

Reviewing and Updating an Established Degree

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ABSTRACT

Under UNITEC's Quality Management System, all degree programmes must have a formal review every five years. The review panel, which includes representatives from industry and other providers, is presented with a self-evaluation prepared by the faculty or school responsible for the degree and meets with staff, students and advisory committee. The panel also scrutinises other documentation, including committee minutes, graduate surveys, moderators' reports, monitor's reports, programme reports, and student evaluations.

This paper describes the process, as viewed from the "inside". The authors were responsible for compiling the self-evaluation, and conducted surveys and focus groups of graduates, staff, students and advisory committee as part of the information gathering process. They also reviewed and analysed the earlier documentation (minutes, surveys, reports and evaluations) that the panel would subsequently examine. The review proved very timely as the programme had grown significantly over five

years, both in terms of students and courses offered, and rapid technological development had rendered some courses obsolete and necessitated introduction of others that encompass new and emerging areas.

1. INTRODUCTION

The Bachelor of Computing Systems (BCS) at UNITEC began officially in February 1997. In practice students had been taking BCS subjects as part of the Certificate in Computing Systems (CCS) or Diploma in Computing Systems (DCS) since February 1996. We decided to begin the mandatory five year review in February 2001 with the aim of completing it by November 2001. Having participated in the 18 month process for reviewing the Bachelor of Business Studies (BBS), we were determined to streamline the process and complete ours in nine months, without sacrificing any of the essential and worthwhile aspects. We also noted that the two main outcomes of the BBS review were the elimination of level 4 courses (which are no longer seen as appropriate in UNITEC degrees) and the replacement of 12 credit courses by 18 credit courses.

2. DATA GATHERING

We began by reviewing the data and documentation already available, including minutes, surveys, reports and evaluations. We adapted a programme review questionnaire that had been administered in November 1998 and sent it to all current students and staff. We adapted a graduate progress survey that had been conducted in August 2000 and sent it to all those who had graduated (BCS, CCS or DCS) since then. As an inducement we said that all students or graduates who sent in a completed questionnaire or survey (with a separate return address so their responses could remain anonymous) would be included in the draw for a free short course (worth up to \$600). In the event, 8 graduates, 10 staff and 51 current students responded, being respectively 13%, 22% and 9% of the potential respondents.

3. ANALYSIS OF PROGRAMME EVALUATIONS

The survey and questionnaire identified many aspects of the BCS structure, delivery and administration that graduates, students and staff like, but highlighted four areas where 20% or more of responding graduates and/or students and/or staff would like change or improvements:

- compulsory courses : 22 students, 2 graduates and no staff disliked them (most comments identified the “business ones”), 11 students and 6 staff liked them.
- online courses: 16 students and 2 staff wanted more
- assessment : 10 students and 2 staff disliked some aspect (mainly group assignments and the timing of deadlines), the same numbers liked the assessment system
- credit values: 3 staff wanted all courses to have the same credits.

Smaller numbers of graduates, students and staff were concerned about course advice, the enrolment process, and laboratory access.

In 1988, 23 students had answered similar questions and 7 expressed their dislike of the “business courses” (including the communication course), while 4 liked them. Other areas where at least 20%

of respondents wanted change were the options (but 3 of the 6 were actually concerned about scheduling, rather than the options themselves, and 16 liked the options), pre- and co-requisites (only one specified a particular difficulty, which has since been removed), and the assessment process (5 disliked some aspect, while 7 liked the process). There were few concerns about course advice or the enrolment process.

4. FEEDBACK

The results were taken to the programme and advisory committees who responded as follows:

- we should ensure all areas covered by compulsory courses are retained, but some could be redistributed, in particular word processing and presentation skills could be built into the communication course, and business content could be “threaded”
- we should continue the present approach of providing more online support for all our courses (and offering a few totally online)
- we should continue to use group assignments, so students get used to working in teams, and stick to deadlines (both were seen as important in preparing students for work)
- we should consider the resource aspects of changing credit values (as well as the academic aspects).

They noted that we have appointed a school administration manager to play a major role in advice and enrolment (which should compensate for ongoing problems with the new centralised Business Information and Support Centre), and extended the laboratory open hours (previously 13 hours on weekdays and 8 hours on weekends, currently 15 hours each day, soon to be 24 hours each day).

5. ANALYSIS OF COURSE EVALUATIONS

An analysis of the student evaluations of course quality (SEQUAL) was conducted to identify courses that consistently scored around or below 3 on the 1 to 5 Likert scale. The six that were identified were the two compulsory first year “business courses”, three very technical second year networks courses and the

third year 4GL course. Computing students have long resisted having to take “business courses” (and not just at UNITEC!), so we will have to look at alternative ways of including the necessary business content in the programme. The networks courses and the 4GL course have all suffered from hardware and software problems. Further analysis is being undertaken to identify which aspects of these six courses were rated lowest, with a view to making improvements in programme structure and/or course delivery.

6. REVIEW OF COURSES

Over the five years that the courses have been offered, subject groups have met regularly to review existing courses and identify needs for new courses. Revised or new prescriptions have then been put to all BCS staff for feedback, changes made where appropriate, comments invited from the advisory committee and NZQA monitor, and approval obtained from the programme committee, the faculty academic committee and the academic board. With seven stages, the process is both thorough and time-consuming.

The following new courses were introduced after following this process:

- Advanced Graphical User Interface Programming (July 1997)
- Internet and Webpage Design (February 1998)
- Multimedia (July 1998)
- Webmaster (July 1998)
- Advanced Multimedia (February 1999)
- Computer Graphics (July 1999)
- Programming Languages (January 2000)
- ECommerce (February 2000)
- Web Client Server Computing (February 2000).

After a thorough review of the programming courses at the end of 2000, two level 6 and four level 7 courses have been dropped and will be replaced in July 2001 by two level 7 courses:

- Graphical User Interface Development
- Object Oriented Development.

Three further new courses have been approved:

- Internet and Website Development 2
- Software Development for Interactive Television

- Database Administration.

Many other courses have been substantially revised and updated, and four have changed their names:

- Business Information Systems (previously Business Systems)
- Internet and Webpage Development (previously Internet and Webpage Design)
- Network Design and Implementation (previously Network Design, and originally Advanced Network Design and Management)
- Web Application Development (previously Web Client Server Computing).

In addition pre- and co- requisites for several courses have been amended to ensure there are no unnecessary barriers and students have the necessary background. All this activity indicates a discipline which is constantly evolving, a programme which is always under review, and a staff who want the students to be up-to-date, even when that entails a lot of extra work in reviewing, revising and developing!

7. SECOND PHASE

Having identified the main issues as

- the level 4 courses
- the compulsory courses
- online delivery
- assessment
- credit values

we are about to move into the second phase of the review. This will involve debate amongst the BCS staff, obtaining feedback from students, advisory committee and NZQA monitor about any proposed major changes to structure or delivery, and then submitting the changes to the programme and academic committees for approval. Everything will have to be documented for submission to the review panel, and they will also have input into the changes that result from our review process. A progress report will be provided at the conference.

