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Our Ref: 02/12/003/021 (v3)

14 June 2001

Professor Dennis Haskell
Chair, Academic Board

Dear Dennis,

Report of the Academic Structures Working Party

I attach the Report of the Academic Structures Working Party for submission to the June meeting of the Academic Board.

As the Report points out, the Review of Academic Structures is the second phase of a three-phase review which started with the Academic Profile - an academic plan which charts the University's directions for the next 10 years - and will conclude with a Review of the University Budget model. It is a package of developmental reforms that are integral to the agenda of change we have pursued over the last 3 years, and arises largely from the OPP process begun in 1998.

I would like to emphasise the importance of these developments at a time of unprecedented changes in higher education worldwide. It is vitally important that we have a clear vision of where we are headed and how we propose to get there. The structures and mechanisms of the past have served us well and UWA is well positioned to move forward in a changing environment. The new structures proposed will, I believe, provide us with a more appropriate and flexible basis for capitalising on changes in the world of knowledge, and enable us to interact more effectively with important societal forces in industry, the professions, governments, schools and the general community. They should also bring cost efficiencies to benefit our academic programs.

Finally, I wish warmly to acknowledge and thank my colleagues on the Working Party, particularly Professor Robson who has led the review, both for the work they have done and the manner in which they have done it. This has been a highly consultative process, and I commend the resulting recommendations to the Board. We have a great opportunity to reshape our University for the future.

Yours sincerely,

Professor Deryck M Schreuder
Vice-Chancellor and President

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REPORT OF THE ACADEMIC STRUCTURES WORKING PARTY

14 June 2001

URL: <http://www.acs.uwa.edu.au/reg/internal/sec/apindex.htm>

Introduction

1. This is the fourth report of the Academic Structures Working Party, following:
 - the Discussion Paper "Academic Structures and Budget Principles", 19 September 2000;
 - the Options paper "Review of Academic Structures", 14 December 2000; and
 - the "Report of the Academic Structures Working Party", 15 March 2001.

These reports in turn follow the June 2000 "Academic Profile Discussion Paper", and the Report of the Academic Profile Working Party that was approved in principle by the Academic Board on 20 September 2000, as the forerunner to the review of academic structures.

These documents are all available on the web location indicated above and are taken as read for the purposes of this report.

2. The starting point for this report is, therefore, Resolution 19 of the Academic Board of 21 March 2001, which reads:

to endorse in principle the Report of the Academic Structures Working Party including the model as presented and the processes for its formal implementation subject to the Department of Biochemistry being situated in the School of Biomedical Sciences and subject to the position of Natural Sciences being reviewed in the light of the Board's discussion.

3. Immediately following the Board meeting the Working Party embarked upon an intensive round of consultations with the various parties involved in the discussion of arrangements for biomedical sciences, and for natural and agricultural sciences in the University. Meetings were held with individual departments, including academic and general staff and senior students, and with representative groups of senior departmental and faculty leaders, including the Executive Deans, Heads of Departments and Professors from the departments concerned.

Natural and Agricultural Sciences

4. The first issue to be addressed was the place of natural and agricultural sciences, and a strong consensus rapidly emerged in favour of the formation of a Faculty of Natural and Agricultural Sciences¹ from the current Faculty of Agriculture and departments of Botany, Geography, Geology & Geophysics, and Zoology, with a view to creating Schools of Animal Science, Earth Science, Plant Science and Resource Economics.

¹ There has been no formal closure on the naming of any of the proposed faculties or schools in this paper at this stage.

5. The consensus of participants in the discussions was that the faculty/school structure should be built on 'natural' discipline groupings, such as those that had been identified in the Working Party's 15 March Report, (page 6, paragraph 17). Indeed, many submissions to the Working Party have argued that this should be adopted as a general principle so that wherever possible formal structures are aligned with academic discipline groupings. The Working Party supports this approach, as part of the principle of academic cohesion, but recognises that it cannot always be achieved. Where it can be achieved, as in the natural and agricultural science area, it is a desirable design principle; where it cannot be achieved, the establishment of discipline groups to complement the faculty/school structure is a critical element in the overall operation of the proposed system.
6. This particular faculty proposal, therefore, closely resembles Option D from the December Options Paper.

Biomedical Sciences

7. The issue of the composition and place of a biomedical science school in the University is more complex and more controversial. However, the particular question of the place of Biochemistry in the University was resolved in one sense quite quickly, as there was a consensus view from the departments of Biochemistry, Microbiology, Pharmacology and Physiology, that, whatever the Faculty structure, they would seek as a first priority, to form a School of Biomedical Sciences to cement and enhance the close teaching and research links between the departments concerned. They saw their future development as being very much assisted by a strong formal grouping which would be competitive with other large biomedical science groups in Australia, and to better position them to capitalise on opportunities for growth and funding.
8. This position is somewhat complicated by the consideration of the place of Chemistry in the new structure. The proposed link between Chemistry and Biochemistry (in Option B as put to the Board) is still seen by the Working Party as an important objective, particularly in the light of recent developments such as the appointment of a new Professor in Biological Chemistry who is also head of the department. Discussions with the Chemistry department confirmed that a link with Biochemistry, and bioscience generally, was important to the academic directions of chemistry, but so too were links elsewhere, particularly with materials science and materials engineering. The department did not want a formal association with biomedical science to jeopardise academic developments in other key areas.
9. Following these discussions, the Working Party's conclusion was that Chemistry should be part of a biomedical and chemical sciences group, with Biochemistry, Microbiology, Pharmacology and Physiology; but that it should also retain strong links with materials science through the membership of appropriate staff in a discipline group of materials science alongside academics from both engineering and physics. The Working Party re-emphasises that it is not possible to embody all academic linkages simultaneously in a school structure; the interplay of schools and discipline groups in the proposed system is therefore vital to preserving and enhancing links that cannot be made to fit into the formal school structure. This is a central feature of the proposed model in terms of its ability to deliver the agreed academic plans of the University in key inter- and multi-disciplinary areas of strategic opportunity.

10. The most difficult issue facing the Working Party, and University, then becomes the question - to which faculty should a School of Biomedical and Chemical Sciences belong? Both the Faculty of Medicine and Dentistry and the Faculty of Science (which could be restyled a Faculty of Life and Physical Sciences, following the proposed establishment of a Faculty of Natural and Agriculture Sciences) have argued for 'ownership' of such a school.
11. In essence, the competing arguments are that:
 - Biomedical science is important to an integrated undergraduate medical program and to medical research, and that there is a clinical context for much biomedical teaching and research activity; several staff in these departments have clinical functions and links.
 - Biomedical science is fundamentally science. The staff and postgraduate students in the biomedical science departments are predominantly scientists and the undergraduate student load is predominantly science students. The underlying molecular and chemical science in several of the departments concerned is independent of clinical medicine and many growth opportunities in these areas are likely to be in science.
12. Many submissions have been received amplifying these general themes and the Working Party acknowledges that there are valid arguments on both sides. The Working Party in particular notes:
 - That the majority of academic staff in the biomedical departments are scientists, although a small minority have clinical responsibilities and a clinical orientation.
 - The vast majority of PhD students are science graduates and the predominant balance of undergraduate teaching of the departments is in the Faculty of Science (student load data for 2000 are given in Appendix 1).
 - There appears to be evidence of more research collaborations between the biomedical science departments currently in the Faculty of Medicine and Dentistry and departments in the Faculty of Science, than between the biomedical science departments and clinical departments in the Faculty of Medicine and Dentistry.
 - There have been many examples of clinical departments appointing biomedical scientists rather than using the expertise of existing staff in the pre- and para-clinical departments.
13. The Working Party's view overall is that, while there are good arguments on both sides, the more compelling arguments and greatest potential benefits for the University would favour the location of a School of Biomedical and Chemical Sciences in a restyled Faculty of Science. The Working Party examined structures in other Go8 universities and found no universal or compelling model. In Melbourne and Monash these departments are in Medicine; in Queensland and Sydney they are in Science; in Adelaide and NSW they are split across the two faculties. Neither the Working Party nor the departments concerned favour a split across the two faculties. Location in Science would best accommodate the majority of staff and the balance of undergraduate and postgraduate student teaching and supervision, and would, in the

Working Party's view, deliver a more balanced faculty structure and mix for the University as a whole than location in Medicine and Dentistry. The Working Party also acknowledges that staff with a strong clinical/medical orientation might need to be accommodated either with a transfer to a medical department/school, in a very few cases, or via joint appointments.

14. At its most recent meeting with the heads of the biomedical sciences departments, the balance of opinion favoured the Working Party's preferred model of locating a School of Biomedical and Chemical Sciences in a Faculty of Life and Physical Sciences rather than Medicine and Dentistry; but there were some misgivings centred primarily on the wish to maintain close links with medical teaching and research; the options of limited staff transfers and joint appointments were welcomed as useful bridging mechanisms.
15. Some of those consulted questioned the proposal to allow departments such as Anatomy and Human Biology or Human Movement and Exercise Science to exist as separate schools when significant elements within them could well be part of biomedical science. The Working Party believes that these two departments/proposed schools are unusual in the breadth of their disciplinary coverage and are genuinely multi-disciplinary at present. Anatomy and Human Biology encompasses anatomy, neuroscience, ecology and anthropology; Human Movement and Exercise Science spans the fields of education through to exercise physiology. It is possible that some individual staff might seek to move as the new schools form; and certainly many would participate in a wider biomedical science discipline group, even if not formally part of the proposed School. Over time the situation could evolve and change as these current stand-alone departments/schools develop and individual staff reassess their most appropriate school base.
16. An important element in the proposed model is, therefore, the provision of a process for change as well as for the initial establishment of a structure. Such a process will need to strike the right balance between stability and orderly adaptability. This was a key feature of the Working Party's March report (paragraphs 16 and 19) and is emphasised again here.

Summary and Conclusions

17. To summarise then, the Working Party has addressed Academic Board Resolution 19 and believes it has resolved the two areas of concern, if not to the satisfaction of all existing parties, at least to the satisfaction of the majority of departments directly concerned. The model that emerges is, therefore, a 9 faculty model, with 30 schools, as follows:

Faculty (9)	School (30)	Current Departments
Architecture & Fine Arts	Architecture & Fine Arts	Architecture & Fine Arts
Arts	Social and Cultural Studies	English, Asian Studies, Anthropology, Social Work & Social Policy, Political Science
	Humanities	History, Philosophy, European Languages, Linguistics, Classics
	Music	Music
Business	GSM	GSM
	Economics and Commerce	Organisational & Labour Studies, Information Management & Marketing, Accounting & Finance, Economics
Education	Education	Education
Engineering & Mathematical Sciences	Environmental Engineering	Environmental Engineering
	Civil & Resource Engineering	Civil & Resource Engineering
	Mechanical & Materials Engineering	Mechanical & Materials Engineering
	Electrical & Electronic Engineering	Electrical & Electronic Engineering
	Mathematics & Statistics	Mathematics & Statistics
	Computer Science & Software Engineering	Computer Science & Software Engineering
Law	Law	Law
Life and Physical Sciences ²	Anatomy & Human Biology	Anatomy & Human Biology
	Biomedical and Chemical Sciences ²	Biochemistry, Chemistry, Microbiology, Pharmacology, Physiology
	Human Movement & Exercise Science	Human Movement & Exercise Science
	Psychology	Psychology
	Physics	Physics
Medicine and Dentistry	Dentistry	Dentistry
	Medicine	Medicine
	Surgery and Pathology	Surgery and Pathology
	Women and Children's Medicine	Obstetrics & Gynaecology, Paediatrics, Institute of Child Health Research
	Public Health	Public Health
	Psychiatry & Clinical Neurosciences	Psychiatry & Behavioural Science
	Primary Health Care	General Practice, WACCRM, CUCRH, Rural Clinical Schools, Emergency Medicine
Natural and Agricultural Sciences ²	Animal Science	Agriculture, Botany, Geography, Geology & Geophysics, Zoology
	Earth Science	
	Plant Science	
	Resource Economics	

² Names subject to negotiation

18. During the course of the discussions leading to the foregoing proposals, there was a keen interest in exploring further the role of discipline groups and discipline coordinators. The Working Party has emphasised throughout that discipline groups would not be formal resourced structures or sub-structures within schools, but would be academic interest groups more formalised than the current 'free associations' that exist between academics with common disciplinary or interdisciplinary interests. The Working Party draws the Board's attention to paragraphs 9 to 19 of its 15 March report which deal with these issues at some length.
19. It has also been suggested that discipline "chair" would be a preferable term to discipline coordinator, signalling both the collegial and leadership aspects of the role. The Working Party would support this suggestion.
20. It has been further suggested that discipline chairs would be powerless without a formal budget allocation role. The Working Party does not agree. Resources will be allocated down from Heads of Schools from their one-line budgets on advice from discipline chairs and, of course, operating funds, as with research grant income, will end up in the hands of groups and individuals within schools, just as they do now within large departments. Discipline chairs will be well placed to exert considerable influence on this process. For example, one option might be to constitute a budget committee within a school, comprising appropriate discipline chairs, just as faculties might constitute budget committees within faculties comprising heads of schools. The Working Party believes the precise way in which resource allocation operates within a faculty or school is best left to the faculty/school concerned (provided that it does not involve a de facto recreation of 'departments'). The Working Party also accepts that the role of discipline chair will need to attract some resource support, probably in the form of teaching relief, to make it viable.
21. There are many implementation issues and details that will need to be worked on if this proposal is endorsed by the Board. These would include formal delegation provisions, representational matters, human resources matters, implications for financial systems, statistical and reporting issues, legislative issues, publications/letterheads/signage matters, scholarship and fellowship allocations. It is proposed that an Implementation Group would be formed immediately under the auspices of the Working Party, to consider all these and other implications if the proposal is accepted. Implementation will take a considerable time to complete but it need not take a considerable time to commence, and an early step would be the identification and formation of discipline groups to complement the faculty/school structure. A process involving both the collegial and executive systems, with proposals coming from within the faculties, and involving Academic Board and Executive consideration, would be initiated as soon as possible.
22. The Working Party concludes, therefore, that the proposal above:
 - Adheres to the 6 design principles agreed in March 2001 (paragraph 2).
 - Secures the benefits of the 9 faculty model as set out in the March Report (paragraph 4.1).
 - Secures the benefits of schools by eliminating the disadvantages of the current structure as set out in the March Report (paragraph 4.2).

- Provides a means, via the creation of discipline groups, for dealing with disciplines within and across schools and faculties.
 - Addresses the issues of the natural sciences and biochemistry as required by Academic Board Resolution 19/01.
 - Provides a structural basis for addressing the academic plans, priorities and strategic opportunities identified and agreed in the Academic Profile.
23. Accordingly, the Working Party recommends that the Academic Board endorse this proposal in principle, pending consideration of the third and final phase of the 3-phase review of academic plan - structure - budget. The third phase, the review of the University budget model, is expected to be finalised by August 2001.

Date compiled: 14 June 2001
(File Ref: 02/12/003/021)

(Attachment: Appendix 1)

APPENDIX 1

Actual Full-Year Student Load 2000 by Faculty of Course - Faculty of Science and Faculty of Medicine and Dentistry

Teaching Department	Faculty of Course												
	PhD	Agriculture	Architecture	Arts	Economics & Commerce	Education	Engineering & Math Sc	Law	Medicine & Dentistry	Science	Aboriginal Programmes	Other	Grand Total
Faculty of Medicine and Dentistry													
750 Public Health	16.7								55.7				72.4
800 Oral Health Sciences, Sch of	2.0								132.5				134.5
860 General Practice	1.8								55.2				56.9
880 Clinical Biochemistry									0.1				0.1
890 Psychiatry & Behavioural Sci.	8.0								52.8	0.5			61.4
900 Medicine	32.4								119.4				151.8
920 Biochemistry	37.6	19.4		0.2	1.0	0.4	3.4	1.2	76.1	87.2		2.3	228.7
930 Paediatrics	12.9								41.1				54.0
940 Obstetrics & Gynaecology	2.8								40.3				43.0
950 Microbiology	33.7	10.2		0.2	1.0	0.4	2.3	0.7	35.7	90.0		0.8	175.0
960 Pharmacology	10.0						1.5	1.0	45.5	34.9		0.6	93.5
970 Pathology	15.6								53.8	20.0			89.4
975 Molecular Imm. & Inst, Ctr for	7.5												7.5
980 Physiology	14.5				0.1		8.9	0.4	80.9	57.1		1.5	163.5
985 Applied Cancer Studies, Ctr for	3.0												3.0
990 Surgery	28.3								82.9	0.3			111.5
995 Ctre for Ophthal. & Vis Sci.	8.0								3.8	1.3			13.1
Total	234.7	29.7	0.0	0.3	2.2	0.7	16.1	3.3	875.7	291.4	0.0	5.1	1,459.3
Faculty of Science													
060 Geography	17.3	4.5	1.8	15.7	1.4		8.4	1.8		110.7		3.0	164.6
140 Psychology	60.6			196.8	7.7		5.7	8.7		289.6		1.8	571.1
310 Human Movement	25.6				2.5	13.0	1.3	0.4		352.2		3.3	398.2
500 Botany	25.3	7.5		0.2	0.4	0.4	4.0	0.2		42.9		1.1	81.9
510 Chemistry	31.3	19.8		0.4	4.6	1.9	36.5	4.9	9.2	141.0		1.8	251.3
520 Geology & Geophysics	41.8	2.3		1.2	0.2		8.5	1.2		82.8		1.2	139.1
550 Advanced Min & Mat Proc, Ctr for										1.8			1.8
560 Physics	29.9	1.8			0.8	0.4	102.3	1.1	5.6	60.3		0.7	202.9
570 Zoology	32.5	8.4		0.2	0.3	0.4	4.2	0.8	4.6	89.2		5.8	146.3
910 Anatomy & Human Biology	16.9			5.9	3.7	0.1	5.2	1.5	91.1	227.0		0.7	352.2
Total	281.0	44.2	1.8	220.4	21.6	16.1	176.0	20.7	110.6	1,397.4	0.0	19.4	2,309.3