

INFORMATICS FACULTY PLAN (2005–2006)

SECOND PROGRESS REPORT

SUMMARY OF PROGRESS AGAINST ACTIONS PLANNED FOR 2005–2006

OVERVIEW

As advised in the First Progress Report, the University has changed their Faculty Planning and Resource template. The Plan, as submitted, complies with this changed template.

For the purposes of clarity and as presented in the first Progress Report summary, this summary report follows the changed reporting template by summarising progress within the two core sections and the four sub-sections of the new template as identified below:

Planning and Review of Core Activities

- Learning and Teaching/ Internationalisation
- Research/ Internationalisation
- Community Engagement
- Student Equity

Resources and Management

- Student Profile
- Staff Management
- Resource Implications (*not reported against*)
- Projected Income & Expenditure (*not reported against*)

This second Progress Report builds on that of the first, hence the achievements identified in the first Report, where not changed, have been retained for this report.

As mentioned in the first Progress Report, the objectives and strategies for this current Plan were devised at the full Faculty Planning Conference held in January 2005 and adjusted at a smaller Planning Meeting in December 2005. As such, new sub-sections which appeared in the revised template were not considered within the structure of that the Planning Conference and the subsequent Plan. However, where the Faculty has progressed activities against these sub-sections in the normal course of operations, this progress has been reported.

Please note also that some new objectives have been formulated (identified in body of summary) and some objectives may have been adjusted in response to changes in environment and priorities.

SECTION 1: CORE ACTIVITIES

Teaching and Learning / Internationalisation

Objective: Provide an effective educational experience for all our students that will produce quality graduates.

- FEC identified MATH151, ECTE171 and CSCI191 for change evaluation in Autumn
- Two unsuccessful ESDF grants completed and lodged
- One successful ESDF application, *Summertime Math*

- Dr A Porter asked to chair an UEC working party to look at the development of Maths Skills across campus.
- Associate Carrick Fellowship application submitted (to address Maths in Science).
- Teaching and Learning Fund application submitted to release SMAS academic to initiate followup evaluations of subject improvements and to identify "second steps" successful
- Expression of Interest for CASR funding submitted to complete larger scale project, *Return to Mathematics*
- Under Faculty Service Agreement with CEDIR:
 - newsletter developed
 - video clips of Science and Engineering problems, student experience and Maths of 21st Century developed
- Improvements effected in three subjects so far:
 - STAT131 – change of assessment
 - SCS114 – continued lab development and assessment modifications
 - MATH141 – developed and trialled new video learning resources
- MATH161 commenced using resources developed in MATH141
- STAT131 to adopt in Spring the lab tests developed in Autumn
- Followup evaluations of five subjects (STAT131, MATH141, CSCI114, CSCI124 and CSCI103) conducted with results as follows:
 - Failure rate for CSCI114 fell from 28–35% to 22% for the Autumn session
 - STAT131 changes led to a doubling of HD and D grades but only a slight drop in failure rate
 - MATH141 students, who used resources developed as identified above, improved their grades from Test 1 to Test 2, and maintained the increase in the Mid-term test (approx 12% improvement)
- Resources now being developed for rest of MATH141 and hence for major assessment final exam
- Working with Science Faculty to develop resources for Maths in Science
- QUALITY101 project working to develop a program of changes with the activities in Maths as an example
- FEC formed working party, amalgamated with Tertiary Literacies Integration working party (TLIWP), to investigate and report on language issues across the Faculty; now also developed a more sophisticated 'map' of various generic and professional skills required and actively developed across the various programs in the Faculty, to facilitate better needs assessment and strategic planning of integration
- Current integrated academic literacy teaching in:
 - ECTE250/INFO202: continuing collaborative teaching with Learning Development
 - ECTE955: series of tutorials/workshops on lab report writing, literature reviews, avoiding plagiarism, and effective oral presentation
- Generic academic literacy resource website established as project to consolidate and share existing resources, and plan further resource development
- Integrated various strategies to support academic literacy development within ECTE171, including early assessment of writing, lecture and follow-up seminars, and still developing marking routines and guide for assessors

- Actively reviewing language development needs of ECTE250/INFO202 and reporting to TLWP
- Separated international PG IACT201/MS9201/ITCS908 students and formed into single tutorial group receiving two intensive workshops on written assignment tasks which delivered significantly positive results
- Report-writing workshop and plagiarism-avoidance workshop integrated into ECTE957
- SITACS sent letters to 71 students who failed two or more subjects in Autumn session inviting them to a Student Forum where attending students were offered mentoring assistance
- STIACS' comparative data of past three sessions indicated a drop from 6.15% to 5.4% of students failing two or more subjects.

Objective: *Review course and subject offerings in line with the University Quality Review Framework with a clear focus on key national and (where appropriate) international industry and social sector needs.*

- SITACS first year subjects now have structured labs.
- Internal audit conducted of SITACS subject outlines with adjustments made to streamline assessment procedures
- CSCI124 commenced Autumn 2006 session with structured labs
- BE final year revised with new final year to be introduced in 2007
- Review of MEngStud complete with new degree structure, ie offering three more focused and industry-relevant majors and two duration options (48-crp single major and 72-crp double major) providing more flexibility being fast-tracked
- Benchmarking being undertaken of SECTE Masters courses against major Australian competitor offerings relative to duration, subject offerings, industry input and course names
- SMAS proposal formulated for immediate changes to MMathFin (first year) for implementation in 2007 and forwarded to FEC
- SMAS commenced process of degree accreditation with the Australian Mathematical Society and the Statistical Society of Australia; application for accreditation of MMathFin with ASIC is nearing completion
- Discussions re connections between MATH121 and CSCI103 in a *Critical Cooperation Project* in process
- SECTE students now provided with MATH010 *Enabling Maths* realising good results for Autumn session
- Additional tutorials, including PASS tutorials, to be used in MATH161
- UEC-initiated project launched to examine teaching Maths/Stats in subjects within other Faculties, particularly Science Faculty
- Access Grid Room, funded by Australian Mathematics Society Institute, now operational with joint Honours subject being run with two other Universities
- FEC developed schedule of course reviews by School
- BIST-review process progressing with terms of reference being developed
- Session reviews of subject delivery process completed Autumn 2006 with results entered into database.

Objective: *Develop Dean's Scholars program across Faculty courses*

- Proposal for Dean's Scholars program developed, approved by the Faculty Executive Committee and Faculty Committee is currently scheduled for a 2007 implementation.

Objective: *Consolidate all offshore partnerships*

- Developing strategic government and industry linkages and contacts as follows:
 - formal relationship currently being developed with the Singaporean Infocomm authority as well as the Singapore Computer Society
 - key industry players identified and dialogue commenced in China, Malaysia and Hong Kong
- Faculty Alumni successfully activated in Malaysia and Singapore with major functions being held in both locations during February
- Hong Kong Alumni activation in progress with event rescheduled to coordinate with 2007 ABRS Graduation ceremony.

Objective: *Review teaching allocation*

- SITACS formed committee to review teaching allocation and subject delivery
- Many SMAS subjects now team-taught, including by an external expert in STAT304.

Objective: *Further enhancing teaching quality (new objective and only for FEC)*

- Five Quality Teaching and Learning grant applications submitted – two successful
- Two ESDF grant applications submitted – both unsuccessful
- Two Carrick Institute competitive grants in priority area categories applications submitted – both unsuccessful.

Research / Internationalisation

Objective: *SITACS to attract high calibre Postgraduate students and improve their research productivity, and performance and completion rates*

- SITACS' new HDR Co-ordinator to arrange a supervision workshop for Spring 2006.

Objective: *Ensure that 85% of Academic staff are research active*

- SITACS current reviewing baseline data to determine fields to be constructed in SIMS (SITACS Information Management System) database
- SITACS runs School Research Colloquium every week including with occasional guest speakers from other institutions.

Objective: *Increase dollar-level of competitive funding from ARC, CRC, other funding agencies and industry sources*

- Faculty review process conducted for 2007 ARC Discovery Grants
- 25 ARC Discovery grant applications submitted
- Successful SMAS staff mentoring program instituted and development of joint applications with other staff members also instituted

- All new SMAS staff applied for University Small Grants resulting in more applications lodged in 2006 than in previous years with all receiving review and discussion prior to submission
- Workshop for unsuccessful ARC Linkage applications held.

Objective: *SMAS to have a strong international reputation for research*

- Four new PhD students enrolled
- Active group in Nanotechnology with PostDocs and visitors established
- Two new professors in Statistics acquired
- Collaborations in Statistics with Manchester, Southampton and ANU established.

Objective: *Review SMAS research structure*

- Maths in Industry Group (MISG) planning progressing with:
 - Two SMAS staff appointed as directors
 - Funding of \$10,000 secured for 2003
 - Web site now live
 - Partners offering problems and support now identified
 - Problems scoped.

Objective: *Produce a substantial amount of research of high quality and impact, thereby positioning the Faculty to thrive in the new Research Quality Framework being developed by the Federal Government*

- FIRDS grant awarded
- Publications increased by 14% over previous year.

Objective: *Establish and/or improve relationship with six key domestic organisations*

- Meetings held in TITR to identify potential projects
- Approaches made to NZ Ministry of Health and to ANSTO.

Objective: *Develop another long-term research strength for the Faculty*

- Centre for Statistical and Survey Research EOI accepted and full application submitted.

Objective: *Develop an effective Faculty-wide research management and funding plan in collaboration with URC*

- Research groups and funding processes finalised.

Objective: *Strengthen incentives and resources for educational growth and development*

- Subscription to TenderSearch bulletin (covering Australia, New Zealand, Singapore and Hong Kong) for information on available tenders and research grants acquired.

Community Engagement

Objective: Quarterly Research Seminars and/or mini-workshops for local industry.

- Ad-hoc workshops and presentations organised by various research groups and strengths; objective to be slated to Associate Dean (Research) to further progress.

Objective: Provide the ICT leadership focus in terms of the development of the Wollongong Innovation Campus (WIC).

- Discussions with *Imprezzeo* progressing with significant venture capital interest
- One provisional patent lodged around *Imprezzeo*
- Partner audit planning for Faculty.

Objective: Contribute to a sustainable economic and environmental management

- *SECTE, SMAS, TITR:*
 - Remote individual computer wake-up applied on an individual unit basis for the server(s) systems and applicable only to computers that have the suitable configuration facility thereby effecting power savings
 - All new computers configures with stand-by and hibernate modes, including "stay off" after power fail.
- *SITACS:*
 - All new SITACS labs (and other computers) are being set so they do not turn on automatically, again effecting power savings
 - Staff computer monitors turn off after 20mins and hard drives after two hours of inactivity.

Student Equity

Objective: Improve access, participation, retention and completion rates among student equity groups at the University of Wollongong

- *SECTE:*
 - created first-year scholarships for females in non-traditional areas to be advertised for students commencing in 2007
 - SECTE held lunch for female students, HDR students through to first-year graduates and staff to encourage networking and demonstrate support for female students
 - SECTE joined with Faculty of Engineering in planning a Guides in Engineering and Science Saturday
 - SECTE female staff established a new 'Females in Engineering' network
- Enrichment Program and Saturday Computing School seeing good female participation rates
- Female intake into Maths-related degrees increased to 36%.

SECTION 2: RESOURCES AND MANAGEMENT**Student Profile**

Objective: *Attract and retain undergraduate and postgraduate students, both domestically and internationally.*

- SECTE:
 - new dynamic School website framework and server development complete.
 - established an informal marketing sub-committee
 - advised UniAdvice of willingness for staff to visit Schools
 - currently producing advertisement on all courses for international magazine and new website placement
- Faculty marketing activities currently focussed on attending identified Careers Markets and on supporting and growing the Enrichment Program
- New booklet developed and printed *Focus on Informatics* for career market distribution, Discovery Day database mailout, and to mail out to Schools
- The Enrichment Program now has a structure and process including online registrations through a dedicated web site, data collation and reporting, and dedicated administrative resources
- Saturday Computing School now finished and Saturday Maths School commencing for the first time
- Faculty supported the University-wide Early Entry advertising ½ page for four weeks in St George/Sutherland Shire Leader.

Objective: *Diversify International onshore students by country, levels and programs.*

- Due to 30% decrease in recruitment from the China market, objectives refocused to:
 - increase Faculty promotional/marketing activities with major agents
 - increase Faculty profile with twinning partners to ramp up articulation from Tainjin, Zhengzhou and Wuhan
- Significant consolidation achieved with Chu Hai College in China resulting in more nuanced articulation arrangements being developed
- Ramping up Chu Hai interaction with less focus being placed on KHUST given their relative non-success in recruitment terms
- Will disengage from KHUST and work to identify a partner for both onshore and offshore recruitment
- Discussions and meetings held with Singapore Polytechnic to gain market intelligence on Singaporean student course preferences as well as subject-development advice for new BComputer Science major, *Multimedia and Games Development*
- Research seminars scheduled to be delivered at both Chulalongkorn and Thammasat University; Prof P Ogunbona on editorial board of Chulalongkorn Computer Science journals
- Seminars presented at ICI in Jakarta receiving press coverage and local industry and government exposure; preliminary discussions with University Binus Nusantara resulting in a senior delegation scheduled to visit in July
- Key academic staff with strong cross-cultural/student interaction skills identified and implemented for soft marketing campaigns

- Newly formed Transnational Program Unit has seen Faculty International Manager relocate and recruitment process commence for replacement staff.

Objective: *Monitor and develop new staff.*

- SMAS have achieved a balanced staff workload through Workload agreements, new staff having at least one class at first year/service level and at least one class at a higher level, new staff applying for a small ARC and/or Early Career Research Grant, and each new staff member being a joint supervisor of at least one higher degree student
- All new SMAS staff achieving good progress with ITT, have attended conferences and been involved in seminar organisation for the School
- Discussions held with senior staff to identify those seeking leadership roles, eg through MISC, SEC and research groups.

Objective: *Improve representation of academic women*

- *Women in Engineering* program reinvigorated in SECTE
- Female academic staff actively involved in high profile committee representative roles
- Dr Katina Michael appointed co-ordinator of R&D initiative on *IP Location Aware Services* (collaborative effort between *Andrew Corporation* and the Faculties of Informatics and Commerce).

Objective: *Create a more inclusive and mentoring Faculty culture for equity group members*

- Faculty achieved 99% completion rate for EOline (only Faculty to do so). This strategy is now complete
- SITACS provides mentoring by Head of School for all new staff within three months of appointment
- SITACS Head of School works with staff to complete probations process
- SITACS' team-teaching practice to undergo Committee review
- SMAS reviewed mentoring arrangements at the commencement of 2006
- All SMAS probation and promotion applications discussed with Head of School and submitted on time with submitted application successful
- Over 50% of SMAS subjects team-taught
- INFO411 team-taught with Faculty's other two Schools
- Entire Faculty attended *Chinese Culture and Language Workshop*.

Objective: *Ensure work practices are non-discriminatory*

- Workloads working party formed to review and assess workload allocation and consistency across the Faculty's schools to be considered at both the Faculty and the EEO Office level.

Objective: *Multi-skilling Faculty's Administrative staff*

- Regular combined Faculty Admin Staff meetings held on a quarterly basis to share information and strategies
- Staff member supported in secondment to another area with existing staff redeployed to now-vacant position undertaking new roles and development

- Faculty and SITACS Admin staff sharing responsibility for support the Enrichment Program process

Objective: *Implement the OH&S Strategic Plan for Informatics*

- The University is still to implement new Cognos reporting tool with updated, accurate data, recently advised to be ready in September
- Schools working on Audit inspections of Labs, teaching spaces and ultimately office space (*see also below*).

Objective: *Promote a safe and healthy work and student environment for all staff, students and visitors*

- SECTE established OH&S sub-committee which has met and scheduled meetings bi-monthly
- Above sub-committee scheduling workplace inspections as per OH&S Strategic Plan commencing with Building 6 laboratories (*see also above objective*).

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7 September 2006