD journal, including contents pages, please go to: http://www.tandf.co.za/journals. Staff in the ITL are available to advise and support you in preparing a paper for HERD journal and other higher education research journals. KM

Would you consider writing a brief book review for our next issue on Online Teaching & Learning? Please e-mail your Synergy review to us at synergy@itl.usyd.edu.au
Conferences, workshops &
Information on IITL projects, workshops and seminars is available at the IITL
Homepage: http://www.itl.usyd.edu.au

2002 CONFERENCES

STLHE 2002
‘Fostering the Spirit of Inquiry’
Society for Teaching and Learning
in Higher Education
June 12-15 2002
McMaster University, Hamilton,
Ontario, Canada,
http://www.mcmaster.ca/learning/stlhe2002/

BUILDING LEARNING
COMMUNITIES THROUGH
EDUCATION
Central Queensland University
June 16-19 2002
Yeppoon, Qld

ED-MEDIA 2002
World Conference on Educational
Multimedia, Hypermedia &
Telecommunications
June 24-29 2002
Denver, Colorado, USA
http://www.aace.org/conf/edmedia

HERDSA 2002
‘Quality Conversations’
Higher Education Research &
Development Society of Australasia
8 – 10 July 2002
Edith Cowan University, Perth, WA
http://www.ecu.edu.au/conferences/herdsa/

6TH PACIFIC RIM FIRST
YEAR IN HIGHER
EDUCATION CONFERENCE
‘Changing Agendas - Te Ao
Hunthe’
8 – 10 July 2002
University of Canterbury,
Christchurch, NZ
Further information from
z.holbeck@qut.edu.au

EARLI SIG (Assessment &
Evaluation)
‘Learning Communities and
Assessment Cultures: Connecting
Research with Practice’
European Association for Research
on Learning and Instruction
28 - 30 Aug 2002
The University of Northumbria, UK
www.northumbria.ac.uk/assessment
2002

PROFESSIONAL
DOCTORATES 4TH BIENNIAL
INTERNATIONAL
CONFERENCE
‘Research Training for the
Knowledge Economy’
29 - 30 Nov 2002
The University of Queensland,
Brisbane, Qld
Further information from
z.holbeck@qut.edu.au

HERDSA 2002
‘Quality Conversations’
Higher Education Research &
Development Society of Australasia
8 – 10 July 2002
Edith Cowan University, Perth, WA
http://www.ecu.edu.au/conferences/herdsa/

6TH PACIFIC RIM FIRST
YEAR IN HIGHER
EDUCATION CONFERENCE
‘Changing Agendas - Te Ao
Hunthe’
8 – 10 July 2002
University of Canterbury,