

# A Report of a New Zealand-Based Funding Initiative Designed to Improve a University's Research Culture

**Jean Rath, MA, MSc, PhD**

Researcher Development Adviser  
Oxford Learning Institute, University of Oxford  
Littlegate House, 16/17 St Ebbe's Street  
Oxford, OX1 1PT, United Kingdom.  
Tel: +44 1865 286913  
Email: jean.rath@learning.ox.ac.uk

### Author's Note

The initiative reviewed in this paper was carried out at Victoria University of Wellington, Wellington, New Zealand. The author thanks her former colleagues in the Research Office at Victoria who provided support for the grant scheme. An earlier version of this paper was presented at the New Zealand Association for Research in Education Conference, Christchurch, 4-7 December 2007.

### Abstract

Over recent years universities in New Zealand have come under pressure from Government to increase quality assured research outputs and raise the level of staff participation in research-focused activity. One response to this pressure has been to target research development funding toward new researchers within an institution. This paper reports on the initial evaluation of one such targeted scheme: a three-year, university-wide funding initiative designed to improve research culture (including the research-teaching nexus) and increase outputs. The funding scheme evaluated in this paper began in 2004 as a strategic initiative designed to provide impetus to the research programs of new researchers and to give them experience in completing grant applications. Following attendance at orientation workshops staff members apply to a new researchers' development fund for an internal grant to support a specific project. Experienced researchers then mentor applicants regarding how to improve their applications before final approval is given. This paper reports on the impact of the scheme in four key areas: contributions to scholarship; teaching informed by research; relationships to external funding; and career progression of participants. The paper concludes with recommendations for the future funding of new and emerging researchers.

*Keywords:* Professional development, research culture, research grants

### Introduction

In common with developments in the international community over recent years, tertiary institutions in New Zealand have come under pressure from Government (e.g. via the Performance Based Research Fund [for details of the PBRF regime see <http://www.tec.govt.nz>])

to increase quality assured research outputs and raise the level of staff participation in research-focused activity. A web search suggests that institutional schemes to provide seed funding to enhance research capacity are prevalent across the country. As Porter (2004) reminds us, those who do not establish effective habits of research and grant writing early in their careers are unlikely ever to do so. Workshops that demystify grant application processes and schemes that mentor new staff in development of writing skills can thus stimulate greater participation in research culture throughout a career. It is not surprising that a number of institutions have targeted research development toward new researchers. They have put in place measures to encourage members of staff new to the academy and those new to research to develop an appropriate portfolio of knowledge, skills, relationships and research outputs in line with the Government's national quality assurance exercise. There have been few published studies that focus on the use of internal funding to promote research capacity, and those that do exist tend to focus either on the links between research and teaching (Morris and Fry, 2006) or the problems associated with the acquisition of grant writing skills (Porter, 2003). This paper attempts to address this under-reported area by providing an account of an initial evaluation of an internal grants scheme at Victoria University of Wellington targeted at new and early career researchers. Although the University recognises that such a scheme might also be used to support and encourage mid-career researchers who may have become inactive, the focus of the scheme and this evaluation is on how best to facilitate early career researchers.

### Description of the Funding Scheme

The New Researchers' Grant Funding Scheme began in 2004 as a strategic initiative designed to provide impetus to the research programs of new researchers and to give them experience in completing grant applications. This paper reports on the scheme for the three years 2004 to 2006 inclusive. The grants during this period were for a maximum of NZ\$2,500 (in 2007 this was raised to NZ\$5,000), and were available to members of academic staff in the first four years of their first academic appointment. The scheme's stated aim was to "provide impetus to the research programs of new researchers and, in particular, to give them experience in completing successful grant applications" (Victoria University of Wellington, 2006).

To apply for funding staff members followed a five-step process:

1. Attend an Orientation to Research workshop.

The three-hour orientation workshop included an experience-based talk from an early career researcher and practical information relating to the university's research strategy, ethics policies and procedures, internal research grants and study leave, and an overview of the New Researchers' Grant Scheme. Workshop evaluations have been consistently positive, with average ratings of workshop quality showing 83% of respondents recording scores of excellent or good. Qualitative comments show that clear explanations of funding processes are most appreciated, and that exemplars of past successful applications and the availability of Research Office staff to answer any queries are highly valued.

2. Submit an application.

The application form includes project title, description (written in plain language, suitable for a non-expert audience), anticipated outputs, project timetable and milestones, an explanation of how the assessment criteria will be met, and a fully justified budget. The Head of School must sign off the application, thereby guaranteeing that he or she is aware of and approves the staff member's plans, and that necessary support will be provided by the school.

3. Applications are reviewed by the Research Development Subcommittee (a subcommittee of the University Research Committee).

The subcommittee includes representatives from each faculty, experienced and early career researchers, a representative from the University Teaching Development Centre, and a member of Toi huarewa (the University's virtual faculty charged with ensuring that appropriate strategies and policies are followed to develop partnership with M ori, New Zealand's indigenous people). Applications are reviewed in line with the following broad criteria: the quality of the research proposal; the research outputs and outcomes, including links with high quality research-informed teaching; the accuracy and justification of the budget; and the strategic significance of the project for the applicant's School or wider University.

4. The committee allocates a member to act as a mentor to provide expert feedback to help develop grant-writing skills.

The committee formulates a consensus view with regard to recommended changes, and a member, usually from the same faculty as the applicant, provides individualised feedback over one or more sessions. It is rare for an application to be approved with no alterations.

5. Once the mentor is satisfied with the amended application a research funding account is set up.

Grant holders are required to sign a contract with the Research Office, and must seek permission if they wish to deviate from the original budget. Grant monies must be spent within one year, and all expenditures must be fully accounted for in line with University financial processes. Three months after the end of the funding period grant holders are required to report on the progress of their research against the objectives specified in their application.

### The Study

This paper emerged from an evaluation of the first three years of the New Researchers' Grant Scheme. It seeks to understand the role and impact of the scheme by reporting on the impact of the scheme in four key areas: 1) contributions to scholarship; 2) teaching informed by research; 3) relationships to external funding; and 4) career progression of participants.

The author was the coordinator of the scheme from late 2006 to early 2008 -- leading the orientation workshop, acting as a member of the Research Development Subcommittee, and mentoring applicants. Data routinely collected as part of the New Researchers' Grant Scheme was collated and analysed for grants initiated from January 2004 through December 2006. This included numerical data relating to size of grants, types of expenditure, academic role, and faculty of origin. Textual analysis was carried out of all successful grant applications and of available final reports. End of funding period final reports were available for 50 grant holders. The final written report followed a standardised pro-forma seeking information in the following key areas: an explanation of any budget variances; details of relationships with external organisations; potential external funding; and outcomes achieved, including intellectual property generated and outputs produced. Application and report data were anonymised and entered into NVivo7. Coding was carried out according to information features such as type of output, research collaborations, external funding and future plans.

Various factors contributed to partial incompleteness in data relating to the scheme, including the departure of some awardees, inability to locate some evaluation data relating to early orientation workshops, a small number of non-responses to requests for final reports, and some extended, ongoing projects.

## Results and Discussion

During the period under evaluation, 77 grants totalling NZ\$195,571 were funded (80 grants were approved, but three awardees did not make use of funds; four applications were withdrawn before the end of the mentoring process). There was little variation in the size of grants, with virtually all applicants opting to apply for at or very close to the NZ\$2,500 maximum, and the variation in actual expenditure was negligible, with most grantees under-spending by less than 2%.

Administrative data demonstrate that grant-holders came from all faculties. There were 38 female and 39 male grant recipients. This is not significantly different to the ratio of female to male new and emerging researchers at the university as defined in the 2006 national staff census for Government. The first orientation workshop was held in 2003, with the first grants awarded in 2004. Since the inception of the scheme 230 people have attended the orientation. Thirty-seven percent of attendees have applied for a grant, 22% were not eligible to apply and 41% of attendees have not applied and may still be eligible.

A short telephone survey of workshop attendees who had not applied for funding was carried out in 2005 (Asmar, 2005). It revealed that although some people were reluctant to apply because they had uncertainties regarding the eligibility of their proposed expenditure or had forgotten the grant closing dates, most were either planning to apply for larger grants, had received other internal funds, did not require funding due to the nature of the research, or had decided to prioritise teaching rather than research at this stage of their careers. Further follow-up with non-applicants is needed. However, the focus of this paper is the analysis of data related to grant-holders. The remainder of this section explores the role and impact of the scheme by reporting on the four key areas outlined in the study description.

*Contributions to scholarship*

One of the main aims of the scheme is to promote the University’s contributions to national and international scholarship. This is reflected in research outputs of various sorts, by collaborative relationships with external organisations and by the generation of intellectual property. Figure 1 shows the proposed outputs as planned in original applications together with the outputs as described within the final reports.

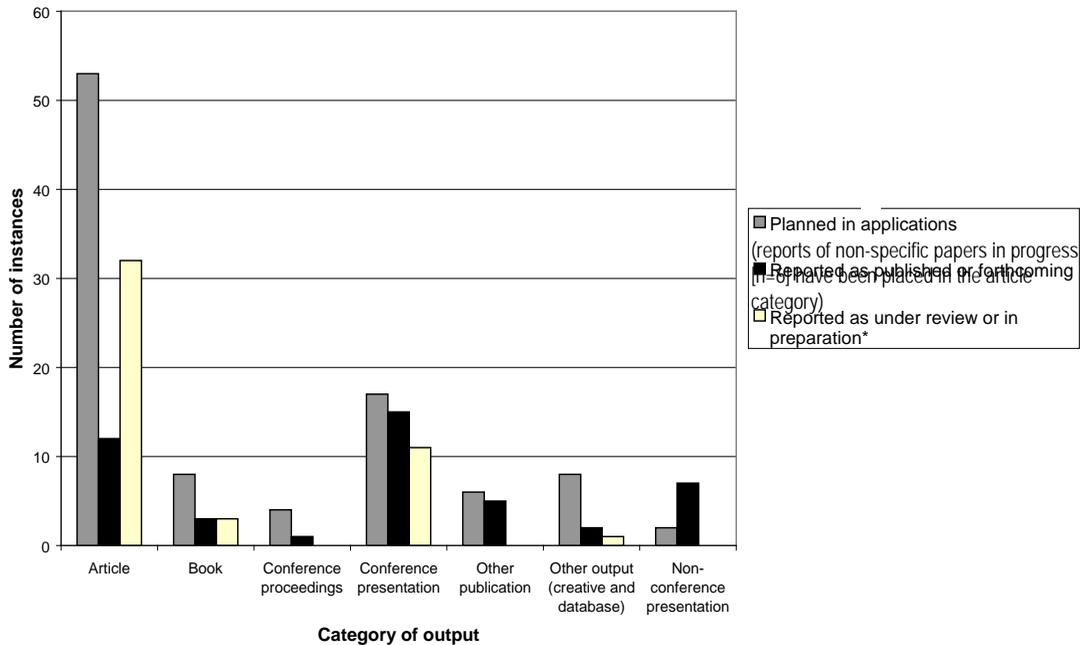


Figure 1. Comparison of number of instances of planned and reported outputs.

Clearly, there is some discrepancy between planned and actual outputs. There appears to be a slippage toward conference-focussed outputs rather than publication. Further follow up with researchers may identify whether these are precursors of “higher level” outputs or if conferences are regarded as the final outputs (which may be most appropriate in some disciplines).

One factor often identified as an issue in grant funding is that researchers tend to underestimate the amount of time and money projects require and be too optimistic with regard to likely outputs. The evaluation here supports Morris and Fry’s (2006, p. 52) point that “despite substantial discussion with those applying for grants and extensive comments on drafts of applications, most grant-holders are still over optimistic about what can be achieved with limited time and funds.” Nevertheless, the data show that grant recipients are actively disseminating their research findings beyond the institution. The large number of articles listed in preparation suggests that the reporting timeframe may need to be adjusted to more accurately reflect the range and number of journal articles produced, although it should be noted that outputs under

review and those in preparation do not always result in successful publication.

Grant-holders appear to be disseminating research findings through networked relationship building as well as publication. The grants may be acting as catalysts for disciplinary collegiality. The final reports show frequent collaboration with partners and advisors outside the University. In total, 54 instances of collaboration were reported. Table 1 shows the report data relating to external relationships.

Table 1

*External relationships recorded in end of grant reports*

<b>Nature of external relationship</b>	<b>Number of instances</b>
NZ academic	8
NZ community or professional	8
NZ public sector	6
NZ private sector	3
Overseas academic	21
Overseas community or professional	5
Overseas public sector	3
Total	54

In summary, it would appear that the New Researchers' Grants have been successful in encouraging the production of research outputs and in facilitating the development of inter-institutional collaborative and communicative networks. A more detailed evaluation is needed to confirm the transition from outputs in progress to finished pieces in the public domain. The University is also keen to encourage staff to develop non-refereed conference presentations into quality assured research outputs; this is an area both for future research development and for future research.

***Teaching informed by research***

In line with the University's Strategic Plan 2005-2015, which emphasises the need to generate initiatives that can effectively highlight Victoria's distinctive teaching and research capabilities, the criteria for the funding scheme (Victoria University of Wellington, 2006, p.2) state that the principles and purposes include outcomes that represent "*High-quality teaching* that is informed by research." The New Researchers' Grant application form requires applicants to address this criterion. Interestingly, textual analysis of applications reveals that only 17% included planned applications to teaching, and only 3% of final reports detail the input to teaching coursework. Several applications mention the use of honours or research degree students as assistants; however, the outcomes of such relationships are not well reported. The lack of reporting is probably related

to the use of a generalised end of grant online reporting system that has no field assigned to implications and applications to teaching. This evaluation has been valuable in identifying this oversight and there are plans to improve reporting in this area.

More could be done through the grant process to support the effective linking of teaching and research in a coherent manner. In recent years considerable efforts have been made to develop institutional awareness and support for the research-teaching nexus (e.g., Angelo and Asmar's (2005) discussion paper and collection of case studies, the development of research-teaching awards, and the inclusion of strong research-teaching themes in the inaugural Ako Victoria, teaching development Conference in September 2007). However, as illustrated by the reporting situation, research policies require further adjustment to allow for informed support and monitoring of the research-teaching nexus.

### *Relationships to external funding*

Table 2 shows the external funding recorded in end of grant reports. At the time of submitting an end of grant report, 9 % of grant holders had achieved external funding, although several had applications under consideration and just under one-third of reports mentioned that external funding may be possible in the future. A brief audit of Research Office records revealed that by September 2007, 21% of grant-holders had been awarded external funding; and 5% had obtained funding from multiple sources. Eight percent had received Marsden Fast-Start Awards, prestigious and highly competitive national funding for early career researchers, worth a combined value of NZ\$960,000.

Table 2

#### *External funding recorded in end of grant reports*

<b>Type of external funding</b>	<b>Number of instances</b>
Commercial funding already achieved	2
Commercial funding may be possible in the future	3
Grant funding obtained	5
Grant funding application submitted	10
Grant funding application in preparation	5
Grant funding may be possible in the future	13

As external research backing focuses on limited competitive funding, so the quality of an application is vital. However, quality alone is insufficient to win a grant (see the recent OECD (2007) review of the innovation system of New Zealand, focusing on the role of government and including an overview of funding opportunities and difficulties), and track record becomes increasingly important to the decision making of funding panels (see Laudel (2006) for an

analysis of the Matthew Effect, rewarding those who are already well-rewarded, with regard to research funding and quality). It would appear that the New Researchers' Grant scheme may have some influence in supporting early career researchers to develop both grant writing skills and a track record of fundable research. In this context it is also noteworthy that 12 grant-holders have gone on to successfully apply for substantial internal monies from the competitive University Research Fund (URF). Anecdotal evidence suggests that many researchers use these URF grants to help build a track record of successful research funding and outputs before they move on to apply for external funding. As a caveat to this section, it is important to highlight that the University remains aware of the need to direct internal monies to some areas that are not well-supported by external funding and to those researchers who "just miss out" on external funding.

### *Career progression of participants*

The New Researchers' Grant Scheme is intended to provide impetus to the research programmes of new researchers and thereby enhance not only the research culture of the University but also the careers of the individuals involved. As seen above, grant-holders produce a range of research outputs, develop collaborative research partnerships, and have achieved success in winning external funding. Whilst it is difficult to obtain a measure of career progression from a study such as this, one possible measure is to assess any changes in the employment status of grant recipients. Without access to academic promotion details, it is impossible to draw conclusions with regard to the nature of any association. However, it is worth noting that promotion criteria emphasise the need for high quality research and scholarship as evidenced by publications and obtaining external and internal funding. The criteria also state that "Promotion to Senior Lecturer recognises meritorious performance of duties as a Lecturer. This will be assessed by considering whether the candidate has established good teaching practices and is establishing him or herself as a researcher" (Victoria University of Wellington, 2007, p. 4).

Bearing the above reservations in mind, an attempt was made to track employment changes as a possible measure of career progression. The employment status of each grant recipient was already known, as this was recorded at the time of the orientation course. At that time 4% of grant recipients were employed as Assistant Lecturers, 74% were employed as Lecturers, 10% as Senior Lecturers, and 12% as Researchers. Forty-four percent of grant recipients were employed as permanent staff, i.e. on continuing employment contracts, and 56% were on fixed-term contracts. It should be noted that Assistant Lecturers and Researchers can only be employed on fixed term contracts.

To assess possible changes in employment status since receiving a New Researchers' Grant, an internal census was conducted in April 2007 to provide a snapshot of job roles and contract type. With regard to members of staff on permanent contracts at the time of the orientation course, one had left the university; the employment status of the others remained unchanged. The employment status of the 56% of recipients on fixed-term contracts was more fluid. Table 3 illustrates the results of the April 2007 employment census for members of staff who were on fixed term employment contracts at the time of the original orientation course.

Table 3

*Employment status staff members who were on fixed term contracts at the time of the original orientation course*

Post held at time of orientation course	Employment status internal census April 2007	Number of individuals
Assistant Lecturer <i>n</i> = 3	Asst Lecturer (fixed term)	2
	Left	1
Lecturer <i>n</i> = 28	Lecturer (fixed term)	5
	Senior lecturer (fixed term)	4
	Lecturer (permanent)	3
	Senior lecturer (permanent)	12
	Left	4
Senior Lecturer <i>n</i> = 3	Senior Lecturer (fixed term)	1
	Senior Lecturer (permanent)	1
	Left	1
Researcher <i>n</i> = 9	Researcher (fixed term)	3
	Lecturer (permanent)	1
	Senior lecturer (permanent)	1
	Unknown	2
	Left	2

Fifty-one percent of temporary members of staff had improved their employment status within the institution by transferring to a permanent contract and/or being promoted. The employment status remained unchanged for 26%, 19% had left the university and data could not be found for 4%. No systematic check was carried out; however, it is known that of the latter group at least three have moved to permanent posts at other institutions.

## Conclusions

The New Researchers' Grant Scheme enhances the profile of research within the University and demonstrates the institution's commitment to supporting the careers of new members of the community. The scheme was designed as a centrally funded, stable, long-term initiative to promote development of a portfolio of skills including as the highest priority how to write convincing proposals that will win external funding, but also the importance of making links between research and teaching, the setting of research career goals and generation of quality assured outputs. Providing a mentored grant writing scheme appears to contribute toward new researchers developing projects that enable them to produce research outputs and network within their discipline, and strengthens their standing when seeking external funding. The ability to take

advantage of this seed funding may increase the likelihood of temporary staff being retained on a permanent basis.

This early evaluation of the scheme appears to demonstrate its efficacy. Whilst further research is necessary, based on experiences to date some tentative recommendations can be made for the future funding of new and emerging researchers, in particular that a funding initiative targeted at new researchers should:

1. Include experienced researchers as mentors (*N.B.* discipline-based mentors may not have the skills to provide input re grant writing skills).
2. Profile the services offered by the university to support research.
3. Offer guaranteed funding to researchers who are prepared to persist with the mentoring process until an acceptable application is produced.
4. Require researchers to commit to producing tangible research outputs in a given timeframe.
5. Include appropriate reporting measures and regular evaluations of the scheme.

The evaluative snapshot of the scheme to date has led to suggestions regarding how the scheme may be maintained and extended. Further developments already in place include increasing the maximum grant available to NZ\$5,000, extending eligibility to five years from initial appointment, clarifying eligibility for staff pursuing research degrees, and formalising links with specialist research development staff to assist the development of external funding applications.

There are plans for more detailed quantitative and qualitative evaluations of the scheme that will focus on the understandings and experiences of new researchers. In particular the ways in which grant-holders value the scheme, the factors that contribute to the successful operation of the scheme and the experiences of new researchers who decide to not apply for the funding.

## References

- Angelo, T., & Asmar, C. (2005). *Towards a new definition of research-led teaching and learning at VUW*. Retrieved November 17, 2007, from <http://www.utdc.vuw.ac.nz/research/rlt/>
- Asmar, C. (2005). *Review of orientation to research workshop attendance and subsequent grant applications*. Unpublished internal report, Victoria University of Wellington.
- Laudel, G. (2006). The 'quality myth': Promoting and hindering conditions for acquiring research funds. *Higher Education*, 52, 375-403.
- Morris, C., & Fry, H. (2006). Enhancing educational research and development activity through small grant schemes: A case study. *International Journal for Academic Development*, 11(1), 43-56.

## Articles

---

- OECD. (2007). OECD reviews of innovation policy: New Zealand. *OECD Reviews of Innovation Policy Series*. Retrieved November 17, 2007, from <http://213.253.134.43/oecd/pdfs/browseit/9207071E.PDF>
- Porter, R. (2003). Facilitating proposal development: Helping faculty avoid common pitfalls. *Journal of Research Administration*, 34(1), 28-32.
- Porter, R. (2004). Off the launching pad: Stimulating proposal development by junior faculty. *Journal of Research Administration*, 35(1), 6-11.
- Victoria University of Wellington. (2006). *New researchers' grants: Criteria and guidelines*. Victoria University of Wellington.
- Victoria University of Wellington. (2007). *Academic staff promotion criteria*. Victoria University of Wellington.