

ACADEMIC BOARD PHASE THREE REVIEW

REVIEW TEAM REPORT

Faculty of Pharmacy

2008

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SECTION I: PREFACE

(1) Background

The Academic Board reviews are intended to encourage in faculties an academic culture that values scholarship, free inquiry and intellectual rigour and honesty, supporting, in turn, the development and maintenance of high standards of teaching, scholarship and research.

In 2001, the Academic Board initiated a cycle of collegial reviews of the academic activities within faculties with a view to supporting faculties in developing effective academic quality assurance process. These were followed up in 2003 with a second phase of faculty reviews, which expanded the scope to include all elements within the University Strategic Plan.

The Phase 3 Review is based on the Faculty's Self-Evaluation Report (SER) which provides an overview of the Faculty's assessment of the culture which supports, and the processes that lead to, continuous quality improvement in the Faculty at the time of the Review. To guide the development of the SER, faculties were invited to address criteria adapted from the Baldrige Education Criteria for Performance Excellence 2007.

(2) The Review Process

The Faculty presented its SER to the Academic Board on 1 August 2008 along with a number of supporting documents and relevant data. The Review Team met on 8 August 2008 to consider these materials.

The review visit took place on 15 August 2008. The key purpose of the visit was to enable the Review Team to assess the robustness and validity of the Faculty's judgements.

Implementation

Within six weeks of receipt of the Review Report, the Faculty is required to provide the Academic Board with a response to the Recommendations contained in the Report, indicating how the Faculty will build the Recommendations into Faculty planning processes

Twelve months after the date the Report was presented to the Academic Board, the Faculty is required to provide the Board with a progress Report responding to the Recommendations.

(3) Membership

3.1 Review Team

Professor Bruce Sutton, Chair

Associate Professor Arthur Conigrave, Faculty of Science

Associate Professor Helen Irving, Faculty of Law

Professor Ivan Kennedy, Faculty of Agriculture, Food and Natural Resources

Associate Professor Adrian Mitchell, Faculty of Arts

Mrs Lynda Rose, Executive Manager, Academic Strategies, Office of the Provost and Deputy Vice-Chancellor (Observer)

3.2 Senior Staff

Professor Iqbal Ramzan, Dean

Dr Alaina Ammit, Associate Dean (Research and Innovation)

Professor Jo-Anne Brien, Pro-Dean

Ms Carroll Graham, Faculty Manager

Dr Jane Hanrahan, Associate Dean (Learning and Teaching)

Associate Professor Ines Krass, Head, Pharmacy Practice

Professor Michael Murray, Head, Pharmaceutics

3.3 Students

The Review Team met with three groups of students: nine undergraduate students; four postgraduate coursework students and five research higher degree students.

The Review Team acknowledges the need to be careful about generalising the views of a small group of students to the whole student body.

SECTION II: OUTCOMES

This section summarises the main findings and lists the commendations, affirmations and recommendations. It should be noted that, in addition, other favourable comments and suggestions for improvement are mentioned throughout the text of the Report. The Report draws on the information provided in the Self-Evaluation Report as well as discussion with staff and students. In some places, text from the Self-Evaluation Report (SER) has been incorporated directly into the text of this Report.

(1) Introduction to Findings

The Faculty of Pharmacy has identified itself as the major centre of professional education and research training in pharmacy. It comprises three academic disciplines:

- Pharmaceutical Chemistry
- Pharmaceutics
- Pharmacy Practice

The Review visit reinforced evidence presented in the SER of a Faculty engaged in the successful implementation of a range of initiatives designed to ensure that it achieves its aspiration to retain its premier position within Australia, and to be among the leading centres internationally, in pharmacy and pharmaceutical sciences education research and innovation.

The SER and discussions with staff and students during the Review visit brought out a number of issues which are addressed further within this Report, as follows:

1. There is evidence that the strategies that the Faculty has implemented to improve its research profile and develop a robust research culture are achieving success. At the same time, it is essential that the Faculty ensure that these strategies are subject to continuous evaluation to ensure their continuing effectiveness.
2. There is a range of infrastructure issues which the Faculty is working to resolve which impact on both staff and students, particularly research higher degree students.
3. The Faculty has undergone some significant changes in recent months, including the implementation of a new governance structure and the implementation of a revised curriculum for the Bachelor of Pharmacy. It is important to ensure that all staff and students are kept fully informed of the outcomes of these changes and have an opportunity to provide feedback.
4. CEQ outcomes are indicative of some ongoing concerns with respect to student satisfaction. The Faculty has established a Pharmacy Education Unit to assist it in improving teaching quality. In addition to teaching quality issues there is evidence of lack of engagement with some sectors of the student community, particularly research higher degree students.

A summary of Commendations, Affirmations and Recommendations follows. Note that these are not prioritised by the Review Team. They are listed below in the order in which the relevant issues appear in the SER.

(2) Commendations

Areas where the Academic Board commends the practices of the Faculty are as follows:

1. The Academic Board commends the Faculty for the structures it has in place to facilitate communication between the Dean and staff (e.g. Executive Committee minutes on intranet; regular Faculty Forum; meetings with professoriate).
2. The Academic Board commends the Faculty for its intention to work with Sydney Talent to provide students with industry employment experience during their candidature.
3. The Academic Board commends the Faculty for the appointment of a Marketing Manager with a specific responsibility to market to prospective research students.
4. The Academic Board commends the Faculty for the successful implementation of a new governance structure, particularly its emphasis on specifying the duties of the Pro-Dean.
5. The Academic Board commends the Dean for the establishment of a National Advisory Board which will facilitate a broader strategic approach to its relationships with key communities.
6. The Academic Board commends the Faculty for the internal reviews which are informing its strategic planning process.
7. The Academic Board commends the Faculty for its development of a formal approach to student engagement.
8. The Academic Board commends the Faculty for implementing processes for teaching relief and for encouraging collaboration with senior research researchers on grant applications for early career staff, which are effective mechanisms for building their research capability.
9. The Academic Board commends the Faculty for its high performance in the Teaching Improvement and Equipment Scheme and the Scholarship of Teaching Index.
10. The Academic Board commends the Faculty for the Audit of Assessment Practices which has undertaken as an outcome of its Evaluation of Coursework Teaching.
11. The Academic Board commends the Discipline of Pharmacy Practice for the implementation of a journal club which engages both staff and students in learning about research and research methods as well as developing facilitation skills.
12. The Academic Board commends the Faculty for the establishment of a postgraduate common room.

(3) Affirmations

Areas where the Academic Board affirms the Faculty's identification of the need for improvements to its practices are as follows:

1. The Academic Board affirms the Faculty's intention to review its alumni relationship capabilities with the aim of creating stronger ties with the community and developing life-long links with its alumni.
2. The Academic Board affirms the Faculty's intention to investigate how the management of practical experiences can be better integrated across health faculties within the University.

(4) Recommendations

Areas where the Academic Board recommends improvements to the practices of the Faculty are as follows:

1. The Academic Board recommends that the Faculty develop clear mechanisms by which it can measure the effectiveness of its new leadership structure.
2. The Academic Board recommends that the Faculty develop more effective mechanisms to ensure that its communication processes work well at all levels of staff and students.
3. The Academic Board recommends that the Faculty consider how it can improve its system of student representation so as to facilitate student involvement in its strategic planning process.
4. The Academic Board recommends that the Faculty develop mechanisms whereby it can assess the effectiveness of the strategies it has designed to meet the expectations of students and stakeholders, with particular reference to research students and Master of Pharmacy students.
5. The Academic Board recommends that the Faculty consider how it can respond to the wishes of the students to improve the value of clinical placements in their training.
6. The Academic Board recommends that the Faculty ensure that students are made aware of the mechanisms through which they can provide feedback on all aspects of their courses and candidature and how this feedback will be addressed. In particular, there may be a need to provide a specific focus for responding to research student feedback.
7. The Academic Board recommends that the Faculty continue to explore mechanisms for meaningful national and international benchmarking to drive improvements in both teaching and research.
8. The Academic Board recommends that the Faculty consider how it can ensure how students are better informed on the programs that it has in place to provide support to all students.
9. The Academic Board recommends that the Faculty investigate how it can improve the experiences of Master of Pharmacy students, particularly with respect to the quality of and access to space, facilities and materials.
10. The Academic Board recommends that the Faculty focus on building its research profile through strategies involving staff support and development; mentoring to achieve higher national competitive research grant success and greater inclusion of RHD students in the Faculty's research culture.
11. The Academic Board recommends that the Faculty consider how it can provide improved infrastructure support for research students.
12. The Academic Board recommends that the Faculty designate one senior academic staff member, possibly the Associate Dean (Research and Innovation), to whom research students can address any issues relating to their candidature and who can act as a conduit for communication generally with research students.

SECTION III REPORT

(1) INTRODUCTION AND FACULTY PROFILE

While the University has been involved in the education of pharmacists since 1899, the Faculty was constituted as an independent Faculty only in 2000. The transition to faculty status reflected the emerging strength of pharmacy as a significant field of academic pursuit. Following a rapid period of expansion and growth, the Faculty has advised that it is now in a position to reflect on and consolidate past successes while planning for future growth and success.

The Review Team was particularly interested in exploring the impact on the Faculty of recent changes in its organisational structure and governance system and the mechanisms it has in place to measure the effectiveness of those changes.

1.1 Key teaching and learning activities

Since the last Academic Board Review, the Faculty has had a significant increase in the number of CSP places for the Bachelor of Pharmacy (from 122 in 2004 to 210 in 2008) and has also introduced a professional Master of Pharmacy degree. Enrolments in the Master of Pharmacy are quite low, which is attributed in part to market sensitivity to price.

At the postgraduate coursework level, the Faculty also offers the Master of Herbal Medicines. The Faculty is not planning to expand its postgraduate coursework offerings at this stage. The Review Team noted that continuing professional education for pharmacists is conducted through the Pharmacy Guild.

The Review Team explored with the various student groups the reasons why they had chosen this Faculty. Their decisions were strongly influenced by the Faculty's reputation.

International and NESB Students

It was noted the Faculty has a quota of 10% of its enrolments for international students. With the loss of full-fee paying local students, the Faculty is considering increasing the number of international fee-paying students. While there was a significant number of domestic students from NESB backgrounds, there were no data to indicate that this had an impact either on pass rates in the degree or pass rates in the oral component of the registration examination. The Faculty advised the Review Team that it had appropriate policies and mechanisms in place to ensure that any deficiencies in language skills were identified and remediated at an early stage of students' courses.

1.2 Faculty Culture

The SER advises that the size of the Faculty enables high levels of direct communication and consultation and creates a transparent and inclusive culture.

While this statement appears to be valid in general in respect of staff, undergraduate students and students in the Master of Herbal Medicines, the Review Team was advised of some concerns by Master of Pharmacy students and research students. The issues that they have raised are addressed elsewhere in this Report.

1.3 Organisational Structure and Governance System

Following the appointment of the current Dean in March 2008 the Faculty structure was reviewed and has been revised to provide more effective strategic support to the Dean (see also Section 2 Leadership).

The Dean is supported by a Faculty Executive Committee comprising:

- Dean
- Pro-Dean
- Associate Deans (Learning and Teaching) and (Research and Innovation)

- Faculty Manager
- Associate Director (Finance)
- Heads of Discipline

Reporting to the Faculty Executive Committee are the Learning and Teaching Committee and the Research and Innovation Committee.

Other aspects of the organisational structure and governance system include:

- Faculty Forum, held every 4-6 weeks to provide face to face communication between the Dean and Faculty staff.
- National Advisory Board, currently being established by the Dean
- Pharmacy Education Unit (PEU) established in 2005 through support from the SESQUI grant funding program.

Evidence was presented that Faculty Forums are an effective means of communication with both staff and students and that they provide an opportunity for input from these groups. They are well attended, with robust discussions. One example was of the curriculum review, where the Faculty Forum had a discussion of detailed procedures, following which there were some minor adjustments to the process. There was a general view that communication works well in the Faculty (email, faculty forum, weekly morning teas).

Commendation 1

The Academic Board commends the Faculty for the structures it has in place to facilitate communication between the Dean and staff (e.g. Executive Committee minutes on intranet; regular Faculty Forum; meetings with professoriate).

Key research funding agencies

The Review Team noted that in addition to the ARC and NHMRC, the Commonwealth Department of Health and Ageing provides significant funding for the Faculty through the Guild-Government Agreements (see Section 7.2.1 Research).

1.4 Challenges

The Faculty has identified the following key challenges

(a) Increase in number of pharmacy graduates relative to employment opportunities

As a result of the recent growth in the number of pharmacy schools, the Faculty anticipates that there will not be sufficient demand in the market for all graduates and has initiated strategies to deal with this challenge.

The Review Team explored with staff and students the projected career paths for pharmacy graduates. There was broadly an expectation that graduates would work as community pharmacists and students felt that the University of Sydney program provided them with the training necessary for registration as pharmacists. There did not appear to be concern among students that employment opportunities would not be available.

Commendation 2

The Academic Board commends the Faculty for its intention to work with Sydney Talent to provide students with industry employment experience during their candidature.

(b) Infrastructure

The Faculty has identified as a challenge the provision of high quality research space, including laboratories, for new academic staff and facilities for research students. The quality of its infrastructure has implications for the number of research students the Faculty is able to train, as well as the recruitment of highly qualified staff.

While there have been some significant infrastructure improvements, some facilities remain inadequate to meet the requirements of research students and of some academic staff. These issues are explored in greater detail in Section 7.2.2 Research Training.

(c) Accreditation requirements

In order to provide a degree that qualifies students for pre-registration, the curriculum is required to meet the standards set by the NSW Pharmacy Board and to meet all accreditation requirements. This influences the structure and delivery of the Faculty's curriculum. The Review Team also explored the extent to which accreditation requirements impact on student satisfaction. These issues are addressed in detail in Section 4 Student and Stakeholder Focus and Section 7 Academic Process Management.

(d) Increasing competition

There are currently 18 schools of pharmacy in Australia, an increase from ten schools in 2000. Entry into the Faculty's undergraduate programs remains highly competitive. The Faculty recognises that to sustain its position it must continue to perform and to distinguish itself as an outstanding education provider.

Undergraduate and postgraduate students confirmed that they had been attracted to the Faculty by its reputation as the leading provider of pharmacy training as well as its research profile.

The Faculty is giving particular attention to attracting high quality research students and has recently appointed a Marketing Manager, one of whose responsibilities is to market to prospective research students.

The Review Team also explored the outcomes of benchmarking to date and the Faculty's future plans for benchmarking that will provide a basis for its claims as the premier pharmacy faculty in the region. While recognising the complex nature of benchmarking and the differences between institutions, the Review Team formed the view that the Faculty could use national and international benchmarking data to drive improvements in both teaching and research (see Section 5 Measurement, Analysis and Knowledge Management).

Commendation 3

The Academic Board commends the Faculty for the appointment of a Marketing Manager with a specific responsibility to market to prospective research students.

(2) LEADERSHIP

2.1 How Senior Leaders Lead

(a) Development and Promotion of Vision, Culture and Values

The Faculty reviewed its senior leadership profile in 2008 following the appointment of the current Dean. The number of Associate Deans has been reduced from five to two and the role of the Pro-Dean has been revised. The new leadership structure is designed to support the Faculty's achievement of its strategic goals. In particular, it aims to provide management support to enhance performance in all areas of academic endeavour.

As set out in Section 1, the Faculty has a range of mechanisms to ensure information exchange from the Senior Executive Group to the Faculty.

The Review Team explored with staff their views on the effectiveness of the new structure and the role of the Pro-Dean. While it was seen as perhaps a little early to assess the effectiveness of the new structure, staff were clear that its main aim was to clarify roles and align them with the Faculty's Strategic Plan and that it provided a structure that would support the Dean and the overall management of the Faculty. They welcomed the role of the Pro-Dean in both supporting the Dean and providing specific management support for clinical placements and policies and procedures. They were also satisfied that the Research and Innovations Committee would help to improve support for research students.

While recognising the benefits to the Faculty of the new leadership structure, it was not, however, clear to the Review Team that the Faculty had any specific measures in place to measure its effectiveness.

Commendation 4

The Academic Board commends the Faculty for the successful implementation of a new governance structure, particularly its emphasis on specifying the duties of the Pro-Dean.

Recommendation 1

The Academic Board recommends that the Faculty develop clear mechanisms by which it can measure the effectiveness of its new leadership structure.

(b) Communication and Faculty Performance

The Review Team explored the extent to which staff and students understand the ways in which the Faculty's organisational and decision-making structure operates and whether there are mechanisms for communication through all levels of staff and students.

The Faculty identified a range of communication processes designed to support achievement of the Faculty's objectives

While staff and undergraduate students were confident that these communication processes were working well, this view was not echoed by Master of Pharmacy students and research students. The Review Team formed the view that the Associate Deans could play a significant role in this regard by providing direct access for such concerns.

Recommendation 2

The Academic Board recommends that the Faculty develop more effective mechanisms to ensure that its communication processes work well at all levels of staff and students.

2.2 Social responsibilities

(a) Ethical Behaviour

The Faculty has multiple processes for promoting and ensuring ethical behaviour in all interactions, and for monitoring and responding to breaches of ethical behaviour. The Review Team found that these processes work well and are understood by staff and students.

(b) Support of key communities

The Faculty supports a wide range of communities. The Review Team noted that the Faculty is taking a more strategic approach to such relationships as defined by its Strategic Plan. This includes:

- The formal National Advisory Board which is being initiated by the Dean. This Board will overarch some of the existing groups and provide a more co-ordinated approach.
- Engaging more fully with alumni. The Faculty is undertaking a review of its alumni relationship capabilities with the aim of creating stronger ties with the community and developing life-long links with its alumni. The Review Team noted that the Faculty was exploring mechanisms to encourage greater alumni involvement from more recent graduates.
- Presentations to industry.

Commendation 5

The Academic Board commends the Dean for the establishment of a National Advisory Board which will facilitate a broader strategic approach to its relationships with key communities.

Affirmation 1

The Academic Board affirms the Faculty's intention to review its alumni relationship capabilities with the aim of creating stronger ties with the community and developing life-long links with its alumni.

(3) STRATEGIC PLANNING

3.1 Strategy Development

(a) Strategy Development Process

The SER advises that the Faculty has a well developed and inclusive strategic planning process. The Strategic Plan 2010 was developed in late 2006 and promulgated in early 2007. In February 2008 the Faculty held a retreat to review progress against the Strategic Plan and to plan activities for the future. The outcomes of the retreat were circulated to all staff and in June 2008, a half-day workshop was held to follow up on the February retreat.

The Review Team was satisfied that all staff had been given an opportunity to be involved in strategy development in the Faculty. It was not clear, however, that students had been given an opportunity to be involved in this process and the Review Team felt the Faculty should find a mechanism to provide them with some sense of ownership.

Recommendation 3

The Academic Board recommends that the Faculty consider how it can improve its system of student representation so as to facilitate student involvement in its strategic planning process.

(b) Developing strategic challenges/advantages

The SER sets out the inputs to the Faculty strategic planning process. These include:

- Benchmarking data: issues relating to benchmarking are also addressed in other sections of this Report. It was not always clear to the Review Team how the Faculty set objective goals in benchmarking and what it had learnt to date.
- Outcomes of internal reviews: Internal reviews provide a good focus for strategic planning, particularly the recent curriculum review and the audit of assessment practices.
- Key performance indicators: the Faculty indicated that it had found it necessary to develop its own KPIs in order to provide a more detailed assessment of outcomes than was available through University KPIs.

Commendation 6

The Academic Board commends the Faculty for the internal reviews which are informing its strategic planning process.

(c) Strategic academic objectives

The Faculty identified a range of particular challenges at the June 2008 retreat. These challenges are addressed elsewhere in this Report and include:

- Abolition of domestic undergraduate full-fee paying places
- Increase in number of pharmacy graduates relative to employment opportunities
- Infrastructure
- Clinical Placements
- Implementation of the new BPharm curriculum
- Maintaining quality of teaching with large class sizes
- Increasing the number of staff who obtain research funding and diversifying the funding base
- Attracting new high performing staff
- Increasing the number of research students
- Increasing community engagement

3.1 Strategy Deployment

The SER advises that that the Faculty Strategic Plan is actioned with a focus on the Faculty's KPIs. KPIs have been developed for each strategic goal to ensure that the Faculty's measurement system covers all key deployment areas, student segments and stakeholders. The Review Team formed the view that the Faculty had developed mechanisms for deploying strategies but that responsibility for implementing these would need to be clearly defined.

(4) STUDENT FOCUS

4.1 Knowledge of students and stakeholders

(a) Student and stakeholder engagement

The Faculty has a range of mechanisms to obtain input from students and stakeholders. In the revised governance structure, the Pro-Dean has specific responsibilities for consultation and communication with students and stakeholders, particularly those in a clinical setting.

The Faculty is developing a formal approach to student engagement and has liaised with the Academic Board review of student engagement in University processes to ensure that the approaches are aligned. This formal process of engagement includes a planned series of lunches with the Dean, Pro-Dean and student representatives at which issues can be brought forward.

There was some evidence from all groups of students that there is currently only a limited level of engagement between the Faculty and students. Students were not always clear on the mechanisms for addressing specific issues, which ranged from noise issues in undergraduate lectures, unsafe laboratories for research students, and difficulties in accessing rooms experienced by Master of Pharmacy students. At the same time, undergraduate students confirmed that they had been engaged with the curriculum review process. These issues are also addressed elsewhere in this Report.

Commendation 7

The Academic Board commends the Faculty for its development of a formal approach to student engagement.

(b) Obtaining and using student, stakeholder and market knowledge

The Review Team noted the mechanisms the Faculty has in place to determine the needs, expectations and preferences of its students and stakeholders. These include formal teaching evaluation mechanisms; attending industry forums; staff retreats; internal University information and community activities. The Pharmacy Education Unit has been effective in the use of this market knowledge to develop strategies to meet the expectations of students and stakeholders.

It was not clear to the Review Team, however, that all student groups felt that the Faculty was meeting their expectations, particularly research students and Master of Pharmacy students

Recommendation 4

The Academic Board recommends that the Faculty develop mechanisms whereby it can assess the effectiveness of the strategies it has designed to meet the expectations of students and stakeholders, with particular reference to research students and Master of Pharmacy students.

(c) Clinical Placements

Issues relating to clinical placements arose in the context of stakeholder relationships. The increase in numbers of students is making it increasingly difficult to obtain appropriate clinical placements for all students. The Faculty indicated that it felt the management of practical experiences could be better integrated across health faculties within the University, which in turn would encourage greater collegiality across health professionals. It is endeavouring to work in parallel with other health professionals and is involved in pilot activities of interprofessional learning. In particular, the Faculty has a history and set of relationships with rural centres and has tapped into the Faculty of Medicine Rural Clinical Schools.

All pharmacy students are keen to obtain placements in hospital pharmacies, which can provide them with greater learning opportunities than clinical pharmacies, but there is only a limited

number of such placements available. Other issues of concern to students in relation to clinical placements related to the daily length of time on placement, with students preferring a full-day rather than the current four hours, and, for Master of Pharmacy students, an earlier start to their Pharmacy Practice unit so as to better prepare them for clinical placement in a pharmacy.

Recommendation 5

The Academic Board recommends that the Faculty consider how it can respond to the wishes of the students to improve the value of clinical placements in their training.

Affirmation 2

The Academic Board affirms the Faculty's intention to investigate how the management of practical experiences can be better integrated across health faculties within the University.

4.2 Student and Stakeholder Relationships and Satisfaction

(a) **Building relationships with students and stakeholder**

The Faculty has a range of programs and events to ensure relationships are established, maintained and nurtured. These include the TSP Showcase, SUPA activities and programs for high school students, teachers and careers advisors.

While this range of programs and events is commendable, the Review Team did not form the view that all students were aware of them. In particular, the undergraduate students interviewed had no knowledge of the TSP Showcase and the mentoring offered by TSP senior students to first year students. No specific recommendation is made regarding this issue, as this relates to issues of communication with students, which are addressed elsewhere in this Report.

(b) **Determining student and stakeholder satisfaction**

Feedback

The Faculty has a range of mechanisms to capture student and stakeholder feedback which are set out in other sections of this Report. These include USE, SCEQ and other formal teaching evaluation mechanisms; strategic planning processes; governance structures, including the Staff/Student Liaison Committee; and, for external stakeholders, the newly established National Advisory Committee.

Students generally felt that staff were responsive to their feedback and this was facilitated by year coordinators and the Staff/Student Liaison Committee. There were, however, concerns that it was not always clear to whom feedback should be provided outside the formal mechanisms noted by the Faculty. Examples of this were: some dissatisfaction by Master of Pharmacy students with the content of Pharmacology lectures; undergraduate students not knowing how the issues of noise in lectures could be brought under control; research students not knowing to whom they should address specific infrastructure problems.

With respect to formal mechanisms for student feedback (USE, SCEQ etc.), the Review Team noted that the Faculty has very low scores. Comments from undergraduate and postgraduate coursework students on the Review Day, however, indicated that they were very satisfied with quality of their courses.

Recommendation 6

The Academic Board recommends that the Faculty ensure that all students are made aware of the mechanisms through which they can provide feedback on all aspects of their courses and candidature and how this feedback will be addressed. In particular, there may be a need to provide a specific focus for responding to research student feedback (also addressed in 7.2 Research and Research Training).

External stakeholders**Academic titles**

External stakeholders present particular challenges for the Faculty and it is aware of the importance of establishing more formal arrangements to reduce risk and improve stakeholder engagement. The Review Team noted the importance of the use of academic titles in relation to improving opportunities for clinical placements in hospitals.

(5) MEASUREMENT, ANALYSIS AND KNOWLEDGE MANAGEMENT

5.1 Selection and use of information and data

The Review Team noted the Faculty's summary of the data used to measure performance and support Faculty decision making.

The Review Team noted the role of the Pharmacy Education Unit in this respect and explored the relationship between that unit and the Learning and Teaching Committee. There was no evidence of any tension between those two groups.

5.2 Management of Information and Knowledge

While recognising the complex nature of benchmarking and the differences between institutions, the Review Team formed the view that the Faculty could make better use of national and international benchmarking data to drive improvements in both teaching and research.

Recommendation 7

The Academic Board recommends that the Faculty continue to explore mechanisms for meaningful national and international benchmarking to drive improvements in both teaching and research.

(6) WORKFORCE FOCUS

6.1 Workforce Engagement: Engaging staff to achieve organisational and personal success

(a) Workforce enrichment

The Faculty has advised that it fosters a culture conducive to high standards of academic performance and a motivated workforce through open communication, informal mentoring and performance management and development. These mechanisms are explored in greater detail below.

(b) Workforce and leader development

The Faculty has implemented a range of workforce development and learning systems designed to support staff to achieve improved academic performance.

The University's PM&D program is an essential tool for academic staff development in the Faculty. The Review Team found that academic staff were satisfied that the PM&D process was supportive of their development, although this view was not echoed by general staff. Some members of the general staff expressed the view that opportunities for career development were limited and, from technical staff, that their advice on matters such as the management of equipment was not listened to. There had been some concern that research staff were unable to benefit from the PM&D process, although this was changing now that externally funded research-only staff were eligible for promotion.

The Review Team explored the extent to which staff from non-English-speaking backgrounds may need support with language skills and was advised that in the rare occasions where such support was required, the staff member concerned had been appropriately supported in improving their English language skills.

The Faculty places a strong emphasis on informal mentoring and the Review Team explored the effectiveness of this strategy. An effective mentoring system to support early career staff in their applications for external research funding has been developed in the Faculty. While staff indicated that they were happy with informal mentoring and did not see any reason to formalise this process, the Review Team formed the view that a more formal mentoring system could be introduced. The PM&D process could be utilised more proactively as a source of mentoring. As an additional resource to the Faculty, the Review Team also notes that SydneyPeople is able to provide some outstanding professional expertise, enhancing and rejuvenating the mentoring process, that should not be overlooked.

Other mechanisms for workforce development include attendance at the ITL Principles and Practice of University Teaching and Learning program; development of a work-based learning program for general staff in collaboration with Learning Solutions, and opportunities for leadership development under the new Faculty governance structure.

The Review Team explored the Faculty's use of the SSP program in the development of staff research profiles. It was noted that few people in the Faculty had the opportunity to access SSP and it was suggested that this was in part because family responsibilities made extended periods of work overseas problematic. The Review Team formed the view that encouraging greater uptake of SSP might be an effective mechanism for the Faculty to improve its research profile, noting that it was possible to take SSP within Sydney.

The Review Team's recommendations relating to the improvement of the Faculty's research profile, including the deployment and integration of workforce development strategies referred to above, are set out in Recommendation 10, Section 7.2.1 Research.

(c) **Workforce engagement**

The Faculty has a range of processes designed to reward and recognise performance, contribution to the Faculty and personal achievement.

The Review Team found that these informal and formal processes are working well, in particular the weekly morning teas, which were open to both staff and research students and provide a good mechanism for social interaction.

6.2 Workforce Environment

Workforce capability

The Faculty endeavours to ensure that its staff have the skills and capabilities to meet current and emerging needs in teaching and research by processes to ensure that staff can (a) balance teaching and research and (b) collaborate with senior staff on grant applications. The Review Team explored the mechanisms within the Faculty to better support all levels of staff, in particular early career staff, to achieve an appropriate balance of teaching, research and administration.

The Review Team found that the Faculty's processes for teaching relief for early career and new staff worked well and provided an effective mechanism for them to develop their research profiles.

The Review Team also found that the Faculty's approach to collaborative research, where early career staff were encouraged to partner with senior staff on grant applications, was an effective means of building up the research profile of early career staff.

Commendation 8

The Academic Board commends the Faculty for implementing processes for teaching relief and for encouraging collaboration with senior research researchers on grant applications for early career staff, which are effective mechanisms for building their research capability.

The Review Team would also like to draw to the Faculty's attention issues that were raised regarding maintenance of laboratory and other facilities within the Faculty. While this is of particular concern to research students, there is evidence that some staff believe that their ability to work productively is hampered by poor levels of support for laboratory maintenance, with potential OHS issues arising from this. This is a matter which requires some investigation by the Faculty. See also Section 7.2.2 Research Training.

(7) ACADEMIC PROCESS MANAGEMENT

The Faculty seeks input from a broad range of stakeholders and is involved in a continuous cycle of review and quality enhancement for all its programs, a number of which have received professional and/or international accreditation. The Review Team noted the range of strategies the Faculty has in place to encourage high academic quality, address student and stakeholder needs and achieve sustainable educational programs. Issues relating to the effectiveness of these strategies are also addressed elsewhere in this Report.

7.1 Coursework program design and delivery

(a) Core competencies and program characteristics

The Bachelor of Pharmacy and Master of Pharmacy courses include units of study designed to meet the requirements of the Pharmacy Board for registration as a Pharmacist and are approved by NAPSAC. The Faculty has a strong tradition of educational scholarship and has had a consistently high performance in the Teaching Improvement and Equipment Scheme and the Scholarship of Teaching Index, both of which are evidence of a high level of teaching quality.

Commendation 9

The Academic Board commends the Faculty for its high performance in the Teaching Improvement and Equipment Scheme and the Scholarship of Teaching Index.

(b) Course program design and curriculum review

The Faculty has developed a new teaching and learning process which strives to deliver high academic quality, address students and stakeholder needs and achieve sustainable educational programs.

The Faculty has recently undertaken a review of its Bachelor of Pharmacy program in order to ensure that graduates have the requisite skills and knowledge for their careers as pharmacists. The new curriculum is more integrated across the Disciplines and, based on successes in the Faculty of Medicine, is based around four themes:

- Basic and Pharmaceutical Sciences
- Professional Practice in Pharmacy
- Personal and Professional Development
- Society and Pharmacists

The new program is a combination of new units of study and new ways of teaching. Feedback from students indicated that the Faculty's introduction of PBL tutorials into the senior years has been successful.

The new first year program commenced in 2008 and the Faculty has procedures in place to facilitate integration of the new curriculum. The Review Team was satisfied that the Faculty has developed robust processes to measure the success of the new curriculum.

Accreditation

The Review Team explored the ways in which accreditation requirements impact on the pharmacy curriculum. It was noted, for example, that the current undergraduate pharmacy program does not provide any flexibility for students to undertake electives and that to some extent this is because of the constraints of accreditation. While the Faculty is required to teach to a competency document and the curriculum is based on outcomes, with units of study not prescribed, there was little scope for electives if the outcomes were to be achieved within the degree timeframe. There was some scope for flexibility in the final year and this was being addressed in the new curriculum, when students would be given a choice of a major or honours. Undergraduate students indicated that they would like to have some electives e.g. hospital/community, which could help them to decide on a career path.

(c) **Program design/anticipating and preparing for individual differences in learning capabilities, rates and styles**

Within the constraints of accreditation requirements, the Faculty has a range of delivery programs that cater to individual learning rates and styles.

Programs to provide support for students at all levels include:

- Talented Student Program
- Student Industry Placements Program
- Summer Vacation Scholarship

The Review Team had some concerns that students were not as well informed as they might be about these programs and in particular, as mentioned in Section 1 of this Report, undergraduate students were unaware of the existence of the Talented Student Program and how they might be able to participate.

Recommendation 8

The Academic Board recommends that the Faculty consider how it can ensure how students are better informed on the programs that it has in place to provide support to all students.

(e) **Coursework Delivery**

A combination of delivery and learning strategies is used to engage students in active learning, stimulate their curiosity and enhance their motivation to learn.

It was noted that a large component of the pharmacy course is didactic and this was seen as necessary if students were to graduate with the capacity to meet registration requirements. Students appreciated the forms of teaching available in later years, particularly PBL, and the opportunity to work together to solve problems.

The Review Team formed the view that, despite the Faculty's low CEQ scores, students were satisfied with the quality of their courses. While workloads were high, students were aware that this was necessary in order to give them the skills required to work as pharmacists. Undergraduate students' main concern related to discipline, with excessive noise in lectures and students not kept under control (although they recognised that not all students in science lectures would necessarily be pharmacy students). The Review Team explored the mechanisms students felt were open to them to resolve this issue and noted that while they knew they could speak to their year coordinator, they had no confidence that this problem was able to be resolved. Undergraduate students also indicated that they were not always aware of the name of their student representative or how to communicate with the unit of study coordinators if the student representative was unhelpful.

The Review Team found a number of differences in the experiences of Master of Pharmacy and Bachelor of Pharmacy students in their responses to the quality of delivery of their courses. Undergraduate students tended to be more satisfied with all aspects of delivery of their course, while Master of Pharmacy students found more difficulties with access to materials, poor teaching spaces and lack of access to facilities.

Recommendation 9

The Academic Board recommends that the Faculty investigate how it can improve the experiences of Master of Pharmacy students, particularly with respect to the quality of and access to space, facilities and materials.

Group Work

The undergraduate students interviewed reported that they were not generally in favour of group work, finding that it was not always conducive to learning and was not a fair indication of the amount of work individual students may put in, particularly high-achieving students.

(f) Research-led teaching

The SER advises that the Faculty aims to develop and articulate research-led teaching to engage students in life-long knowledge discovery and creation. The Review Team noted that the Faculty has a strong record of research into teaching and learning, which is facilitated through the Pharmacy Education Unit.

(g) Student Satisfaction and Feedback

Student satisfaction is measured through the formal evaluation mechanisms of USE, CEQ and SCEQ. As indicated above, while the Faculty outcomes are relatively low, the students interviewed on the Review Day generally had very positive comments about the quality of their course. There was some indication that outcomes related to assessment workload as well as to a low sampling size. Undergraduate students indicated that they generally found assessment levels to be appropriate but would appreciate more continuous assessment. The Faculty advised that it had looked at how assessment load could be reduced and was also addressing load in relation to assessment timing. Both CEQ and USE data were improving as a result of these initiatives.

The Faculty also has a range of other internal mechanisms to monitor performance including, as part of the curriculum review, an *Evaluation of Coursework Teaching* conducted by the Pharmacy Education Unit. Outcomes of this evaluation included the introduction of a systematic process for ongoing evaluation of teaching and an Audit of Assessment Practices.

<p>Commendation 10</p>

<p>The Academic Board commends the Faculty for the Audit of Assessment Practices which has undertaken as an outcome of its Evaluation of Coursework Teaching.</p>

Other quality assurance mechanisms

The Faculty advises that it has a variety of other mechanisms for ensuring teaching quality. These include

- Benchmarking (see Recommendation 7)
- High level of support services from administrative and technical staff
- Educational Designer appointed to the Pharmacy Education Unit.

7.2.1 Research

(a) Core competencies

Specific areas of research strength in the Faculty include Pharmaceutics, Pharmaceutical Chemistry and Pharmacy Practice.

(b) Encouraging research excellence

The Faculty has taken a pro-active approach towards assisting researchers to achieve and sustain their research potential. Its recruitment strategies are aimed at engaging high potential staff and providing them with high quality research and computing facilities, a reduced teaching load in the first year of employment, and semi-formal mentoring through the Research and Innovation Committee. The SER advises that the Faculty's strategy of research mentoring is aimed at increasing significantly the proportion of staff with a track record enabling them to compete successfully for ARC and NHMRC grants. The Review Team believes that it would be appropriate for the Faculty to implement a more formal mentoring process to help it build its research profile through encouragement of and support for national competitive research grant applications.

Other mechanisms to support research productivity include:

- The creation of key strategic positions to guide and support the Faculty's overall research and research training program
- Discipline of Pharmacy Practice 'journal club' where club members (staff and students) select a paper and review the paper as a group
- Support of Faculty-wide initiatives through the RIBG
- Support for international research collaborations
- Support for attendance and presentation of papers at national and international conferences.

The Review Team explored the success of the above strategies with staff. There was a general view, both from early career and other staff that they were working and the Faculty felt positively about its success in improving research outcomes. The Faculty advised that it has achieved an increase in the number of grants from ARC/NHMRC from nine in 2006 to 13 in 2007 indicating that the Faculty's support strategies are having an impact on outcomes. The Review Team also noted the success of the Pharmacy Practice group in 2007/8 in obtaining a large amount of competitive funding (\$4 million in 2007/8) under the 4th Guild-Government agreement both through tender and investigator initiated grants.

However, although there had been significant recent improvements, research activity appears to be relatively low. 25-30% of staff are responsible for approximately 70% of the Faculty's competitive research income. The Review Team notes that it is important for the Faculty to focus on increasing the rate of applications (and consequently the success rate) for national competitive research grants.

The Review Team explored other mechanisms for the Faculty to improve its research profile, including the possibility of increasing the number of Fellowships. The Dean indicated that every effort had been made to increase the number of Research Fellows in the Faculty. It was noted that Linkage grants were a valuable tool for the Faculty in obtaining grant funding.

Research in pharmaceutical science and practice may be of increasing importance in view of the recent expansion in the number of Pharmacy graduates nationally. This is an area where the University of Sydney should aspire to be a national leader.

Recommendation 10

The Academic Board recommends that the Faculty focus on building its research profile through strategies involving staff support and development (see Section 6 Workforce Focus); mentoring to achieve higher national competitive research grant success and greater inclusion of RHD students in the Faculty's research culture.

Commendation 11

The Academic Board commends the Discipline of Pharmacy Practice for the implementation of a journal club which engages both staff and students in learning about research and research methods as well as developing facilitation skills.

7.2.2 Research Training

Twenty new research students commenced their PhDs in the Faculty in 2007.

The Faculty has listed a range of processes designed to support research students to succeed. These include:

- Infrastructure support
- Weekly seminars
- Financial support for equipment and international travel
- Annual Postgraduate Student Conference
- Facilitation of access to scholarships and research funding
- Induction for new research students

The Review Team found that while research students were satisfied with the quality of their supervision, there were some concerns with the overall management of their candidature. The view was expressed that the focus of the Faculty was on its undergraduate students.

The research students interviewed were particularly concerned with the quality of their facilities and the lack of support for basic equipment such as printers and computers they felt that they received from the Faculty. Inadequate infrastructure was compounded by safety issues relating to poor air-conditioning, fumes etc. The official channels for managing laboratory infrastructure problems were not clear to them, which was a source of great frustration to both staff and students.

There was also evidence that communication channels with research students were poor. One example given was a recent change to eligibility for PRSS funding which caused considerable inconvenience and potential loss of conference deposits by some students. Research students would welcome a more collaborative environment in which problems could be addressed in a more timely manner.

Comments made to the Review Team indicated that processes for support of research students were not working as well for all students as the Faculty appeared to believe. Students were not always aware of the existence of some of the processes listed. On a more positive note, however, the Postgraduate Student Conference was very effective and research students found that their social interactions had improve with the opening of a postgraduate common room.

Commendation 12

The Academic Board commends the Faculty for the establishment of a postgraduate common room.

Recommendation 11

The Academic Board recommends that the Faculty consider how it can provide improved infrastructure support for research students.

Recommendation 12

The Academic Board recommends that the Faculty designate one senior academic staff member, possibly the Associate Dean (Research and Innovation), to whom research students can address any issues relating to their candidature and who can act as a conduit for communication with research students generally.