

Quality of Research Policy

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1. Background

The Strategic Plan (2013-18) has the ambitious plan to transform USP from good to excellent. The transformational agenda requires a significant investment in research and will require substantial improvements in research outputs. Crudely, a university or an individual's research outputs can be assessed based on three key measures: quantity, quality and impact (how much research is carried out, how good is it and what difference does it make?). Currently some measures such as PhD supervision and external research grant applications are at too low an average to establish reasonable threshold levels for research activity at USP. This is expected to change over the strategic planning period. These measures are still useful to establish good and exceptional performance in research.

2. Quality of Research (QoR) Measures

2.1 Research Outputs: Research outputs are relatively easily identified, although there are issues with the definition and weighting of research outputs (for example, the equivalence between a book and a conference paper). USP monitors research outputs through the institutional open-access repository USPERR (<u>http://repository.usp.ac.fj/</u>). In addition to 'standard' research outputs such as journal articles and book publications, the repository collects data on creative works as well as applied research reports and policy/management briefs and technical reports. Other quantity measures include research grant applications, success rates and active grant income.

2.1 Quality: Quality of outputs is more difficult to assess. In the sciences, there is a long established tradition of quality assessment based on the esteem of the journal or book publisher in which articles are published, and in the modern era this has been translated relatively effectively into journal rankings based on average citation rates. A difficulty with this approach is the wide disparity in citation rates, and therefore journal rankings between disciplines. This issue was addressed by the Excellence for Research in Australia (ERA) 2010 journal rankings, which rated journals according to their relative rankings within a discipline (so that there were approximately equal numbers of 'top ranked' journals in social sciences versus medicine, for example). This scheme has been replaced in subsequent ERA exercises by a peer assessment system. For USP, individual assessment of research performance would be prohibitively expensive. Therefore, USP will continue to use the ERA 2010 rankings, but will amend and adjust the system by reviewing the standing of journals using established and internationally recognized metrics. Where there is a conflict between these and the 2010 rankings, no journal will be downgraded from its 2010 position. A scheme for assessing books, book chapters and creative works will be included in the QoR following consultation with faculties and schools.

2.3 Impact: Research Impact is difficult to measure, as it encompasses the many facets of societal benefit that accrue from research activity. Often the true benefits of research will not be realized until

many years after the research has been published. Also, except in rare circumstances, the societal advances and changes made possible by research cannot be solely attributed to one piece of research, but to accumulated efforts of several researchers and research groups. Moreover, citation rates tend to measure impacts within the research discipline and not the wider societal benefits of the research. Thus, attributing the relative impact to an individual is challenging. Therefore, while research impact is an important aspect of research quality, it is not currently feasible to develop routine targets and measures for the USP QoR system.

2.4 Research student supervision: research student supervision is one useful indicator of societal impact, including regional capacity building, as well as being a measure of research activity. PhD supervision is at too low an average across the University to establish threshold levels, but research Master's supervision is a good indicator, and can be combined as a measure of research student supervision.

3. Research Performance Threshold Levels

3.1 Benchmarking

Based on 2010 research outputs, in comparison to a range of Australian competitors, relevant average annual benchmarks for research performance by individuals at USP are as follows¹:

Key Indicator	USP (2010)	Comparator average
Refereed research journal or	0.62	0.69
creative works outputs		
High ranked (A+A*) journal or	17%	N/A
creative works outputs (% of		
total refereed outputs)		
Average journal citation rates	6.0	8.2
(ISI Web of Knowledge) per		
article		
Total EFTS research students	0.67	0.85
(Master's 700-level + PhD 800-		
level)		
PhD student to total research	26%	87%
student percentage		
External (project) research	FJ\$52,000 ²	=FJ\$75,570
income		

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Table 1: USP research	performance in	2010 against o	comparator universities

N/A = data not available.

3.2 USP Thresholds. Based on current and planned research performance at USP, the levels shown in Table 2 are for research performance management of RO and T&R staff via the iPerform system. Threshold levels are set to represent the minimum levels of performance expected for staff to be designated as 'research active'. Performance below threshold levels would only be expected for part-time staff or those with an exceptional administrative or teaching load. Research active staff would be expected to meet the thresholds across all of these key indicators, although exceptional performance in one area might compensate for performance below the threshold in another. Different staff categories would be

¹ Larkins F (2012) Research Benchmarking Performance Evaluation for the University of the South Pacific: A 2010 Baseline Study, 13 pp. based on academic staff with a research remit.

² External research income is likely to be overstated as this includes consultancy and development funding whereas the comparator average shows research funding only

expected to show different levels of performance, so, for example, Professors and Associate Professors might be expected to exceed the thresholds for 'research active' by a greater margin, and show excellent performance across all or some indicators. Note the following:

- For these purposes, only peer-reviewed research outputs catalogued in the USP Electronic Resource Repository and ranked (A* to C) according to the current Research Office ranking methods for standard outputs (journal articles, books, book chapters) or subject to external peer review (nonstandard outputs such as creative works) are counted. The process and methods to assess the ranking of Non-Standard Outputs (NSOs) such as creative works and cultural performances is published on the Research Office website at: <u>http://research.usp.ac.fj/index.php?id=173&L=0</u> (follow links to 'Research Outputs and Awards').
- 2. EFTS calculation is annual, so a full time Ph.D. student would count as 3 EFTS over 3 years. For the purposes of this policy, in the case of Master's students, there will be one principal supervisor and no more than one co-supervisor; and, in the case of Ph.D. students, there will be one principal supervisor and no more than 2 co-supervisors. Principal supervisors in each case would have a 70% allocation for supervision and co-supervisors would have a 30% allocation pro rata, except where a different workload distribution is approved by a dean or head of school. These allocations have been arrived at by a review of practice internationally.
- 3. Research income must be accounted as income within the previous 3 year period, so a FJD 50k award over 5 years would count as FJD 30k if the start and end dates of the award spanned the previous 3 years (otherwise should be calculated *pro rata*). Note that income accrued during extensions to awards should not be counted unless additional income is received (which should be calculated *pro rata*). For example, if a FJD 30k grant is made for 3 years, which ends after the first 2 of the previous 3 years, then the research income is FJD 20k, even if a 1-year extension is granted, unless an additional income of FJD 10k is made, in which case the total grant income for the period is FJD 30k, not FJD 40k. Note that research income includes both internal and external research income. To reach Threshold Level 3, Strategic Research Theme and/or external research income would be required. To reach Threshold Level 4 and above, external research income would be required. Where research income is jointly held it will be apportioned pro rata between the relevant members of staff.
- 4. Some staff may not have access to external research income or student supervision (e.g. due to contractual arrangements), in which case higher thresholds may be expected in other areas of performance.

Key Indicator	Threshold	Threshold	Threshold	Threshold	Threshold	Threshold	Threshold
	level 1	level 2	Level 3	Level 4	Level 5	Level 6	Level 7
Refereed, ranked research outputs deposited on USPERR over previous 3 years ¹	1	2	2	3	4	6	8
High ranked (A and A*) research outputs over the previous three years	0	0	1	2	3	4	6
Total EFTS research students (Masters 700 level plus PhD 800 level) over the previous 3 years as primary or secondary supervisor ²	0	1.5	2	2.5	3	4	6
Research income (as named investigator) over the previous three years ³	0	FJD 12k	FJD 30k	FJD 60k	FJD 90k	FJD 180k	> FJD 300k
Performance expectations							
Assistant Lecturer	Meets Performance Expectations	Exceeds Expectations	Excellent				
Lecturer	Development required	Meets Performance Expectations	Exceeds Expectations	Excellent			
Senior Lecturer	Does not meet expectations	Development required	Meets Performance Expectations	Exceeds Expectations	Excellent		
Associate Professor/Research Fellow	Does not meet e	xpectations	Development required	Meets Performance Expectations	Exceeds Expectations	Excellent	
Professor/Senior Research Fellow	Does not meet e	xpectations		Development required	Meets Performance Expectations	Exceeds Expectations	Excellent
Table2:		Research	Pe	rformance	Th	nreshold	Levels

3.4 Meeting Strategic Plan 2013-18 Targets

The distribution of academic staff by contract type (at May 2015) was as follows (Table 3): Table 3: Distribution of academic staff in 2015

Staff rank	Number	Percent
Professor	19	7%
Associate Professor	22	8%
Senior Lecturer	49	18%
Lecturer	81	30%
Assistant Lecturer	80	29%
Fellow	9	3%
Senior Fellow	14	5%
Total	274	100%

The Strategic Plan calls for a doubling of high-quality (e.g. ISI-listed) research outputs per staff member from 0.3 to 0.6 by 2018. If all staff operated at the 'meets expectations' thresholds, then the outputs would be 0.58, with 0.25 outputs per staff in the A/A* category. Since the SP also calls for an increase in the professoriate, the iPerform thresholds therefore appear to provide appropriate levels to incentivize staff to perform at the levels required to meet SP 2018 targets, at least in terms of research outputs.