

Introduction

The Bachelor of Science (BSc) was reviewed from the 17th to 21st August 2015 by a panel of distinguished national and international experts chaired by Professor Merlyn Crossley of the University of New South Wales. The panel made 25 recommendations which we consider individually in this response.

Process

The Report of the BSc Review panel was circulated to faculty staff through the faculty Teaching and Learning Committees and sent directly to Heads of Schools and Institutes and other interested parties. A meeting of key staff who were involved in the consultation process leading into the review was convened on September 25th to discuss the recommendations of the panel. Following these discussions, a draft response was developed, circulated, and amended prior to submission.

Recommendation 1: *That the faculty articulates a vision statement for the Bachelor of Science program, emphasizing the importance of the degree as a professional foundation for creating change and establishing a career, and for introducing students to the international community of scientists.*

Response: The faculty supports this recommendation. We note that the BSc includes a great diversity of fields of study and career outcomes, so the vision statement will, of necessity, be broad and aspirational in nature, but reflective of a common view.

Strategies: A vision statement will be developed at ongoing meetings of key staff, including school and faculty Teaching and Learning committees.

Timeframe: 6 months

Recommendation 2: *That the faculty reviews Graduate Learning Outcomes of the BSc and each of its majors, to inform decisions regarding the inclusion, development and compulsory/elective status of courses within the degree.*

Response: The faculty supports this recommendation although we note that in 2013, the faculty reviewed the GLOs for each of the majors in the BSc, as well as overall program GLOs.

Strategies: The GLOs of the BSc and its majors will be examined to ensure that GLOs for each major are both consistent with the overall GLOs for the BSc, but also reflective of the disciplinary specifics of each major. In conjunction with this, we will conduct a comprehensive review of the content and goals of the compulsory course (STAT1201) and highly recommended course (SCIE1000), identifying any missing or unnecessary content, and then forming two appropriately modified courses. In developing these courses, the review will also consider the appropriate location and scope of material addressing more generic UQ Graduate Attributes (such as oral or written communication, and ethical thinking), in both these and other courses as needed. We anticipate that both courses arising from this review would become compulsory, but this will be discussed extensively.

Timeframe: 6 months for review of GLOs, by early 2017 for reformulation of the two new courses.

Recommendation 3: *That each of the majors in the BSc includes at least one required course that essentially defines that major.*

Response: The faculty supports this recommendation.

Strategies: All majors currently comply with this recommendation. Major coordinators will consult with disciplinary colleagues to decide whether the compulsory course is better suited to be a “cornerstone” (Level 2) or a “capstone” (Level 3) course. Major coordinators will also consider the content of the compulsory course in terms of GLOs for the major.

Timeframe: 6 months, for implementation from 2017.

Recommendation 4: *That the faculty withdraws the current Level 8 Bachelor of Biomedical Science (Honours) degree and replaces it with a Level 7 three year Bachelor of Biomedical Science and a one year Level 8 Honours Program*

Response: The faculty supports this recommendation.

Strategies: Implementing this recommendation will require extensive consultation both within the Faculty of Science, and with the School of Biomedical Sciences and the Faculty of Medical and Biomedical Sciences. It will also require significant input from the University Senior Executive, recognising that undergraduate biomedical and health degrees are important to the broader perception and appeal of the university to potential students.

Timeframe: Introduction in 2017.

Recommendation 5: *That the faculty explores opportunities to further enhance the Bachelor of Advanced Science (Honours) degree via, for example, new courses, practicals, timetabling to create cohort structures, or by new activities within the program etc.*

Response: The faculty supports this recommendation.

Strategies: We have identified several areas we need to look at, such as greater flexibility within the degree structure (majors and introducing minors), an improved cohort experience, possibility of academic mentoring, redesign of core courses, and possible introduction of new courses. The faculty is committed to identifying and implementing ways to improve this flagship program.

Timeframe: Ongoing

Recommendation 6: *That the faculty does not introduce a three year level 7 Bachelor of Advanced Science Degree at this time.*

Response: The faculty accepts this recommendation. No further action is required at this time.

Strategies: N/A

Timeframe: N/A

Recommendation 7: *That the faculty develops a strategy, criteria and process for evaluating proposals for additional majors within the Bachelor of Science and/or Bachelor of Advanced Science (Honours). This process should include assessment of demand and consideration of impact on existing degrees.*

Response: The faculty supports this recommendation, but notes that assessing demand can be difficult.

Strategies: A clearly defined process for the evaluation of proposed majors will be developed at meetings of key staff, including school and faculty Teaching and Learning committees.

Timeframe: 6 months

Recommendation 8: *That the faculty works with the institutional alumni office to identify graduates and long term employment outcomes.*

Response: The faculty supports this recommendation.

Strategies: The faculty Engagement Unit will work closely with central institutional bodies to collect and maintain these data.

Timeframe: Ongoing

Recommendation 9: *That stakeholder advisory boards, including representatives from industry, government, high schools, employment agencies, philanthropists, alumni and research institutes, be established at both School and faculty levels.*

Response: The faculty supports this recommendation.

Strategies: A number of schools already have advisory groups of this type. Schools will be encouraged to review their Terms of Reference to include the recommended representatives to provide support and advice to the school in relation to the BSc and other school programs and activities. Where schools do not currently have boards, they will be encouraged to establish these. At Faculty level, the board may consist of representatives selected from across the schools, in order to provide a broad representation of stakeholders from a range of disciplines with membership broadly representative of not only the BSc but other programs which utilise the BSc course list.

Timeframe: 6-12 months to review existing boards and establish new boards.

Recommendation 10: *That the faculty identifies a 'single point of contact' for external professional stakeholders wishing to contact the faculty.*

Response: The faculty supports this recommendation.

Strategies: The faculty Engagement Unit will be identified as the initial point of contact for external professional stakeholders. This single point of contact is not intended to replace existing links within schools, but is intended for external stakeholders who have no points of contact, or who are uncertain who to contact.

Timeframe: 6 months.

Recommendation 11: *That the faculty works with the UQ Advantage office to embed and facilitate work-integrated-learning opportunities, as well as to promote and emphasize the range of careers available to Science graduates.*

Response: The faculty supports this recommendation.

Strategies: The Faculty of Science currently has a number of work-integrated learning opportunities embedded in specialist programs and managed at School-level and intends to continue its efforts in this area. The Faculty has begun working with the UQ Advantage Office to identify key staff throughout the Faculty who have established connections with industries and organisations for the purposes of internships and work placements. This work will be ongoing and will include discussions on how to include such opportunities within the workload and curriculum demands of the BSc. In addition, the logistics of offering such opportunities on a large-enough scale in terms of range of disciplines and actual number of placements will also be investigated to determine how to offer these to a significant number of BSc students.

Timeframe: Ongoing

Recommendation 12: *That the faculty makes a formal proposal to the Provost to continue lifting the OP/ATAR cut-offs for the BSc, noting that this will also improve the retention and ultimate success of students.*

Response: The faculty supports this recommendation.

Strategies: OP cutoffs need to be considered each year, in light of student demand and institutional priorities. It is our intention to move to OP 9 entry for the BSc in 2016.

Timeframe: 4 months, for 2016.

Recommendation 13: *That the faculty continues to work with the Student Services to appropriately advise and support at-risk students.*

Response: The faculty supports this recommendation and recognises that in certain areas of student support, UQ scores poorly compared with other Go8 universities.

Strategies: The faculty will meet with representatives from Student Services to look at ways in which we can more ably support at-risk students. We will also modify the induction days to include a session on health and wellbeing.

Timeframe: Ongoing

Recommendation 14: *That the faculty better engages with Head Teachers and Careers Advisors at important feeder high schools.*

Response: The faculty supports this recommendation.

Strategies: The faculty Engagement Unit oversees a comprehensive program of engagement with feeder high schools. We will review existing programs and look at ways to build on this engagement.

Timeframe: Ongoing

Recommendation 15: *That the faculty boosts its efforts in international student recruitment, possibly by exploring articulation programs and also links via research activity.*

Response: The faculty supports this recommendation.

Strategies: The faculty is currently exploring articulation programs in key markets including China, India, Malaysia, Indonesia and Vietnam. This process has included the development of proposals and individual consultations with all of the Schools within the Faculty to identify key institutions (where teaching and research links may already exist) who are key discipline leaders in their own country. The faculty will look to recruit more academics interested in speaking with international students about opportunities to study at UQ.

Timeframe: Ongoing

Recommendation 16: *That the Executive Dean chair an implementation panel comprising key stakeholders, such as the Program Director, Head of Biomedical Sciences, and relevant Schools representatives to implement the recommendations of the review.*

Response: The faculty supports this recommendation

Strategies: N/A

Timeframe: Immediate

Recommendation 17: *That an inter-faculty liaison position be identified to provide dual degree students with advice regarding degree requirements. It is further recommended that all dual-degree students be made aware of this point of liaison.*

Response: The faculty supports the intention that we believe is behind this recommendation, but does not support the recommendation as worded.

Strategies: For students undertaking dual degrees, the University already clearly identifies a controlling faculty for their dual degree, and most decisions around the administration and operation of their degree is taken at the controlling faculty. Students are always directed to the appropriate faculty when such decisions need to be taken. Creating inter-faculty liaison positions would, of necessity, require duplication of existing resources and structures. In our view, any student enrolled in a BSc can and should attend the Faculty of Science front counter or contact us via email

or phone. If the student is enrolled in a dual degree, the student is always immediately directed to the controlling faculty. Even if inter-faculty liaison positions existed, this position would merely direct students to the appropriate faculty. On other occasions, it is necessary for dual degree students to interact with both faculties. For example, a student may need to visit course coordinators from both areas. Establishing inter-faculty liaison positions would not streamline this process. Having said this, we recognise that sometimes students are redirected multiple times. We will investigate ways to ensure that this does not occur.

Timeframe: 6 months

Recommendation 18: *That all students be provided with a visible and accessible front counter to facilitate engagement with staff.*

Response: The faculty supports this recommendation.

Strategies: At the faculty level, all students are directed to the student enquiries office where there is a visible and accessible front counter. At the school level there is inconsistency in the provision of local front counters. The faculty will engage in discussion with individual schools so that there is consistency in approach.

Timeframe: 6-12 months

Recommendation 19: *That the Executive Dean works with the university to give greater recognition to teaching excellence and leadership in the promotion process*

Response: The faculty supports this recommendation.

Strategies: We understand that greater recognition of teaching is a focus of UQ more broadly, including upcoming discussions of the student strategy. The faculty welcomes the opportunity to participate actively in any initiatives that are adopted to further improve and support teaching and learning across the University.

Timeframe: Ongoing

Recommendation 20: *That the faculty further develops and incentivises discipline-specific professional development in teaching for academic staff.*

Response: The faculty supports this recommendation.

Strategies: We understand that the "Teaching@UQ" project is developing an institutional approach to professional development for teachers, and the faculty will participate enthusiastically in that scheme. To supplement the institutional program, discipline leaders within schools will be encouraged to develop opportunities for discipline specific professional development. For example, GPEM has been using a peer review system for academics within their school.

Timeframe: Ongoing

Recommendation 21: *That the faculty works with the Institutes to strengthen Institute staff involvement in undergraduate teaching and learning and also to assist in strengthening industry linkages leading to work integrated learning opportunities*

Response: The faculty supports this recommendation.

Strategies: We understand that UQ is developing a broader expectation that Research Focused staff will undertake significant teaching roles, and the faculty is very supportive of this approach. To translate this into practice, schools will work with institutes to develop guidelines and identify opportunities for researchers to contribute to undergraduate teaching.

Timeframe: Ongoing

Recommendation 22

That the faculty develops and implements an Assessment Policy consistent across program offerings, including BIOL1040, so that assessments throughout the BSc and related degrees are aligned with University Policy, are streamlined and are transparent, and easily understood by students.

Response: The faculty supports this recommendation.

Strategies: The Faculty is constantly reviewing its assessment policies across its many program offerings and believes that the general assessment policies in all its programs align with University Policy. Notwithstanding, we accept the panel's recommendation that assessment practices need to be examined. The panel has identified a particular course (BIOL1040) for consideration. The Faculty accepts that the BIOL1040 grading matrix is not clearly understood by many students and staff and supports the recommendation that the assessment matrix in BIOL1040 be removed, and replaced with a more transparent and easily understood regime.

Timeframe: 6-12 months for overall Faculty review of assessment practices; 4 months for changes to assessment matrix for BIOL1040.

Recommendation 23: *That the faculty develops and monitors a feedback policy that ensures timely and high quality feedback to students.*

Response: The faculty supports this recommendation.

Strategies: Through discussion with course coordinators at faculty level workshops, and through faculty Teaching and Learning Committee, we will identify ways in which feedback to students can be improved. This might include providing clear explanations to students of what constitutes feedback. Discussions will include development of a feedback policy to ensure transparency.

Timeframe: 6-12 months

Recommendation 24: *That the Dean works with the university to develop an "Assessment Database" to ensure that assessments are appropriately timed (for all students irrespective of the nature of their degrees or combined programs).*

Response: The faculty supports this recommendation.

Strategies: We understand that work is being done by the learning analytics team to extract this information directly from course profiles. We will identify courses in which there is a substantial overlap in the list of enrolled students, and enable better coordination of assessing timing across those courses.

Timeframe: Ongoing

Recommendation 25: *That the exploration and resourcing of technology enhanced learning supported by learning analytics be systematically progressed.*

Response: The faculty supports this recommendation.

Strategies: In recent years, UQ has made a significant investment in the area of technology enhanced learning (TEL) and learning analytics. Members of the faculty have achieved great success in attracting funding to support TEL in their courses, and have adopted a range of effective, innovative practices in large and small classes. The faculty will make a long-term commitment to effective use of TEL. Subject to available resources, we will employ an educational/learning designer who has experience working with a wide range of educational technologies and who can recognise the benefits (and limitations) of those technologies, and how to best meet the needs of students and teaching staff.

Timeframe: Ongoing