

# **SELF-REVIEW FOR HIGHER EDUCATION INSTITUTIONS**

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## **PART B: Self-Review in Higher Education: Experiences from the University of Queensland**

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### **Introduction**

Self-review forms an important part of the external review process embedded in practice at the University of Queensland (UQ) since 1985. The self-review, which is preparatory to an external evaluation, is one part of the quality improvement cycle. In this chapter, we describe the evolution of the review system at UQ, the framework for the review process, and present two case studies to illustrate the principles and purposes of self-review. The example case is of an academic unit within the University, whilst the second is of a large generalist undergraduate degree program. While the scale of each self-review differs and the processes used in self-review vary in complexity, there are a number of important principles common to the reviews which helped contribute to successful outcomes.

Self-reviews should occur regularly, and be comprehensive in scope, covering both the organisation's activities and their results (Brereton, 1996). The review should ask what the unit is doing and how and why it is doing it. Also, the review should ask if there is something it is not currently doing that it should be doing. A key point to be noted is that the self-review should be seen as leading to demonstrable improvements in the organisation, and not a report that explains the current state of practice (Kells, 1995). Participation in improvement-oriented self-reviews can help staff to feel more valued and committed to the organisation, as well as enhance openness and improve the effectiveness of the organisation (Kells, 1995).

### **The University of Queensland**

The University of Queensland, the first university in the State, was founded in 1909. In 2008, it has just over 37,500 enrolled students, drawn from over 113 countries, including 9,900 students enrolled in postgraduate programs. The University has seven faculties and six research institutes. Students can study a wide range of programs at the undergraduate level including, associate degrees, single or dual bachelor degrees and honours, through to post-graduate masters and PhD degrees. The University employs approximately 5,600 staff. In 2006, UQ received \$215 million in research income. The University can be described as a modern university with an integrated approach to: (1) teaching and learning; (2) research; (3) community service; and (4) innovation and commercialisation.

## Evolution of Reviews at the University of Queensland

In 1985, a formal review system was initiated at UQ. This arose from the recommendations made by an Academic Board<sup>1</sup> Committee on Staff Development and Reviews of Academic Performance, and in response to views expressed by the Commonwealth Tertiary Education Commission. Under the auspices of the Vice-Chancellor, eleven reviews of academic departments were undertaken during 1985–1986. In October 1986, the Academic Resource and Planning Committee (a committee no longer in existence at UQ) and the Academic Board Standing Committee<sup>2</sup> jointly assessed the effectiveness of the University's review procedures.

In 1989, the University Senate approved the *Guidelines for Reviews of Academic Departments*, which were based on the evaluation of the procedures used in the eleven reviews. The guidelines advised that the purpose of departmental reviews were: to examine the aims and to justify the existence of departments; to determine the extent to which the collective goals and programs were being achieved; and, where appropriate, to suggest other possible aims that could be pursued and the means by which they could be achieved. Reviews under this system were to be conducted under the formal auspices of the Academic Board. Continued refinements were made to review procedures over the ensuing years. In May 1994, the National Committee for Quality Assurance in Higher Education advised that the University's departmental review process was comprehensive and was a strength of the quality assurance mechanisms of the University. In April 1996, the University Senate approved the *Review of the Departmental Review Process — Report of the Review Panel*. This review had sought to clarify the purposes of the review process and to suggest procedural improvements to better serve the defined purposes of the reviews.

In August 2000, the University moved to a school-based faculty structure. This consolidated 65 discipline-based departments into 35 multi-disciplinary schools, and precipitated the need to revise the departmental review process. Concomitant with these university changes, the federal government had established a national quality assurance body (the Australian Universities Quality Agency) and the national council of ministers for education, MCEETYA, had approved National Protocols for Higher Education Approval Processes in 2000 (Department of Education, Training and Youth Affairs, 2000). In 2001, Academic Board received a *Report on Reviews of Academic Departments* which observed that the current process being used provided a robust mechanism for quality assurance and improvement within the university. The process was revised in so much as to focus on the school as the unit of review, rather than the department.

Another important development at UQ in the 1990s was the establishment of research centres and institutes, and from 2000 these were included in the schedule

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<sup>1</sup> Academic Board is constituted by the University of Queensland Senate to provide authoritative academic advice to the Senate and the Vice-Chancellor. It currently has a membership of approximately 125 members.

<sup>2</sup> Academic Board Standing Committee is a committee of 10 members drawn from each faculty, the student group and the President and Deputy President of the Academic Board. It is chaired by the President of Academic Board. This Committee functions as a de-facto executive committee of Academic Board.

of reviews. In March 2003, a formal policy for the review of all research institutes, centres and units was approved by the University Senate.

In September 2003, AUQA's Audit Report of UQ commended the school review process. It stated that:

*AUQA commends UQ for its long-standing school review process, the central guidelines, the control exercised over the process by the Academic Board Standing Committee, and the continual attention to the ways in which the process may be improved. (AUQA, 2003:9).*

In October 2003, a parallel review process for the review of academic and administrative service units was approved by the University Senate. It should be noted that these periodic reviews form just one part of the University's quality management and assurance framework (The University of Queensland, 2003).

### Framework for the Review Process at the University of Queensland

Hence, since 2003, there have been procedures for reviews of: (1) schools; (2) research institutes, centres and units; and (3) academic and administrative services units. These reviews have been conducted on a rolling septennial cycle. The reviews are governed by three key UQ Senate approved policies each under the auspices of different governing bodies (**Table 1**). Policy 1.40.2 is reproduced in the **Appendix**.

**Table 1:** Reporting structure and policies for reviews at UQ

Reviews of organisational units	Governing body for reviews	UQ Policy for reviews	Web address for policy
Schools	Academic Board	1.40.2 Review of Schools and Academic Disciplines	<a href="http://www.uq.edu.au/hup/index.html?page=24982&amp;pid=24963">http://www.uq.edu.au/hup/index.html?page=24982&amp;pid=24963</a>
University research institutes, centres and units	Deputy Vice-Chancellor (Research)	1.30.6 Policy and Procedures on the Establishment, Approval, Administration and Review of Institutes and Centres	<a href="http://www.uq.edu.au/hup/index.html?page=24979&amp;pid=24963">http://www.uq.edu.au/hup/index.html?page=24979&amp;pid=24963</a>
Academic & administrative service units	University Secretary & Registrar	1.40.3 Review of Academic and Administrative Service Units	<a href="http://www.uq.edu.au/hup/index.html?page=24983&amp;pid=24963">http://www.uq.edu.au/hup/index.html?page=24983&amp;pid=24963</a>

Since the inception of the review system at UQ, the process has been responsive to the national bodies governing higher education quality assurance in Australia, and in most instances UQ has been a step ahead of national policies. The framework

around reviews at UQ is flexible, adapting as the institution evolves. Over the past two decades, the University has grown in size and the organisation has become increasingly complex, particularly with the introduction of research centres and institutes. The student population has also increased dramatically, resulting in greater demands on the academic units. In the global climate of greater competition amongst tertiary institutions for quality students and staff, the roles of reviews in improving the various organisational units within UQ have become paramount. To better understand the review process, the following section will elaborate further on the process of school reviews at UQ before providing two case studies.

### **The Review Process for Academic Schools**

School reviews at UQ require a process of self-assessment, benchmarking, reflection, strategic and operational planning and external peer review, occurring on a seven-year cycle. A generic set of terms of reference is provided to the academic school. In consultation with the Academic Standing Committee, the school can modify these to suit the needs within their unit. Additionally, an external review committee is formed with the members being either external to UQ, including the chair, or internal to the University but external to the School itself. The schedule of upcoming reviews are released in a timely manner so that Schools have adequate time to conduct their self-reviews and prepare the necessary documentation for the external review committee.

Early each year, a training workshop is held to assist the heads of those schools to be reviewed in the following calendar year. The workshop covers the benefits of reviews and possible self-review strategies. At this workshop, one session is dedicated to having a head of school from a recently reviewed school speak on her or his experiences, elaborating on what worked and did not work for them in their preparation and self-review stages. Issues relating to the timing of, and time needed for, self-review activities along with resourcing needs are frequently discussed in this workshop. In this way, instances of best practice are shared with other units about to embark on their own reviews.

The President of Academic Board or an Academic Board Standing Committee member is assigned to the external review committee to assist in the review. Following the workshop for heads of schools, this senior academic will visit each school, speak individually to the head of school, and then address a whole school meeting regarding the objectives and processes of the review. An important part of this address is to illustrate to the school community the value of the review process, and the importance for them to genuinely engage with the process. Additionally, expectations for self-reviews and the activities to be engaged in as part of the self-review are articulated. The intention is to provide a framework to guide the process, whilst allowing freedom for the schools to drive their own self-review.

Given this freedom within a broad framework, the schools must determine their own mechanisms for self-review with most relying on a combination of strategies. Typically, the head of school will take charge of the process, selecting a core team to plan and implement the self-review. In many instances, this core team will consist of both senior and more junior members of the school, as well as staff with different

functions (for example, research-only, teaching and research staff, and administrative staff). Where schools are multi-campus, it is important to involve personnel and students from across the campuses in the self-review activities.

Typically, a whole-school retreat will be held early in the process. In most cases, this retreat will be held at an off-campus venue, signalling the seriousness of the activity for all members of staff. Targeted workshops will then be held with particular groups of stakeholders around performance and planning of: (1) learning and teaching; (2) research (3) innovation and commercialisation; and (4) community engagement. Because international student fee income is becoming increasingly important to Australian universities, organisational units are also asked to explore this in depth as part of the review process. Focus groups of employers and students will be held, along with surveys to elicit information on specific issues. These strategies align with observations from King (1998) that it is usual for a combination of strategies to be used in the self-review process.

As Meade and Woodhouse (2000) observed from experience in reviewing the effectiveness of the New Zealand Universities Academic Audit Unit, the more thorough the school's self-review activities, the more successful the overall review or audit. Using self-review as a transformative process ensured greater returns. Those schools which embraced the self-review process, and saw this stage as a means of advancing the mission and success of the school, gained much more and received more advantageous review recommendations. Meanwhile, those schools that regarded self-review as another compliance check were more likely to have reviews which found problems and recommended major, and often, unwanted changes. The willingness to seek improved approaches, determine the efficacy of something previously untried, test hypotheses, and resist complacency is a sign of institutional vigour (Middle States Commission on Higher Education, 2002:4)

The self-review culminates with the submission of a review document, which along with other submissions from interested internal and external parties, form the written preparatory material for the external review committee. The committee visits the university to conduct its review, and meets with senior officers of the University and the faculty, staff and students of the school, and key external stakeholders. Constituent student groups are invited to participate in the interviews, including undergraduate students, postgraduate coursework students, higher degree research students and international students. A review report is then planned, the thematic points of which are first discussed with the President of the Academic Board, the Senior Deputy Vice-Chancellor and the executive dean of the faculty, prior to delivering verbal feedback to the school on the final afternoon of the review week. It is usual practice for a first draft of the report to be written before the external review committee disbands and leaves the University.

A comprehensive written report is then prepared within the next month under the stewardship of the external review committee chairperson, with feedback from all other members of the committee. This final report is delivered to the President of the Academic Board. This report is then discussed with the senior executive of the University, and the school is asked to consider and respond to the review report. The school's response, in combination with the review report, is then considered by a

combined meeting of the Standing Committee<sup>3</sup> and the Senior Deputy Vice-Chancellor, and the planned action conveyed to the Academic Board, and to the University Senate. Where changes have impact upon students, such as in the case of discontinuing a particular specialty post-graduate degree, plans for the accommodation of currently enrolled students are developed. Schools may be required to develop a six-month implementation plan that addresses how they will meet all, or some of the recommendations. This is especially likely to be the case where recommendations of some complexity are suggested. Then, at 18 months, schools are required to submit an implementation report on the outcomes of the recommendations made in the review report. In some cases, prior to reporting through Academic Board to the University Senate, some schools have been required to attend to some recommendations or make further changes prior to acceptance of their implementation report.

### **Review of the School of Economics at The University of Queensland**

The UQ School of Economics has recently become the largest and most comprehensive teaching and research unit of its kind in Australia. It has grown significantly since its previous review in 2001 and benefited greatly from the recommendations made to the University by the review committee at that time. Over the past decade, a large number of economics schools/departments in Australia have either been closed or absorbed into business schools. This has usually occurred because of declines in numbers of students choosing to undertake programs specifically in economics.

The discipline of economics is not closely linked to a professional association but, instead, produces graduates with strong analytical and statistical skills that are applicable in a range of organisational contexts, both in the public and private sectors. The absence of a close link with a professional association poses challenges which can only be overcome by first class quality assurance in programs, carefully targeted marketing, close connections with secondary schools and strong external relations with potential employers and alumni. The necessary reliance upon significant enrolments of international fee paying students, given the particular Australian system of university funding, poses a special set of challenges with regard to admission standards, student advice, student welfare and the maintenance of academic standards.

Given these challenges, the seven yearly review process at UQ has been particularly valuable for the School over the years. Not only have external review committees made important recommendations but the ratification of School goals by these committees has led to support from the University for new initiatives that would have been less likely without review committee support. There is a growing tendency for academic schools to be ranked and assessed in terms of the quantity and quality of research outputs and this can have costs in terms of teaching and program quality in research intensive universities. The review process is a welcome counterbalance to this tendency because it provides external assessment of all

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<sup>3</sup> Standing Committee has a student member who is particularly attuned to student issues which may arise from recommendations of the review report.

aspects of a school's activities. Review committees rarely lose sight of the fundamental importance of teaching in the mission of a university.

In the School of Economics, the production of a review submission (i.e. a report developed from the detailed self-review process undertaken in the School) is very much a team effort, led by the Head of School. Two priorities dominate in the construction of a submission: first, everything must be as evidenced-based as possible and, second, an explicit set of goals and targets over the coming years must be developed and clearly identified. The process is quite simple: members of the School Executive are allocated particular areas of the School's activities. These are generally chairs of School committees who already have in-depth knowledge of particular areas. They begin developing databases and associated commentary about nine months before the review. After about three months their drafts are submitted to the Head of School. At that point, a decision is made whether to have particular task forces to discuss identified problem areas in more detail. If required, this can involve all members of the School. These days, much more of this feedback and discussion is undertaken by email which has the advantage that comments are written down and are not just expressed verbally in a meeting. A staff retreat is only organised when there is a large problem to be discussed. Meetings with identified stakeholders are arranged and other schools/departments in Australia and overseas are contacted to provide information for benchmarking purposes.

Six months before the review, the School Executive Committee meets again to discuss how the draft commentaries on data and other information can be translated into submission chapters and what goals and targets should be identified given the School's mission statement and the terms of reference of the review. The next three months involve an iterative process with email interactions and meetings leading to the creation of draft chapters. This involves a wide range of staff in the school with considerable interactions with the Head.

The emphasis is on flexibility and informality in this process with heavy reliance upon administrative staff, particularly the School Manager, in ensuring that what is being produced is consistent and properly organised. All draft chapters are available on the school network on a shared drive. Members can access the draft chapters and suggest modifications.

Three months before the review, a draft of the whole submission is put together, including benchmarking comparisons which most staff will not have seen up to that point. Staff are all requested to look at the submission draft in its entirety and to provide feedback and comments on the draft as a whole, as well as detailed comments in parts of the draft that they may not have previously looked at very carefully. Where necessary, meetings are organised to clarify issues, correct data, alter interpretations and add missing material. At that time, the appendices to the submission are brought together by administrative staff and accurately linked in. After an intensive two-week period, a final draft of the submission is produced and sent off for desktop publishing.

Although the production of a comprehensive submission is a great deal of work for both academic and administrative staff, it provides a valuable opportunity for self-



evaluation and the formulation of new strategies. The critique and further development of strategies by an external review committee is essential and a key factor in getting strategies understood and accepted elsewhere in the University. Engagement in the process brings home its importance and it becomes clear that academic units that run into trouble do so when there is no proper review process in place. Academics see themselves as, first and foremost, teachers and researchers; they are not, by training and instinct, managers and business strategists. However, if strategic thinking is made a priority, through the existence of a formal review process, academics can be highly effective in formulating strategies over the medium term, for example, a decade. As suggested earlier, this is particularly important in disciplines that are not kept constantly on their toes by professional associations. There is little doubt that the comprehensive, externally assessed, review process at UQ has given the School of Economics advantages over its competitors in other universities which do not review academic units in such an effective manner.

### **Review of the Bachelor of Science Degree at the University of Queensland**

In 2005, the UQ Academic Board expressed a wish for the Bachelor of Science degree (BSc) to undergo a major review. This reflected its new policy of reviewing the large, generalist degree programs at UQ on a seven-year rolling cycle. While most degree programs are administered within a single school, the large generalist degrees at UQ, the Bachelor of Arts and the BSc, involve several schools across differing faculties. The process of review for these major degrees is similar to that of the school review although it is more complex in nature given the various organisational units involved.

This whole of program review approach provided a timely opportunity for the three faculties that teach into the degree to focus in a holistic manner on all aspects relating to the BSc, ranging from its contribution towards achieving the broad academic vision of the University to specific details of the structure, content, pedagogy, academic advising and the student experience. The review also presented an opportunity to consider recommendations arising out of the rolling seven yearly Academic Board reviews of the schools within the University that teach into the BSc. Over the years, many of these reviews have made important recommendations about discipline specific areas and this exercise was seen as an important step of integrating such recommendations in a systematic way into the degree. Additionally, the review of the BSc was timely considering the rapid advances occurring in the sciences, particularly at the interdisciplinary boundaries. Given that only distinct disciplinary areas of the degree had been reviewed over the last ten years, a whole of program approach for reviewing the BSc was needed.

In carrying out the review there was an acute awareness that in general the BSc had three broad student cohorts, reflecting the different career trajectories of UQ graduates: (1) those students who are present to obtain a general science-based education; (2) those students who are positioning themselves to enter a professional degree (e.g. medicine, pharmacy, physiotherapy, psychology, engineering, law, primary and high school teaching, etc.); and (3) those students who see science as a career path and will proceed to honours, masters and probably a PhD. The first category comprised the bulk of students and therefore, in designing a new science degree for a research intensive university like UQ, special emphasis was given to the

enabling sciences such as chemistry, physics, mathematics and biology to underpin a generalist education. To enable students to develop their special interests and to be excited by the recent developments in the sciences, a more streamlined set of majors was developed. The intention here was to provide students with the opportunity of 'doing science' and thereby, seeing science as a worthwhile career choice.

In addition to UQ-specific considerations, the changing state of science education from both the primary/secondary schools and higher education sector was taken into consideration. The leadership team was informed by the many reports outlining the importance of a vibrant science education system in underpinning a knowledge-driven economy. Unfortunately, the same reports also highlighted a 'flight from and fright of science' at all levels of the education system from primary through to university. While a number of these reports documented an Australian crisis, they also emphasised that it is an international phenomenon (Dekkers and De Laeter, 2001; Goodrum and Rennie, 2007a; Goodrum and Rennie, 2007b; Lyons, 2006; Rennie, Goodrum and Hackling, 2001; Tytler, 2007).

The lack of popularity and the quality of science education in schools has also had the flow on effect of causing a demand for remedial teaching at university. Adding to this, the massification of the higher education sector over last two decades in Australia (441,074 students in 1989; 634,094 students in 1996 and 978,000 students in 2006) and the concomitant blow out in student-to-staff ratios at UQ [13:1 in 1989 to 20:1 in 2006], meant that in designing a new degree the same level of thinking that delivered the current degree could not be used in planning for the future. As well, advances in information technology, pedagogies and the disturbing fact that much of the teaching infrastructure had barely changed over the last two decades necessitated a rethink of how a modern science degree should be delivered.

There was also an awareness that both industry and government were seeking students with better developed generic skills (leadership, teamwork, problem-solving, analytical thinking, global consciousness, ethical thinking, quantitative reasoning, information skills, reading, writing and oral communication) along with the requisite content knowledge in a chosen area. The type of content knowledge to be taught further challenged the discussions, as many of the break throughs in science are now happening at the interdisciplinary boundaries. The review process at UQ stimulated critical thinking about these factors and how best to educate students in a holistic manner that crossed the traditional disciplinary boundaries.

### ***Guidelines for the Review Process***

The review of an academic program that spanned three faculties and seven multidisciplinary schools was unprecedented at UQ. **Table 2** summarises some of the critical literature that helped formulate a template for conducting the review of the BSc degree.

**Table 2:** Seminal publications that help guide the review of the Bachelor of Science degree

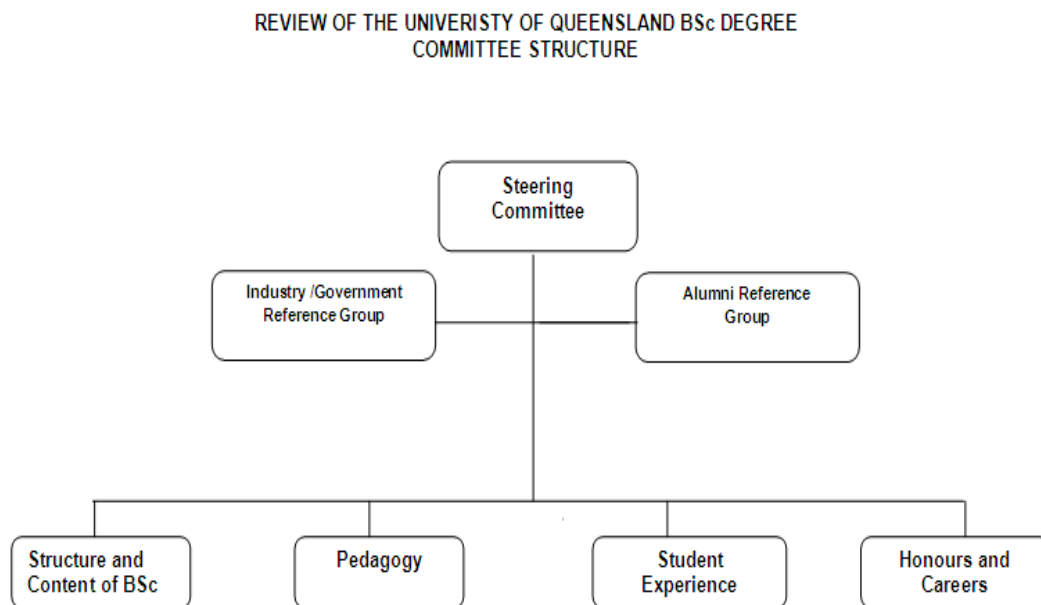
Title	Reference
The Boyer Report Reinventing Undergraduate Education: Blueprint for America's Research Universities	<a href="http://naples.cc.sunysb.edu/Pres/boyer.nsf/">http://naples.cc.sunysb.edu/Pres/boyer.nsf/</a> Accessed 28 January 2008
Review of the Harvard College curriculum	<a href="http://www.fas.harvard.edu/curriculum-review/">http://www.fas.harvard.edu/curriculum-review/</a> Accessed 28 January 2008
Bio2010: Transforming Undergraduate Education for Future Research Biologists	Committee on Undergraduate Biology Education to Prepare Research Scientists for the 21 <sup>st</sup> Century, Board of Life Sciences, Division of Earth and Life Studies (National Research Council of The National Academies, 2003)
Our Underachieving Colleges: A candid look at how much students learn and why they should be learning more	D. Bok, Princeton University Press, 2006.
The Future of Higher Education: Rhetoric, reality, and the risks of the market	F. Newman, L. Couturier and J. Scurry, John Wiley & Sons, Inc, 2004.
Science Teaching and Research – Which way forward for Australian Universities?	<a href="http://espace.library.uq.edu.au/collection/UQ:152846">http://espace.library.uq.edu.au/collection/UQ:152846</a> Accessed 28 August 2008

This literature led staff to begin questioning what parts of the current BSc curriculum represented best practice and what parts required renewal. To help stimulate debate, an overarching list of questions was developed. These questions are summarised in **Table 3**. In addition, four Working Parties that reported to the overarching BSc Steering Committee were established: (1) Structure & Content of BSc; (2) Pedagogy; (3) Student Experience and; (4) Honours & Careers (**Figure 1**). To enable these Working Parties to get started, a set of questions specific to each of their tasks, were prepared (<http://espace.library.uq.edu.au/collection/UQ:152846>).

The questions were simply provided as a starting point and the development of this approach was influenced by the review of the Harvard College curriculum. Books by Bok (2006) and Newman et al. (2004) provided important background information about curriculum review as well as the overall educational role of a modern university. As the self-review progressed, the United States National Research Council publication, *Bio2010: Transforming Undergraduate Education for Future*

*Research Biologists* (2003), became an important reference, which emphasised the need for an interdisciplinary approach to undergraduate science education. An interesting outcome of the review was that the principles underpinning *Bio2010* were adopted as much by members of the physical sciences as the biologists, which we attribute to the strong emphasises on the need for quantitative reasoning and the enabling sciences in an undergraduate science education.

**Figure 1:** Committee Structure for the Review of the BSc\*



\*It was resolved at the Review Retreat on 8–9 June 2006 that the Pedagogy and Student Experience Working Parties should merge, and prepare a joint document for the final submission to Academic Board

**Table 3:** Higher Order Issues/Questions to Guide the Review of the Bachelor of Science Degree

What is the UQ Bachelor of Science degree seeking to deliver?	What is required to educate a person in the rapidly expanding and changing sciences of the 21st century?	Is the way the BSc is run at UQ consistent with producing graduates that have the following attributes?	Does the UQ BSc satisfy the six characteristics of a learning focused institution? <sup>1</sup>
<ul style="list-style-type: none"> <li>• Is the mission of the UQ BSc to deliver the best quality undergraduate science experience?</li> <li>• Are we committed to pedagogical excellence within a rich research environment?</li> <li>• Do we recognise the important role of science education in underpinning a knowledge economy (Backing Australia’s Ability<sup>2</sup> and the Smart State<sup>3</sup> initiatives) and do our courses reflect this goal?</li> </ul>	<ul style="list-style-type: none"> <li>• How do we enable a student to become broadly educated and at the same time gain in-depth knowledge in a particular field?</li> <li>• How do we capture advances at the interdisciplinary boundaries within a science curriculum?</li> <li>• Do we know the brand of our Bachelor of Science degree?</li> <li>• Do we know the market position of the UQ BSc within the state, nationally and internationally (no boundaries)?</li> </ul>	<ul style="list-style-type: none"> <li>• Are part of and contributors to, the knowledge society?</li> <li>• Have the skills and capacity to learn and grow intellectually throughout their lifetime?</li> </ul>	<ul style="list-style-type: none"> <li>• Clearly defined outcomes for student learning</li> <li>• Student participation in a diverse array of learning experiences</li> <li>• Systematic assessment and documentation of student learning</li> <li>• Emphasis on student learning in the recruitment, orientation, deployment, evaluation, and award of faculty and administrators</li> <li>• Institutional and individual reflection about learning outcomes leading to action aimed at improvement</li> <li>• Focus on learning consistently reflected in key institutional documents, policies, collegial effort, and leadership behaviour</li> </ul>

1. Newman, F., Couturier, L. & Scurry, J. (2004). *The Future of Higher Education: Rhetoric, reality and the risks of the market place*. San Francisco: John Wiley & Sons.
2. Backing Australia's Ability— Building Our Future Through Science and Innovation, <http://backingaus.innovation.gov.au/> (2004).
3. Smart State Strategy: Queensland’s smart future 2008 – 2012, [www.smartstate.net/strategy/strategy08\\_12/](http://www.smartstate.net/strategy/strategy08_12/)

### ***Involvement of Stakeholders***

An essential requirement for realising the overarching goals of the University and those of the BSc review was ensuring active involvement from all stakeholder groups, including students, alumni, academics, research institutes, industry, primary and secondary schooling systems, and government. The process of curriculum renewal was seen as a form of change management and a comprehensive consultation process was put in place.

A detailed account of the different activities that were undertaken during the self-review phase to prepare the submission to the external review committee of the BSc are included in the introduction section of the BSc review submission, which can be viewed at <http://espace.library.uq.edu.au/collection/UQ:152846><sup>4</sup>. The preparation for the review started on 18 November 2005 and culminated in the visit of the external review committee to the University from 20–23 November 2006. To start the formal discussions, each school was asked to submit a position paper on the future of science education at UQ (these papers are available at: <http://espace.library.uq.edu.au/collection/UQ:152846><sup>5</sup>). These were used to inform the discussions of the four Working Parties and over the period from February to September 2006, the Working Parties provided reports on their respective areas to the BSc Steering Committee.

The Working Parties also provided the position papers that drove the BSc Curriculum Retreat held at an off-campus venue on 8–9 June 2006. This retreat was facilitated by Dr Norman Swan of Radio National and involved 83 academics and seven student representatives. Following this, a decision was made to combine the Pedagogy and Student Experience Working Parties. This combined Working Party, along with the Honours and Careers Working Party, were subsequently asked to prepare their submissions for a BSc Review Symposium held on campus from 30–31 August 2006. However, it was clear from the Retreat that the Structure and Content Committee had much unfinished business, and they were asked to continue their discussions. The BSc Review Symposium also was facilitated by Dr Swan and was open to all academics and general staff within the three faculties. Representatives of the other faculties at UQ were also invited. Students were again invited to attend and contribute to this event.

To gain student input into teaching and learning programs, and to enable identification of trends in student satisfaction, it is University policy that programs are subjected to formal evaluation using: (1) course experience questionnaires; (2) UQ student experience surveys; and (3) course evaluation questionnaires. These sources of information were accessed to inform the review and were capable of providing trend data over an approximate five-year timeframe. Focus groups were also held and a comprehensive survey developed specifically for the self-review was administered electronically to all BSc students and answered by over 900 participants.

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<sup>4</sup> Accessed 28 October 2008

<sup>5</sup> Accessed 28 October 2008

## **Summary**

In developing the new BSc, the leadership team has re-emphasised the importance of the core disciplines to ensure students are well-educated in the fundamental aspects of biology, chemistry, physics and mathematics. The new degree follows the spirit of 'Bio2010' in being much more quantitative. An attempt was also made to integrate those elements of the above enabling sciences to foster in students the ability to actively engage and understand interdisciplinary areas of science (e.g., genomics, biodiversity, climate change, regenerative medicine, earth systems, systems biology, information systems, neuroscience, materials [chemical and physical] sciences, infectious diseases, structural biology, drug design and computational science). There was also a significant reduction in the number of majors from 40 to 16, and an overall course number reduction of approximately 30%. Further, discipline specific streaming commences much later than at present, in the second semester of second year.

Over all, the leadership team worked hard to promote a culture that values educational research to guide pedagogical reform in all aspects of its activities. A Science Teachers Centre is being planned to further nurture teaching excellence and to ensure all science programs are evidence-based. Special attention has been given to the 'science of learning' as through such an approach, the transfer of knowledge and understanding between disciplines can be effectively facilitated, and the student experience significantly enhanced.

## **Key Features for Successful Reviews**

While the scope and nature of the two self-reviews detailed here clearly varied, a number of important similarities can be distilled that were pivotal for their success.

### ***Leadership***

In both cases, the heads of the organisational units recognized the value of undergoing a comprehensive self-review process. They provided the vision and scope, implemented a structure that allowed for staff at all levels in their units to become actively involved, and then they facilitated the process. As the reviews progressed, they allowed others to step into leadership roles and drive various facets of the process. This leadership approach allowed others to buy-in and own the process, which requires an experienced leader who understands the delicate balance between 'leading from the front' versus 'leading from the back'.

### ***Planning and Preparation***

A feature of the review process at UQ is scheduling reviews well in advance so that units can have adequate time to prepare. In both cases, the organisational units took advantage of the time and began the self-review process early. This allowed for appropriate resources to be allocated with structures established that would facilitate a comprehensive evaluation process. Additionally, existing data could be compiled and analysed with time available to gather further data where needed.

Utilising the time allotted allowed mechanisms to be set up early in the process to ensure collective ownership and stakeholder engagement, affording staff the opportunity to constructively contribute in their areas of interest and expertise. In both cases, all available time was maximised to ensure the most was achieved out of the review process.

### ***Intention***

In both cases, the intent of the review to improve the organisational unit was made clear. The review process was viewed as an opportunity in these two cases, when they could easily have been interpreted as a burden of compliance. Evidence to inform the self-review process was featured prominently in both cases, demonstrating an underlying culture that seeks objectivity and values truth, which can be confronting during an evaluation process. While it was implicit in both cases, the intention of the reviews was focussed as much on identifying strengths to build on, as well identifying weakness to be addressed. Finally, both cases looked beyond the scope of their own institutions, striving for national and international comparisons. How can an organisation know how well it is performing unless it is open to interrogation, reflection, and benchmarking against other institutions?

### **Conclusion**

In this chapter, we have briefly described the evolution of the review system at UQ, explored the framework for the review process at UQ, and presented two case studies of self-review at UQ. The examples of the review of the School of Economics and the 2006 review of the Bachelor of Science degree have been used to identify the key features for successful self-reviews. While the cases differed in scope and complexity, both highlighted the role of leadership, the need for timely planning and preparation, and the importance of clearly articulating the intent of the self-review as a vehicle for improvement.

Self-reviews, as part of an institution's overall quality management system, have the potential to deliver enormous gains to the units under review. Therefore, the planning and management of the self-review process is of the utmost importance. The level of sophistication of this planning will vary, according to the size and complexity of the unit under review and its operations. Yet, the overall goals remain the same. A good self-review can shape the tenor of the external review, and can deliver exponential outcomes for the unit being reviewed.



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## APPENDIX

UNIVERSITY OF QUEENSLAND<sup>6</sup>

POLICY 1.40.2

### REVIEW OF SCHOOLS AND ACADEMIC DISCIPLINES

Policy Number: 1.40.2

Contact Officer: Senior Manager, Academic Administration

Date Approved by Senate: 24/7/2008

Date last Amended: 28/07/2005

Date for Next Review: 24/07/2011

Related policies: 1.30.6

#### 1. Overview

Academic Board, through its Standing Committee conducts reviews of schools, university centres and institutes on a septennial basis. This policy statement concerns reviews of schools and is also applicable to cross-school academic disciplines. For policy on the review of university centres and institutes, see HUPP [1.30.6](#) *Policies and Procedures on the Establishment, Approval, Administration and Review of Institutes and Centres*.

This statement includes the purpose of reviews together with a summary of procedures used to conduct reviews.

Guidelines for the conduct of reviews, roles of the members of review committees and a summary of the review process are found in the appendices.

#### 2. Policy

##### 2.1 Purpose

The purpose of reviews is to improve the performance of a unit, with a view to attaining best practice by international standards, and to focus on strategic planning matters that may impact on the unit.

The review process involves a self-analysis, benchmarking and an external assessment of the School's academic, strategic and operational plans incorporating teaching and learning, curriculum development, research and research training, service and external relations, equity issues, and internationalisation.

The process is undertaken in the context of the faculty, and the University as a whole, and considers relationships of course offerings and research programs within and between

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<sup>6</sup> The University of Queensland has approved the reproduction of this Policy for this publication. The Policy is available on the UQ website in the Handbook of University Policies & Procedures (HUPP) at: [www.uq.edu.au/hupp/](http://www.uq.edu.au/hupp/). The Policy reprinted here was accessed on 8 December 2008. Its contents were correct at the time of publication but may change subsequently.

schools and, where relevant, with centres and institutes. The process also involves a consideration of the most appropriate utilisation of the school's organisational structure and resources to enhance its performance and to fulfil its academic goals and objectives.

The review committee's task is to provide an objective view of the school's perceptions and plans developed through the self-assessment process, and either confirm or recommend changes to those plans. The majority of school reviews are expected to result in incremental changes in schools. However, it is recognised that significant change might result from some reviews.

## **2.2 Principles**

The following principles underpin school reviews–

- The core focus is academic performance and planning.
- External assessment is a valuable and integral part of the process.
- The review process is transparent and clearly documented.
- Reviews are normally conducted every seven years.

## **2.3 General terms of reference**

Reviews address general terms of reference, as set out below, that are read in the context of the University's mission, goals and objectives. Additional specific terms of reference may be suggested. Terms of reference are approved by Academic Board Standing Committee on advice from the Head of School, Executive Dean and the Vice-Chancellor's Executive.

The terms of reference provide the opportunity for analysis of the school's performance (and that of its centres) since the previous review and its plans to meet future performance targets, using national and international benchmarking.

The general terms of reference include the following–

1. to review the quality, scope, focus, direction and balance of the school's curricula and teaching at undergraduate and postgraduate levels in the light of enrolment trends, success rates, student and graduate satisfaction and the perception of key external stakeholders, the availability of alternative programs elsewhere in Queensland and Australia, and future developments in the discipline/s; within the context of current University policies and practices;
2. to review the research performance of the school and its constituent disciplines, including their research activity, research quality and impact, research outcomes, and the quality of research training, in light of future developments in the discipline/s;
3. to review the role played by the school and its constituent disciplines in relation to its relevant industries and in service to the profession and the community;
4. to review the success of the school's internationalisation strategies in relation to undergraduate and postgraduate program development, international student enrolments and collaborative research projects; and the school's support services for international students;
5. to review the performance of the school in providing equity in employment, working, and learning for staff and students; and
6. to review the organisational structure of the school in the context of its functions, current programs and anticipated developments in the constituent disciplines, internal

administration, support structures and staffing arrangements; and the effectiveness of the School's use of resources in relation to accommodation, facilities, allocation of teaching/research/equipment funds, and potential to generate additional external resources.

### **3. Procedures**

#### **3.1 Timetable for reviews**

1. Academic Board Standing Committee prepares a tentative schedule for reviews to be held in the next seven years.
2. In consultation with the Executive Deans, Academic Board Standing Committee prepares the review timetable for a particular year no later than the end of first semester in the preceding year to give schools adequate time to plan for the review including preparing the school submission.
3. The review schedule is presented to the Vice-Chancellor's Executive for endorsement. The Head of School and Executive Dean identify a range of dates for the review to be held.
4. Early steps to secure the services of the external members are taken to give the school maximum notice of the exact timing of the review. Invitations to join the review committee are sent out by the President and, once availability is established, the final dates for the reviews are determined.

#### **3.2 Composition of review committees**

1. The composition of each review committee is determined by Academic Board Standing Committee in consultation with the senior executive, the relevant Executive Dean, and the Head of School.
2. The composition of a school review committee is:
  - two to three external members (depending on the size of the school) with nationally/internationally recognised discipline expertise and knowledge, whose expertise covers the disciplines in the school;
  - the relevant Executive Dean;
  - a representative of the Academic Board Standing Committee, or equivalent; and
  - a representative of a cognate school.
3. The Academic Board Standing Committee representative and the cognate school member on the review committee do not normally belong to the same faculty as the school under review.
4. The overall composition of a review committee provides as broad a coverage as possible of all the major disciplines offered by the school.
5. Where it is relevant to the core functions of the school, one of the external members has strong industry links.

6. On the recommendation of the President, Academic Board Standing Committee appoints one of the external members to chair the review committee. The President considers–
  - discipline expertise;
  - impartiality;
  - experience in managing organisational units of a comparable size; and
  - experience in the conduct of similar reviews.

The Executive Officer of the faculty to which the school belongs, normally serves as the Secretary to the review committee.

### **3.3 Preparation for review**

1. Schools are given the approved terms of reference together with a set of guidelines regarding the review approximately 12 months in advance of the review.
2. The President presents a workshop for Heads of School and relevant support staff to inform them of the process and to discuss any concerns.
3. The school prepares a submission to the review committee. Schools are encouraged to begin self-assessment exercises 12 months before the expected date of the review.
4. Approximately 9 – 12 months before the review, the Academic Board Standing Committee member appointed to the review committee briefs the school to explain the review process.
5. Before the visit, the Head of School–
  - issues an invitation to all school staff, including general and research staff, to attend the briefing; and
  - briefs the Academic Board Standing Committee member on any recent developments in the school.
6. The President invites interested parties (including all school staff, and undergraduate and postgraduate students) to make a written submission to the review.

### **3.4 The review report**

1. The review committee considers the school submission and other submissions received. The committee interviews University staff, students, and other parties (e.g. industry representatives) as it sees fit.
2. The review committee conducts the review expeditiously so that a complete draft of its report is prepared prior to the departure of external members.
3. Prior to finalisation of the review report, the recommendations will be discussed with the Executive Dean and the Head of School, and the thrust of the major recommendations is presented separately to:
  - the Deputy Vice-Chancellor (Academic) and the President of the Academic Board; and
  - a full meeting of the school.

4. Initially, copies of the review report are given to–
  - members of the Vice-Chancellor’s Executive;
  - the relevant Executive Dean;
  - the relevant Head of School;
  - members of the school reviewed; and
  - members of Academic Board Standing Committee.
5. Following approval by Senate (see 3.5 below), the review report, together with a composite statement from the Academic Board, is distributed to those people who made written submissions and to other interested parties.

### **3.5 Approval**

1. Academic Board Standing Committee is responsible for considering the recommendations of the review committee’s report within the broader context of the University, by–
  - consultation with those affected by the review; and
  - coordination of the adjudication of any particular recommendations.
2. Following consideration of the review committee’s report, Academic Board Standing Committee prepares a report to Academic Board which accompanies the review report, setting out Academic Board Standing Committee’s comments on the recommendations.
3. The review report, together with a statement from the Academic Board is sent to Senate for approval.

### **3.6 Implementation**

1. The relevant Executive Dean and the Head of School are responsible for implementation of the adopted recommendations.
2. Academic Board Standing Committee is responsible for monitoring the implementation.
3. Academic Board Standing Committee may request a 6-month implementation plan addressing some (or all) recommendations.
4. Schools submit (via the Executive Dean) an 18-month implementation report within 18 months of Senate approval of a review report. This report is submitted via the Academic Board to Senate.

## **The Authors**

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Robyn is currently Principal Consultant, Quality at RMIT University. In this role she is responsible for managing institutional wide processes and systems to assure and improve processes and outcomes across higher education and vocational education and training operations, including preparation for external audit activities such as those involving the Australian Universities Quality Agency and the Australian Quality Training Framework. In 2006, Robyn worked as Audit Director with the Australian Universities Quality Agency where she took responsibility for two audits and assisted with the design of the cycle 2 audit process. Prior to her appointment to RMIT in 2003, Robyn held senior management positions at Curtin University of Technology, coordinating planning and quality management frameworks and in human resources and industrial relations. Robyn has assisted several universities in their preparation for audit processes and has undertaken international consultancy activities related to quality assurance.

### **John Foster**

Professor John Foster is Head of the School of Economics, The University of Queensland (1991-2008). He is a Fellow of the Academy of Social Science in Australia (since 2001), President Elect of the International J.A. Schumpeter Society (since 2008), Member of the Federal Treasury Academic Consultative Panel (2007-8) and Life Member of Clare Hall College, Cambridge (since 1995). He has served on three UQ Review Committees: the former Department Commerce, the School of Sociology and Anthropology and the School of Physical Sciences.

### **Michael McManus**

Professor Mick McManus was Executive Dean of the Faculty of Biological & Chemical Sciences at the University of Queensland (UQ) from 1998-2008 and prior to this he was Head of the Department of Physiology & Pharmacology from 1993 to 1997. From 2005-2008 Mick led the review of the Bachelor of Science degree at UQ and is currently working with Education Queensland on the future of science, technology, engineering and mathematics (STEM) education in Queensland. From 17 January 2009, he will assume the role of Acting Deputy Vice-Chancellor International at the University of Queensland.

### **Kelly Matthews**

Kelly Matthews is the Student Experience Manager for the Faculty of Biological and Chemical Sciences at the University of Queensland (UQ). She is involved in several UQ funded teaching and learning projects including (1) Multidisciplinary Science in the new BSc, (2) Enhancing Student Learning Experiences in Large, First Year Chemistry Courses, and (3) Developing a program for the professional development of tutors within the research-focussed Bachelor of Science Degree Program. Kelly is currently pursuing a PhD from The University of Queensland, researching the quantitative skills of science students in the new BSc program.



### **Louise Mattick**

Dr Louise Mattick received her BSc with Honours from Monash University and her PhD in the field of molecular microbiology from the University of Melbourne. She then worked in human molecular genetics at the University of Cambridge, Department of Genetics, and in human genetic epidemiology at the Queensland Institute of Medical Research. Since 2001 she has held an academic position at the University of Queensland, undertaking special projects for the Faculty of Biological and Chemical Sciences on the development of special resources for high school students and in the re-structuring of the science degree, majors and curriculum. In particular, Louise's experience in the area of Science, Technology, Engineering & Mathematics (STEM) has involved managing two international meetings. Both of these conferences informed the subsequent Review of the Bachelor of Science degree at UQ and Louise has been involved in all aspects of curriculum development and implementation as part of her appointment as Manager, BSc Review in 2006.

### **Jenny Strong**

Professor Jenny Strong is the Professor of Occupational Therapy in the School of Health & Rehabilitation Sciences at The University of Queensland. She is the former President of the Academic Board at The University of Queensland (2002-2005), the former Deputy President of Academic Board (2001-2002), and Head of the Department of Occupational Therapy (1997-2000). She was appointed Professor of Occupational Therapy at UQ in 1997. In her previous role as President of Academic Board, Prof Strong chaired 7 Academic Board Committees, was a member of 15 other University Committees, and a member of The University of Queensland Senate. She was responsible for the set-up, and conduct of the external review process of Schools, University Centres and Institutes at UQ, and the policy which guides such reviews and implementation of recommendations.