

## “Give me your four best papers”: The privileging ethos of research accountability systems from an Aotearoa/New Zealand perspective

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### ABSTRACT

While much has been written on the topic of research assessment (notably on the Performance-Based Research Fund, PBRF) in the Aotearoa/New Zealand context, this article provides a state of the art (an up to date literature review and details from recent studies in this area) perspective from two scholars researching the effects of the PBRF on academics. One of the authors has recently completed a PhD on this topic (Ashcroft, 2006) and the other has been involved in a current research project on the effects of the PBRF on academic identity (see Billot & Smith, 2008). In this paper, drawing on the work of Foucault’s (1984) conception of governmentality and Taylor’s (1911) thesis on Scientific Management (see Ashcroft, 2006), we argue that the PBRF has intensified the “creation” of research something akin to a production-line in a factory. Furthermore, drawing on a range of recent literature in this area, we argue that academic identity is being shaped by the new regime of research evaluation.

### Introduction

The PBRF should appropriately measure the quality of the full range of original investigative activity that occurs within the sector, regardless of its type, form, or place of output. (Ministry of Education, 2002: 8)

Within New Zealand’s current climate of accountability in which indicators of productivity are required for a variety of evaluative and audit processes, it is hardly surprising that the research output of the tertiary education sector is now entrenched beneath the scrutiny of New Zealand’s government via Performance-Based Research Funding (PBRF). The underlying assumptions that accompany this research-focused accountability regime serve to privilege a hierarchy of research interests, paradigms and outputs by creating and perpetuating a new vision of the qualities and behaviours that a “good” academic might be expected to exhibit.

In 2005 Professor John Hattie stated that the effects of PBRF were only just beginning to become apparent. He suggested that PBRF was becoming a “game” and that in order for academics to succeed in it, they would need to learn the “rules and constraints” that accompanied it (Hattie, 2005: iv). Smith (2005: 52) claimed that he had already identified a number of colleagues who were beginning to respond to PBRF by playing “the game” in preparation for the 2006 Quality Evaluation round. He believed that even those colleagues who had been dismissive, nonchalant or even subversive towards PBRF at its conception now appeared obsessed by the idea of needing to do

well in the exercise (Smith, 2005; see also Ashcroft, 2005; Ashcroft & Nairn, 2004; Codd, 2005; Middleton, 2005).

This paper explores several interrelated topics, the first of which outlines the central argument that the new regime of research assessment is somewhat analogous to the creation of an academic production line. The second section overviews the process of the PBRF quality scores and the privileging of certain types of academic outputs and publishing avenues, especially those in high status journals (see also the articles by Currie and Crothers in this volume). The third and final section outlines how the PBRF, as a research evaluation process, is affecting the perceptions of academic(s) identity/identities (Billot & Smith, 2008).

### Creating an academic production line

In 2001 the Tertiary Education Advisory Commission (2001: 88) argued that there was a “positive relationship between the use of explicit incentives for performance and the actual effort expended by academic researchers”. PBRF was implemented in New Zealand in 2003 and the first PBRF Quality Evaluation assessment results were published in 2004. This process evaluated individual academics and “ranked” them according to their performance and research capability as determined by PBRF criteria. According to Small (2005), it is possible to perceive New Zealand’s PBRF as a competition for the attainment of scores that can be used as a form of currency that academics trade against various institutional incentive schemes for individual opportunity and success. Ashcroft (2006) argues that PBRF has all the hallmark characteristics of a Foucauldian instrument of “governmentality” because it positions academics in a new hierarchy of status and reputation whereby practices of audit and accountability enable new rules of conduct to decide academics’ subjection.

According to Foucault’s (1994a,b) notion of governmentality, the aim of governments and their institutions is to create self-motivated and self-regulated individuals who actively (or passively) support the sustainability of the state. In many cases governments will facilitate this by adopting various technologies of production and power to call into account the bodies and conduct of individuals and encourage the constitution of economically efficient and profitable human subjects. *Scientific Management Theory* was an earlier example of this type of governmentality and describes a technique developed by Frederic Taylor in 1911 that promoted capital accumulation through the specialisation of labour based upon the analogy of a factory (or organisation) as a machine (Jones & May, 1999).

As both a technology of production and a technology of power, *Scientific Management Theory* had initially been a response to the needs of managers and owners of industrial enterprises within the United States to increase productivity and profits, and exercise control over labour (Clegg & Dunkerley, 1980). Taylor (1967) made a number of assumptions about the nature of the institution or organisation, offering the analogy of a “machine” that functioned without any management/worker conflict. Central to the operating capacity of the “machine” was the way labour was divided through specialisation. The more people specialised, the more efficient they became (Jones & May, 1999). Braverman (1974) argued that *Scientific Management* encouraged the institutionalised supervision of workers “to render conscious and systematic, the formerly unconscious tendency of capitalist production ... concentrated in the hands of management” (pp. 120–121). It was via this theoretical principle that factory-based production lines came into being. Their purpose, as an instrument or technique applied within the factory or organisation, was to manage the bodies and conduct of workers in accordance with the factory or organisation’s function or purpose.

The analogy of a “factory production line” can be used to indicate how PBRF represents the imposition of a new government rationality on New Zealand’s research culture. This new government rationality serves to “manage” academics in their institutions via new expectations of performance and accountability associated with being a more efficient academic subject. According

to Trowler (2001) the conditions for subjectivity presented in the various discourses of higher education and their associated policies and practices expose academics to new discursive repertoires of examination and accountability. Dew (2004: 188) asserts that New Zealand's tertiary education environment has become one that is increasingly defined by evaluation and measurement: a culture that promotes "a standardisation and normalisation of practices fostering conformity". Ashcroft (2006) demonstrated this in his PhD research that captured the experiences of fifteen academics from one New Zealand university as they encountered PBRF and the Quality Evaluation exercise for the first time. Ashcroft (2006) noted that a number of participants interviewed in the study indicated their belief that the emphasis placed upon Nominated Research Outputs, accompanied by the allocation of quality scores and an increased urgency to publish could reconstitute the activity and production of research as a calculated and mechanical process. For example, one respondent asserted:

If the programme persists then I think it'll make academic work more mechanical and more by way of response rather than exercising any sort of initiative. You have a deadline, you have a production line. There are some things that you may not be able to afford to do.

Another claimed:

In general I think that PBRF makes researchers to be somehow uniform. You know, publishing in the same journal and somehow to be critical but not too critical.

Ashcroft (2006) went on to argue that academics were being encouraged to take up more routinely ritualised ways of work and worker accountability (to adopt specific technologies of the self and respond appropriately) as part of their own academic subjection. Using the words of his respondents, Ashcroft (2006: 113) claimed that the consequences of PBRF would "result in a 'dumbing down' of research in which the process will become 'mechanical' and 'uniform' and the focus of academics will be on 'bureaucracy and paper work' and producing 'X number of products within X period' of time". By referring to a discourse of *Scientific Management Theory*, we argue that PBRF promotes conveyor-belt specialisation and compliance in an attempt to produce more "efficient" and "quality-focused" (whereby quality is determined by productive yield) products and outputs.

For Broadhead and Howard (1998: 7) it is difficult to see how academics might resist the new normalising tendencies inherent in accountability frameworks like PBRF because the discourses that accompany them promote a sense of complicity through a notion of "spontaneous consent". Academics become an integral part of their own surveillance because to do so comes "naturally" as a direct consequence of the many years that their professional identity has been systematically subjected (Broadhead & Howard, 1998: 7). This subjection begins even before academics enter their profession, during their many years as students where they are perpetually examined, assessed and rewarded (Broadhead & Howard, 1998). This ongoing examining, assessing and rewarding continues as they enter the academic profession, sending papers off to journals and other outlets seeking publication and professional affirmation. This quest for affirmation becomes an almost ritualised activity that serves to shape and position academics within the spaces of their profession.

It is no coincidence that the various technologies used within the PBRF framework mirror the same technologies that academics have used for years to guide their own activities and practices. The application of these techniques (for example, the process of peer review), along with the normalisation of a performance hierarchy based upon the allocation of quality scores, constitute a powerful guide for academics to abide by. As Broadhead and Howard (1998: 8) claim, "so much is at stake" for both academics and their employing institutions and as such, "the individual academic must conform" to secure their place, and their institution's place, upon the all important hierarchical league table(s).

## The privileging effects of “Quality Scores” and journal status

According to Broadhead and Howard’s (1998) analysis of Great Britain’s Research Assessment Exercise (RAE), they argue that accountability processes like PBRF are capable of facilitating the constitution of a new audit-focused academic subject. Devos (2000) asserts that the scores allocated by these exercises and any professional development practices that arise as a consequence of them, may be seen as technologies of the self that academics take up and use to govern and police their activities and practices according to new government rationalities. In this case, those government rationalities are about what counts as “research”. Both Broadhead and Howard (1998) and Devos (2000) argue that contestable forms of research assessment encourage a sense of conformity whereby the activities and practices of academics are assessed according to a grade-based hierarchy that not only defines an academic’s research productivity, but also creates new norms against which that productivity is measured. According to Broadhead and Howard (1998; see also Codd, 2005, 2006a, 2006b; Roberts, 2006), the consequence for academics in being assessed and ranked on statistical league tables is that it will serve to construct an academic subject in terms of a preferred set of quantifiable outputs and numerical status indicators.<sup>1</sup>

Tied up into the rationale for allocating quality scores is a push for productive accountability and a sense of immediacy; an academic’s need to demonstrate their actual research output in a business-like quantifiable way within the shortest, or most efficient, time frame. Curtis and Matthewman (2005), in their analysis of PBRF and other issues affecting higher education in contemporary New Zealand, refer to studies undertaken by Clark (1998) and Slaughter and Leslie (1997) to argue that there is an “entrepreneurial variant” inherent to PBRF (Curtis & Matthewman, 2005: 1). According to Curtis and Matthewman (2005), this “entrepreneurial variant” conceptualises research as a means for facilitating revenue and this has powerful implications for changing the shape of universities and the kinds of research that is privileged within them. The implications of this are twofold. Firstly, PBRF policy discourses assume that the cost of undertaking and producing a piece of research has a direct correlation to the economic value of its outcomes and usefulness. Secondly, that policies pertaining to PBRF appear to only value research that has an explicit capacity to generate an economic return.

In responding to these types of concerns, one of the biggest issues that many academics (see Ashcroft, 2006; Codd, 2006b; Dalziel, 2005) identify in relation to their research involves the way it is published or disseminated and how that might change as PBRF requirements become more entrenched as part of the accountability regime. There is an assumption underpinning PBRF discourses that assumes that individuals, in submitting their Evidence Portfolios, will select their four Nominated Research Outputs on the basis that they represent the individual’s “best” work during the specified period. But this notion of best work is underpinned by an assumption within the PBRF process that there is a correlation between the quality of research and the status of the journal the research is published in. During the first PBRF Quality Evaluation in 2003, journal status was used as a proxy indicator to assess the quality of at least 80% of Nominated Research Outputs submitted (Web Research, 2004). This meant that at least 80% of those papers graded for “quality” during the inaugural exercise were done so without actually being read.

In assuming that individuals would select what they considered to be their four best pieces of research for the PBRF Quality Evaluation, this does not necessarily mean individuals select those pieces on the basis of the journal in which they are published. Academics publish in journals that vary in status and purpose for a variety of different reasons (Milne, 2002). One such example is the situation whereby academics working in applied or professional programmes may prefer to publish in vocationally orientated journals, which tend not to be ranked as highly as more prestigious scholarly periodicals. Notwithstanding, changes to editorial boards over time may alter the nature of a journal and the kinds of articles it publishes. Therefore, the existing status of a journal may not always be indicative of the quality of the articles published in it. Furthermore, in addition, the

creative disciplines have other forms of output challenges as they do not naturally submit to journals (Billot, 2008 personal communication).

According to Small (2005), academics' concerns over the importance that PBRF appears to give to the status of a journal in determining the quality of an output could have a significant impact upon how academics choose to engage with PBRF in the future. He believes that academics' perceptions of the purpose and intent of the Quality Evaluation framework could result in a situation whereby PBRF fails to reward "quality" and, instead, rewards the publishing prowess of what he describes as the "dull but diligent" (Small, 2005: 24). By this, Small (2005) is referring to an idea discussed by Broadhead and Howard (1998) whereby more seasoned and experienced academics are able to regurgitate their research. This leads to the repetitive duplication of the same type of research in the same prestigious journals, often at the cost of denying access to less well-known scholars who may have more original or insightful material to offer. Although the practice of recycling material for publication has been occurring within academia for some time, constantly reaffirming the status of those academics skilled (or "diligent" enough) in perpetuating the practice, both Broadhead and Howard (1998) and Small (2005) believe that accountability practices such as the PBRF Quality Evaluation is likely to increase this activity. Ashcroft (2006) provided evidence of this by referring to a respondent in his study who commented:

I suppose what's good about [PBRF] and how it's changing my practice is that it's going to force you to get more mileage out of what you do in terms of making sure you get it off to refereed journals. So [describing a key-note address he'd given at a conference] I've got something three quarters written for an academic article. All I've got to do is 'academicise' it a bit, stick in something a bit more conceptual, stick in a bit more theory, stick in a few more footnotes and it's there, and off it goes. And so, and if I'm smart, like, I say I can get two journal articles out of the one keynote address and that's got to be a good thing.

According to Ashcroft (2006: 108), this respondent's ideas about how to develop two publications out of one conference paper is more mechanical than conceptual – "taking one's hamburger and upsizing it to a combo meal". The implication is that academics' papers just require certain 'add-ons' and they become *bona fide* academic journal offerings that meet the new rule-bound codes of conduct that some academics may associate with being successful in PBRF terms.

Dobson (2004) refers to his experiences of the RAE in the United Kingdom (see also Findsen, this volume) to argue that because the focus of the PBRF Quality Evaluation places the greater emphasis on the four Nominated Research Outputs, they are likely to become the sole focus of academics as well. According to Dobson (2004: 4), academics are unlikely to consider publishing large books or contributing to encyclopaedias and textbooks when all that is required from them is four short journal articles over a six year period. So long as those four articles are published in the top-tiered international journals, they represent far greater value for the academic than does a single authored book or six to ten articles published in so-called mediocre, national or professional/vocational orientated journals. In other words, according to Dobson (2004), PBRF is likely to encourage those academics skilled at securing spaces within the international journals to actually do less rather than increase their productivity.

Weiner (1998) suggests that as research increasingly becomes the primary focus of academics within a context of hierarchical assessment, this will lead to a further proliferation in the range of advice available for academics in respect of getting published and participating successfully within those assessment hierarchies. Examples of these include various "how to" guides such as Brown, Black, Day and Race's (1998) *500 Tips for Getting Published* and Germano's (2001) *Getting it Published: A guide for scholars and anyone else serious about serious books*. Other examples include publications on preparing and enhancing Evidence Portfolios (such as Kelly, 2003) and preparatory programmes and workshops such as those that were run by various tertiary education institutions prior to the 2006 Quality Evaluation (for example, Victoria University of Wellington, 2005). According to Weiner (1998), publications and programmes of this nature are likely to become essential components of an academic's tool kit, providing guidance on how academics can write for and target specific

journals, and offering them strategies for planning and participating in various assessment and evaluation processes. In other words, the proliferation of resources of this nature will provide assistance to academics by enhancing their capacity to “play” the PBRF “game” (Dobson, 2004; Hattie, 2005; Kinnear, 2004). Not only does it lead to game playing it also has an effect of actually moulding academic identity as is highlighted in the final section below.

### **Changing academic identity**

Drawing on the literature in academic identity Billot and Smith (2008) and Smith and Billot (2007) note that people’s lives are multifaceted, causing challenging conflicts between professional and personal identities (Day, Kington, Stobart & Sammons, 2006). Identity itself is an unstable concept as changing contexts, including those of work-based policy changes, impact on the individual’s notion of their relationship with the social and economic environment. Change poses both “threats and opportunities” to academic staff whose “academic identities, including identities as researchers, are forged, rehearsed and remade in local sites of practice” (Lee & Boud, 2003: 188). Although individual academics have the ability to negotiate their roles and responsibilities through a process of personal and professional prioritisation, their academic identity will always be influenced by the institutional context in which they are situated (see Billot & Smith, 2008)

Changes to the current tertiary environment have led research to become the “normal” work of an academic (Lee & Boud, 2003: 189). The Billot and Smith (2007, 2008) project indicates that there has been little preparation for role changes resulting in an environment of tension as individuals reassess their responsibilities and develop new ways of working. The Billot and Smith (2007, 2008) project’s aim was to examine the impact of the newly implemented funding regime, the PBRF, on the professional identity of academic staff. The primary intention was to focus on perceptions of the staff themselves and to identify how they experience a working research culture. Three case studies were selected for the project’s sample, namely the Schools of Education, Design, and Nursing; these permit a comparison across differing disciplines and between the two higher education institutions.

Lee and Boud also point to the challenges that staff face in the increasingly competitive environment, especially with the introduction of performance-based funding. Individuals may encounter greater self-questioning and experience more fear and anxiety. Thus the identity of an academic emerges from the “nuances and complexities of the concept of the career life cycle” of being a researcher (Gordon, 2005: 40). The “fluidity and fragmentation of many research fields” (Gordon, 2005: 40) causes individual academics to constantly reassess their position within their own discipline (see also Lee, 2007).

Churchman (2006) alludes to the way in which academic staff can have multiple and different interpretations of who they are. The changing tertiary environment and character of the institution in which they work, causes “contradictions” and “compromises” as their roles and responsibilities transform (2006: 13). Billot and Smith’s (2007, 2008) findings have suggested that further research is needed on the interactions between employer (institution) and employee (academic staff member) if institutional objectives are to be achieved. It also becomes essential that academics develop their identities in alignment with the institutional direction (Harris, 2005).

The early analysis from the Billot & Smith (2007, 2008) research project appears to have some resonance with the view of Stronach, Corbin, McNamara, Stark and Warne in the UK that the academic’s “professional self and its disparate allegiances (is) a series of contradictions and dilemmas that frame the identity of the professional as an implementer of policy” (2002: 109). The New Zealand example of a relatively newly introduced funding regime (the PBRF) indicates the far-reaching results of economic policy. As well as achieving a fiscally monitored and evaluated tertiary sector, the procedure will also impact on human agency and identity (Billot & Smith, 2008). Thus, policy imperatives will have a series of intended and unintended consequences, the latter being those emerging from reactions to the overt directives in play. So, as professionals, academics

develop ways of addressing or redressing the dilemmas and challenges that affect their role. In so doing, they “re-story themselves in and against the audit culture” (Stronach et al., 2002: 130). Ashcroft’s (2006) data presents similar findings to those of Stronach et al., albeit in the New Zealand context. There is a current concern that policy is now leading and structuring research, with the result that an academic’s research identity is constructed to achieve governmental and managerial aims rather than educational objectives (Billot & Smith, 2008).

The recent collaborative research project on the effects of the PBRF on academic identity (Billot & Smith, 2008; Smith & Billot, 2007; Smith, Billot, Todd, Jiao & Kumar, 2008) found that the academics they interviewed in the ‘professional’ fields of Nursing and Education felt motivated by the need to “perform” in research for PBRF purposes, whilst others were more ambivalent towards the process and argued that the teaching aspects of their jobs was as important. However, mostly respondents did reflect that the PBRF had influenced their publication processes in various ways, as the following example highlights. One participant identified by Billot and Smith (2008) outlined how they re-prioritised their work. “I think the PBRF has made me more aware that there needs to be some outputs and I need to play the game to a certain extent, but I am careful not to let it override my other commitments.”

Further comments illustrate how there has been an increased awareness of staff accountability. One participant noted:

Before I really understood PBRF, I would just be following research paths that really interested me ... and now I have a, now there’s a second kind of decision making process that goes on that says well is this useful to, you know, to my PBRF rating. (Billot & Smith, 2008)

Another stated:

I am mindful that that whole structure has enormous authority within our existence now and because of that you can’t ignore it, you can’t say well it doesn’t matter. It’s the driving force behind our funding and all that. (Billot & Smith, 2008)

The following response indicated a negative reaction to the PBRF:

I don’t see that the PBRF ends up with a solution that measures the quality of research. I don’t think it measures research culture. I think it’s a mechanism for the distribution of funds rather than the enhancement of educational research and so I’m disappointed and so I won’t play the game. (Billot & Smith, 2008)

These participants’ comments and associated project findings provide further insight into other areas of academic identity and some of these are related to the way in which their employing institution has reacted to external policy directives such as the PBRF. For example, as one participant asserted “What I value in a humane and critical education is not counting of numbers” (Billot & Smith, 2008).

From the Billot and Smith (2007, 2008) study’s findings, it appears that as current policy has an impact on restructuring academic research in New Zealand, academic identity is also being challenged. Academic identity is “affected by external (policy) and internal (organisational) and personal experiences past and present, and so is not always stable” (Day et al., 2006: 610) and can be viewed as “occasional identities in response to shifting contexts” (Stronach et al., 2002: 117). How an individual makes sense of their own practice and gains a sense of being a professional is often through evaluating “disciplinary and professional orientations” (Clegg & Bradley, 2006: 72). However the Billot and Smith (2008) study illustrated that this is not always a simple aim to achieve, as the PBRF rewards specific outputs. One participant summed it up thus:

I am not convinced that the PBRF process accurately reflects what is needed for the profession even though we need that for the institution, we need the income. I’m not convinced that that’s the best way. I think there may be another way. (Billot & Smith, 2008)

It would appear that the general findings of both the Ashcroft (2006) and Billot and Smith (2007, 2008) studies provide consistent evidence of academics' negative responses to the impact of PBRF. Furthermore, these are also congruent with earlier studies in this area (see for example, Codd, 2005; Hall & Morris Matthews, 2006; and Middleton, 2005, 2006).

## Conclusion

We have argued that New Zealand academics' "professional" identities are being shaped by the PBRF and external pressures, as well as some internal managerial and institutional devices within the employing tertiary institutions (see also Ashcroft & Nairn, 2004; Billot & Smith, 2008). Drawing upon the theoretical work of Foucault we suggested that much academic work is being constrained and that there is now an academic production line and gaming occurring (and this coheres with the arguments of Codd, 2005; and Middleton, 2005). In terms of a research accountability mechanism and device the PBRF has been "successful" in shaping the highly competitive tertiary environment and the academic work of those employed within tertiary institutions. Thus, it has achieved the government's aim.

Milne (2002: 84) describes the accountability function of PBRF as a "half-baked measure" that fails to provide any accurate or objective account of the quality of academics' research. He asserts that:

If we are to evaluate the quality of academics' research, as I think we are destined to by the nature of our work, then I believe we owe it to ourselves the courtesy of actually reading their work and making up our own minds. And if we can not be bothered to do this, then we should refrain from making a judgment in the first place (Milne, 2002: 84).

It is one thing to measure individuals in relation to their peers by saying "you're better than him, but not as good as her" or by suggesting that "you could be a Senior Lecturer but you are not yet ready to be appointed to a Professorial position". It is quite another to assign a value to an individual's craft, particularly if that value is being determined by factors not directly related to the work itself. We do not judge a table crafted by a carpenter based solely upon the room it is located in. Nor do we assess the calibre of a painting based on the wall upon which it hangs. Therefore, arguably it seems contrary to the design and purpose of PBRF to assign a quality score to an academic's research if the primary indicator used in determining that score is the journal in which the research is published.

## Note

1. The academic identity of some tertiary educators has been shaped by research assessment exercises such as the RAE and PBRF (see for example, in the UK, Henkel, 2000; Kogan & Hanney, 2000; Lucas, 2004, 2006; McNay, 2003; Sikes, 2006; and for Aotearoa/New Zealand, Ashcroft, 2005; Codd, 2005, 2006a; Hall & Morris Matthews, 2006; Middleton, 2005; Smith & Jesson, 2005).

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## References

- Ashcroft, C. (2005). Performance Based Research Funding: A mechanism to allocate funds or a tool for academic promotion? *New Zealand Journal of Educational Studies*, 40(1), 113–129.
- Ashcroft, C. (2006). *Academics' Experiences of Performance-Based Research Funding (PBRF): Governmentality and subjection*. Unpublished Doctor of Philosophy thesis. University of Otago, Dunedin, New Zealand.
- Ashcroft, C., & Nairn, K. (2004). Critiquing the Tertiary Education Commission's role in New Zealand's Tertiary Education Sector: Policy, practice and panopticism. *ACCESS: Critical perspectives on communication, cultural & policy studies* 23(2), 43–54.
- Billot, J. (2008). Personal communication, November 28, email.
- Billot, J., & Smith, R. (2007). Research in Progress: Mapping the terrain of two applied institutional research cultures. Paper presented at the *Change, Evidence & Implementation: Improving Higher Education in Uncertain Times* conference. Australian Association for Institutional Research (AAIR), November 27–30, Sydney, Australia.
- Billot, J., & Smith, R. (2008). Changing Academic Identity as a Result of Policy Actions. Paper presented at the *International Conference on Education, Economy and Society (ICEES)* conference, 17–19 July, Paris, France.
- Braverman, H. (1974). *Labor and Monopoly Capital*. New York and London: Monthly Review Press.
- Broadhead, L., & Howard, S. (1998). "The Art of Punishing": The research assessment exercise and the ritualisation of power in higher education. *Education Policy Analysis Archives*, 6(8), 1–12.
- Brown, S., Black, D., Day, A., & Race, P. (1998). *500 Tips for Getting Published*. London: Kogan Page.
- Brunetto, Y., & Wharton, R. F. (2005). Academics' Responses to the Implementation of a Quality Agenda. *Quality in Higher Education*, 11(2), 162–180.
- Churchman, D. (2006). Institutional Commitments, Individual Compromises: Identity-related responses to compromise in an Australian university. *Journal of Higher Education*, 28(1), 3–15.
- Clark, B. (1998). *Creating Entrepreneurial Universities: Organizational pathways of transformation*. London: Pergamon.
- Clegg, S., & Bradley, S. (2006). Models of Professional Development Planning: Practice and processes. *British Educational Research Journal*, 32(1), 57–76.
- Clegg, S., & Dunkerley, D. (1980). *Organization, Class and Control*. London: Routledge & Kegan Paul.
- Codd, J. (2005). The PBRF as Ideology: Lessons from the British RAE. In R. Smith & J. Jesson (Eds.), *Punishing the Disciplines – the PBRF Regime: Evaluating the position of education –where to from here?* (pp. 58–65). Auckland, New Zealand: AUT University and the University of Auckland.
- Codd, J. (2006a). Assessing Research Quality: The origins and outcomes of New Zealand's Performance-Based Research Fund. In J. Blackmore, J. Wright & V. Harwood (Eds.), *Counterpoints on the Quality and Impact of Educational Research. Review of Australian Research in Education, 6, The Australian Educational Researcher Special Issue*, 43–56.
- Codd, J. (2006b). The PBRF and the Production and Commodification of Knowledge. In L. Bakker, J. Boston, L. Campbell & R. Smyth (Eds.), *Evaluating the Performance-Based Research Fund: Framing the debate* (pp. 221–235). Wellington, New Zealand: Victoria University Institute of Policy Studies.
- Curtis, B., & Matthewman, S. (2005). The Managed University: The PBRF, its impacts and staff attitudes. *New Zealand Journal of Employment Relations*, 30(2), 1–18.
- Dalziel, P. (2005). Rewarding Individual Research Excellence in the PBRF. *New Zealand Journal of Tertiary Education Policy*, 1(2), 1–10.
- Day, C., Kington, A., Stobart, G., & Sammons, P. (2006). The Personal and Professional Selves of Teachers: Stable and unstable identities. *British Educational Research Journal*, 32(4), 601–616.
- Devos, A. (2000). *Productive Learning or Technologies of Government: A Foucauldian reading of the politics of professional development in higher education*. A paper presented at the annual conference of the Australian Association of Research in Education, December, Sydney, Australia.
- Dew, K. (2004). Academic Freedom and its Limits. In K. Dew & R. Fitzgerald (Eds.), *Challenging Science: Issues for New Zealand society in the 21st century* (pp. 187–204). Palmerston North, New Zealand: The Dunmore Press.
- Dobson, S. (2004). Impact of the RAE: Lessons for PBRF? *Otago Bulletin* 10, 4.
- Foucault, M. (1994a). Governmentality. In J. Faubion (Ed.), *Michel Foucault Power: Essential works of Foucault 1954–1984, Vol. 3* (pp. 201–222). London: Penguin.
- Foucault, M. (1994b). The Political Technology of Individuals. In J. Faubion (Ed.), *Michel Foucault Power: Essential works of Foucault 1954–1984, Vol. 3* (pp. 403–417). London: Penguin.
- Germano, W. (2001). *Getting it Published: A guide for scholars and anyone else serious about serious books*. Chicago, Illinois: University of Chicago Press.

- Gordon, G. (2005). The Human Dimensions of the Research Agenda: Supporting the development of researchers throughout the career life cycle. *Higher Education Quarterly*, 59(1), 40–55.
- Hall, C., & Morris Matthews, K. (2006). Impact of the Performance-Based Research Fund on Teaching and the Research-Teaching Balance: Survey of a New Zealand university. In L. Bakker, J. Boston, L. Campbell & R. Smyth (Eds.), *Evaluating the Performance-Based Research Fund: Framing the debate* (pp. 419–476). Wellington, New Zealand: Institute of Policy Studies, Victoria University of Wellington.
- Harris, S. (2005). Rethinking Academic Identities in Neo-Liberal Times. *Teaching in Higher Education*, 10(4), 421–433.
- Hattie, J. (2005). Foreword. In R. Smith & J. Jesson (Eds.), *Punishing the Discipline – The PBRF Regime: Evaluating the position of education – where to from here?* (pp. iii–iv). Auckland, New Zealand: The University of Auckland and AUT University.
- Henkel, M. (2000). *Academic Identities and Policy Change in Higher Education*. London: Jessica Kingsley Publishers.
- Jones, A., & May, J. (1999). *Working in Human Service Organisations: A critical introduction*. Australia: Longman.
- Kelly, D. (2003). Measuring the Worth of Scientists: Lessons for career development and CV presentation from the PBRF process. *Ecological Society Newsletter*, 106, 2–4.
- Kinncar, J. (2004). The Royal Society of New Zealand Social Sciences Committee Transcript of Plenary Sessions of the PBRF Forum: Evaluating the assessment framework. Retrieved September 7, 2005, from [http://www.rsnz.org/advisory/social\\_science/media/pbrf2004-plenary.php](http://www.rsnz.org/advisory/social_science/media/pbrf2004-plenary.php).
- Kogan, M., & Hanney, S. (2000). *Reforming Higher Education*. London: Jessica Kingsley.
- Lee, A., & Boud, D. (2003). Writing Groups, Change and Academic Identity: Research development as local practice. *Studies in Higher Education*, 28(2), 187–200.
- Lee, J. (2007). The Shaping of the Departmental Culture: Measuring the relative influence of the institution and discipline. *Journal of Higher Education Policy and Management*, 29(1), 41–55.
- Lucas, L. (2004). Reclaiming Academic Research Work from Regulation and Relegation. In M. Walker and J. Nixon (Eds.), *Reclaiming Universities from a Runaway World* (pp. 35–50). Buckinghamshire, UK: Open University Press.
- Lucas, L. (2006). *The Research Game in Academic Life*. Buckinghamshire, UK: Open University Press.
- McNay, I. (2003). Assessing the Assessment: An analysis of the UK Research Assessment Exercise, 2001 and its outcomes, with special reference to research in education. *Science and Public Policy*, 30(1), 1–8.
- Middleton, S. (2005). Disciplining the Subject: The impact of PBRF on education academics. *New Zealand Journal of Educational Studies*, 40(1), 131–156.
- Middleton, S. (2006). Researching Identities: Impact of the Performance-Based Research Fund on the subject(s) of education. In L. Bakker, J. Boston, L. Campbell & R. Smyth (Eds.), *Evaluating the Performance-Based Research Fund: Framing the debate* (pp. 477–500). Wellington, New Zealand: Institute of Policy Studies, Victoria University of Wellington.
- Milne, M. (2002). The Construction of Journal Quality: No engagement detected. *Accounting Forum*, 26(1), 73–86.
- Ministry of Education. (2002). *Investing in Excellence: The report of the performance-based research fund working group*. Wellington, New Zealand: Ministry of Education.
- Roberts, P. (2006). Performativity, Measurement and Research: A critique of the performance-based research funding in New Zealand. In J. Ozga, T. Popkewitz & T. Seddon (Eds.), *World Yearbook of Education 2006: Education, research and policy* (pp. 185–199). London: Routledge.
- Sikes, P. (2006). Working in a 'New' University: In the shadow of the Research Assessment Exercise? *Studies in Higher Education*, 31(5), 555–568.
- Slaughter, S., & Leslie, L. (1997). *Academic Capitalism: Politics, policies and the entrepreneurial university*. Baltimore, Maryland: John Hopkins University Press.
- Small, D. (2005). Commentary: The PBRF – some risks of research rankings. In R. Smith & J. Jesson (Eds.), *Punishing the Discipline – The PBRF Regime: Evaluating the position of education – where to from here?* (pp. 23–26). Auckland, New Zealand: The University of Auckland and AUT University.
- Smith, R. (2005). Counting Research in Education: What counts under the Sheriff of Nottingham-style funding redistribution? In R. Smith & J. Jesson (Eds.), *Punishing the Discipline – The PBRF Regime: Evaluating the position of education – where to from here?* (pp. 45–57). Auckland, New Zealand: The University of Auckland and AUT University.
- Smith, R., & Billot, J. (2007). A Tale of Two Applied Institutions: Success against the odds? Building research cultures in an age of PBRF accountability. Paper presented at the *Education in the Pacific conference*. New Zealand Association of Research in Education (NZARE), December 4–7, Christchurch, New Zealand.

- Smith, R., Billot, J., Todd, C., Jiao, X., & Kumar, R. (2008). Engaging in Collaborative Research, Leading and Learning: Minds and hearts focusing on building capacity amongst a team and within our research cultures. Paper presented at the New Zealand Educational Leadership and Administration Society (NZEALS) international conference *Enhancing the Heart: Enriching the mind*, 30 April – 3 May, Auckland, New Zealand.
- Smith, R., & Jesson, J. (Eds.). (2005). *Punishing the Discipline – The PBRF Regime: Evaluating the position of education – where to from here?* Auckland, New Zealand: AUT University and the University of Auckland.
- Stronach, I., Corbin, B., McNamara, O., Stark, S., & Warne, T. (2002). Towards an Uncertain Politics of Professionalism: Teacher and nurse identities in flux. *Journal of Educational Policy*, 17(1), 109–138.
- Taylor, F. (1967). *Principles of Scientific Management*. New York: Norton.
- Tertiary Education Advisory Commission. (2001). *Shaping the Funding Framework*. Wellington, New Zealand: The Tertiary Education Advisory Commission.
- Trowler, P. (2001). Captured by the Discourse? The socially constitutive power of new higher education discourse in the UK. *Organization* 8(2), 183–201.
- Victoria University of Wellington (2005). *Vic News*, Thursday 25 August, 2005. Wellington: Victoria University of Wellington.
- Web Research. (2004). *Phase 1 Evaluation of the Implementation of the PBRF and the Conduct of the 2003 Quality Evaluation*. Wellington, New Zealand: Centre for Research on Work, Education and Business Limited.
- Weiner, G. (1998). *Scholarship, Disciplinary Hegemony and Power in Academic Publishing*. Paper presented at the European Conference for Educational Research, September, University of Ljubljana, Slovenia.