

Towards a theory and practice of policy engagement: Higher education research policy in the making

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Abstract

Academic engagement with higher education research policy in Australia, and with education policy more generally, is in trouble. This time around, it is not just that our theoretical tools are blunt and irrelevant (Ball 1990), so are our politics. It seems our attention has been so consumed by ‘what is policy’ (Ball 1994) and with challenging its claims to authority, that we have missed or ignored imperatives to engage with its production. Even though some have attempted contributions, for the most part we have been ‘coerced into an era of cooperation’. Getting ourselves out of this mess will take more than just better theories and new politics. It *will* require a degree of cooperation, to advance a theory and practice of policy engagement and to re-establish a field of education that resists the tendency to fragment and/or the temptation to defend itself ‘against’ policy. In this address I attempt an assessment of where we are theoretically and politically with regard to education policy and where we need to look to find new forms of policy engagement. By way of illustration, I draw on examples from AARE (the Australian Association for Research in Education) and the RQF (Research Quality Framework) although the analysis is by no means restricted to these.

Introduction

I want to begin by sharing with you two short anecdotes, which focused my thoughts on the matters I plan to raise in this address. For me, they are critical incidents that ‘exemplify underlying patterns and values’ (Tripp, 1993, p. 97) in our collective engagement with education policy, including policy in the higher education field. Here I am using engagement to mean description and analysis as well as prescription and advocacy, as will become apparent. Both incidents occurred in quick succession, indeed at the same location – the National Stakeholders Forum held in Canberra last June [2005] as part of the RQF consultation process – to which I was invited as President of AARE. Of the 94 that attended the Forum, AARE was the only representative from the disciplinary field of education. This in itself is cause for reflection but I want to focus for the moment on the two incidents in question, which both occurred during the morning and afternoon breaks while I was lining up for coffee.

The first arose while introducing myself to a fellow stakeholder with a background in the physical sciences. Squinting first at my nametag, he subjected me and us to his microscopic gaze: “AARE? Who are they? Where are they located? Are they in the higher education sector? Do they conduct research on education?” The second incident involved a more knowledgeable couple: two past education academics, both now in

university administration. However, their acquaintance with current AARE activities was not a lot better. In the course of the usual introductory exchanges, one commented: "I haven't heard of AARE making any contribution to the RQF debate." In hindsight, I am inclined to ask: what constitutes a contribution? Is this the kind of work that Australian education researchers are good at? Are our ways of engaging with education policy adequate? These are questions I hope to explore here, through an examination of the contemporary policy literature and by focusing on the potential for AARE's political involvement in educational policy making.

In his now well-known 1990 monograph, *Politics and policy making in education*, Stephen Ball begins with the claim that 'the basis for description of education policy has changed significantly and the established conceptual tools seem blunt and irrelevant' (Ball, 1990, p. 8). Some fifteen years on, and in light of my experiences this year as AARE President, I want to make a similar although separate claim: that our current and singular discursive stance in engaging with education policy has contributed to our (somewhat unfavourable) repositioning in the field of education and that we now need to add new conceptual and political tools to our toolbox in order to meaningfully engage with policy. As Bourdieu (1992, p. 99) would say, regaining (or perhaps that should be gaining) a position of influence in the field will require us to play in such a way as to increase the value of our stakes in the game.

Implied in this claim is the presumption that it is no longer sufficient for education researchers to simply expose the power/knowledge relations of policy. While we need to understand the processes of policy production, we also need to engage with policy in its making; to develop a theory of and active politics for policy engagement. This may seem a bold assertion, given the wealth of critical literature regarding the theory and politics of policy production that now informs policy sociology. But I am concerned that we have restricted the interests of critical social science to asking 'what is going on?' and 'how come?' (Troyne, 1994, pp. 72-72) and have neglected to ask 'what can be done about it?' To use Roger Dale's (1989, p. 24) distinction, we have focused on the 'politics of education' almost to the exclusion of 'education politics'. Yet increasingly, *both* are necessary for an adequate engagement with policy. As Bourdieu has said, 'the field of positions is ... inseparable from the field of stances ... Both spaces ... must be analysed together' (1992, p. 105). Indeed, analysis is not enough. We also need to say how things might be otherwise, given the conditions that prevail. Without such theoretical and political tools, our current efforts to engage with policy could equally be described as blunt and irrelevant.

In making these claims, then, I will refer specifically to Australian higher education policy and AARE's involvement in this, although my comments are not necessarily restricted to this arena and I will draw on examples from other related fields to elaborate on what I mean. I will begin with a short and recent history of policy research, noting in particular our obsession with analysing what policy is; uncovering its intentions and its effects and problematising how policies are 'received' and understood in contexts of practice. I will then outline the problems I see with such analysis dominating our engagement with policy. As implied, I am particularly concerned by the marginalisation of education policy

analysts who adopt a critical stance, and with the critique that then confronts them: that they offer few alternative ways forward. Finally, I make some overtures towards what a theory and practice of policy engagement might look like. In doing so I seek to take seriously this year's conference theme of *Creative Dissent and Constructive Solutions*.

A short history of recent policy analysis: what is policy?

When Stephen Ball first claimed that 'theoretical and epistemological dry rot [was] built into the analytical structures' (1994a, p. 15) of policy research, policy studies in education were dominated by analyses from the fields of political science and public administration. Often, their analyses were 'technocratic and managerialist in orientation and concerned mainly with implementation questions' (Lingard, 1993, p. 36). Typically, they set out quite complex and intricate arrays and flowcharts of policy making processes with a 'tend[ency] towards tidy generalities' (Ball, 1990, p. 9) and linear, two-dimensional representations of how policy is produced and implemented. Agreed values in one end, policy outcomes out the other.

One strength of this work is that it was not just concerned with naming policy but also provided guidance on how it could be made. Yet, there was little recognition of 'discontinuities, compromises, omissions and exceptions' (Ball, 1990, p. 3) in policy or in its production. Policy had come to mean something quite different from politics, despite the absence of the distinction in most European languages. In their separate guises, policy was positioned as the servant of politics and policy makers in the service of politicians. Despite the fact that the distinction is unsustainable theoretically and empirically, this separation between policy and politics still exists in the hearts and minds of many (cf. Yeatman 1998: 21-22), and is testament to the ability of social actors to dissimulate the politics of policy making. The question, then, is how to politicise policy, while keeping a critical distance from explicit policy advocates.

Cognisant of such matters, more recent policy literature has moved on. Influenced by cultural studies and particularly by the work of Michel Foucault, recent accounts describe policy as text and as discourse. For example, Ball (1994a), who first directed us down this trajectory, argues that policy texts are 'cannibalised products' that carry meanings representative of the struggle and conflict of their production. Once these meanings are captured in policy documents they become the focus of 'secondary adjustment' (Riseborough, 1992), through various 'interpretations of interpretations' (Rizvi and Kemmis, 1987) or 'refraction' (Prosser, 1981; Freeland, 1986). While there is recognition that policy texts are themselves political acts or 'textual interventions into practice' (Ball, 1994a: 18), they 'enter rather than simply change power relations' (1994a: 20, emphasis original). In other words, policy texts are both products and tools of production where 'the translation of the crude, abstract simplicities of policy texts into interactive and sustainable practices of some sort involves productive thought, invention and adaptation' (Ball, 1994a: 19).

By comparison, analyses of policy as discourse uncover the politics of policy text production: 'what can be said, and thought, but also ... who can speak, when, where and with what authority' (Ball, 1994a: 21). Ball argues that policy discourses are 'ways

of talking about and conceptualizing policy' (Ball, 1994b: 109). They are also 'practices that systematically form the objects of which they speak ... [they] are not about objects; they do not identify objects, they constitute them and in the practice of doing so conceal their own invention' (Foucault, 1972: 49). As I have noted in my own work, policy discourse is like a double-hinged door; it is both productive of 'text' and interpretive of it. In this way, discourse informs textual writings *and* readings including their 'writerly' and 'readerly' possibilities (Gale, 1999). They encode and decode policy texts in ways that constrain and enable their meanings and 'establish "discursive limitations"' (Henry, 1993: 102) on policy outcomes. They do not simply assign meanings to texts in isolation, but weave them together to form contexts. In the process, only some texts are included and even then they are ordered and emphasized in distinctive ways, giving them meanings that they might not have had in other contexts. Any one policy text, then, takes its meaning from its relationship – its relative positioning and emphasis – with other texts (or its context) and from how these are discursively 'storied' (Gale, 1994).

This is the current orthodoxy in the policy sociology literature; far more theoretically nuanced, cognizant of and explicit about (undemocratic) power relations in policy making than the 'rational' formulation / implementation accounts I referred to earlier. And yet it does not seem to go far enough theoretically or politically in helping education researchers, for example, to engage in the policy process. In this text / discourse account, academics and educators often seem to remain recipients or implementers of education policy not strictly producers of it, no matter how much we might acknowledge their ability to reinterpret. While 'policy as text' and 'policy as discourse' provide better answers to critical questions of 'what is really going on?' and 'how come?', they do less well in answering 'what can be done about it?' In drawing attention to the later, I want to emphasise that addressing such questions is a collective challenge that needs to be negotiated across a range of education communities, and I will attempt to elaborate on this as I progress.

Reading the discourses of contemporary research policy in Australia

Let me illustrate what I mean by my discontent with the current standard of policy analysis with a brief examination of the developing Research Quality Framework (the RQF). Even a cursory reading of the RQF documents, suggests that the exercise is primarily about developing a new system for determining how much funding each institution will receive from the Federal Government to conduct research and, indeed, whether some will become teaching only institutions. Brendon Nelson himself has indicated in the introduction to the recent Preferred Model, that 'the RQF will provide the Australian Government with the basis for redistributing research funding' (EAG, September 2005, p. 3). Note the reference in this text to 'redistribution' rather than 'distribution'. In any new system the Government fully expects that there will be winners and losers. There is not more money to go around Australia's 39 universities, or at least the Federal Government does not intend to make more money available from its annual surpluses; at last count around \$11.5 billion in this financial year. However, universities that fair badly under this new funding system may be able to access some 'third stream

funding' to ameliorate their initial shock and to help them restructure themselves, perhaps as teaching only universities.

The emphasis on the efficient use of resources is also seen within the Preferred Model in expressed commitments to 'avoid[ing] a high cost of implementation and the imposition of a high administrative burden' (EAG, September 2005, p. 8). This means, for example, that it is seen as 'desirable to exploit evidence [of quality research] and metrics currently available within universities and the Australian Government' (EAG, September 2005, p. 16).

The alleged problem to be solved by the RQF is uncertainty about the quality of Australian research. While discussions of what constitutes quality research and its impact are important and have largely dominated consultations in the development of the RQF, the policy needs to be read in the context of a burgeoning industry in ranking the world's universities and the economic consequences of this for them. In that context, the RQF is primarily a mechanism to reassure the global market and Australian tax payers that Australia has a high quality university system, at least at the upper end, supported by a strong financial basis. The discourses that help to construct uncertainty about its current undifferentiated state draw on claimed global and local imperatives that are also couched within an underlying economic discourse, as the following pronouncements by Nelson demonstrate:

While being the best in Australia is an achievement, Australia's future depends on a collective effort by the Australian Government, industry and the community in identifying areas of international research excellence in Australia. (EAG, September 2005, p. 3)

And:

Every single dollar, every single dollar that we invest, whether in schools or universities, or research, or training, every dollar is a dollar that some Australian worked damned hard for, and we've got to make darn sure that every dollar that we invest delivers the very best outcomes for all Australians, and particularly the next generation. And, at the moment, as Australia's Minister for Science and Higher Education, if you like, I cannot, with any confidence, tell the average Australian that every dollar we invest in research, funds and supports the highest quality research in all circumstances. (Nelson, Opening Address to the National Stakeholders Forum, 2 June, 2005)

These accounts entice us to work together to achieve what is best for Australia and to justify ourselves, and 'our' spending, to 'average Australians'. We could quibble with this account and probably should, but I also want to highlight the *discourse of cooperation*, which accompanies this 'best-model-possible-under-the-circumstances' orientation, and which permeates the recent Preferred Model (September 2005) as well as the National Stakeholders Forum held last June (2005). On every page of the most recent RQF document and sometimes more often, 'agreement' among the disparate parties is foregrounded, to the obvious delight of Minister Nelson who wrote in his introduction to the Preferred Model that he was:

pleased with progress to date with developing the RQF. Especially impressive is the acceptance and commitment shown by the key stakeholders, particularly the universities, to developing the best possible Framework. Each step taken in collaboration will bring us closer to an agreed model and will allow us to develop the necessary guidelines to implement the RQF. (EAG, September 2005, p. 3)

The limits of discourse analysis

My point in this is, we may be able to read the discourses and know what they are doing to us, but this doesn't seem to help much in knowing what to do about it, except to develop strategies and tactics within the frames that these discourses establish; in effect, to speak within them. To use Bowe, Ball & Gold's (1992, p. 20) instructive diagram, by and large we have been excluded from contexts of influence. If we have learned anything from this representation of contexts of policy making, it is that the production of policy is not confined to contexts of policy text production *and* that these contexts are not confined to particular locations in time and space. Yet, we seem to remain fixated on policy texts and discourse, or with speaking against policy from positions located in contexts of practice.

This is not to say that the policy sociology community has not been interested in the politics of these contexts. On the contrary, this has been a central interest, including an implied interest in uncovering their strategies and tactics for our own purposes. For example, my own work in analysing contexts of policy text production disclosed six strategies of social actors in the negotiation of Australian higher education entry policy in the early 1990s: strategies of trading, bargaining, arguing, stalling, manoeuvring, and lobbying (Gale 1997; 2003). And, drawing on de Certeau (1984), I have more recently demonstrated that teachers are indeed policy makers in the tactics they employ and the use they make of policy to exploit opportunities and generate possibilities in contexts of practice (Gale & Densmore 2003: 36-53). In Yeatman's (1998) terms, the former are policy activists; in Sachs's (2003) terms, the latter are 'activist professionals'. Policy actors in both contexts have an interest in 'determining their own fate' (Yeatman 1998: 19) – what Giddens (1994) has referred to as a 'generative politics' – yet they are also cognisant of 'what can I do from where I am?' (Sachs 2003: 138), or what is achievable given certain constraints.

When I embarked on a PhD in the early 1990s I was interested to research what influences the production of policy. Since then, policy analysis has moved on. Our questions similarly need to shift to *how* to influence the production of policy. There is an old distinction in the policy literature between analyses *of* and *for* policy (Gordon et al., 1977, p. 27), which continues to be advocated by some and challenged by others. Here I am suggesting the need for analyses *of and for* policy *making*.

To borrow from De Bono (1971), policy analysis is like digging holes. Digging deeper in the same hole tends to reveal more of the same. Yet, while we have been digging, the field of education has been reframed. We now need to think differently about our engagement with policy. We need to dig more exploratory holes. And it will take a road-

gang to dig them. We cannot rely on one or two to do the work for us. It will involve our collective imaginations and a willingness to build alliances across conceptual borders.

I remain concerned, then, by our current silence on policy analyses of contexts of influence: 'the contexts where knowledge, practice and identity are shaped' (Luke 2005c: 11). Allan Luke (2005a: 4) suggests that 'perhaps this is because ... exchanges [in such contexts] have historically been barred from researcher or public scrutiny', although I am aware of recent forays by some education researchers into these arenas, such as those by Luke himself and also by Alan Reid (2004), Roger Slee and others. These exceptions are heartening given the current capture of influence by conservative politics. The more prevalent picture, though, is of our exclusion or, more accurately, our containment elsewhere. As Gary Hardgrave – the Federal Minister for Vocational and Technical Education – put it at a recent (9 October 2005) ACDE award ceremony for education journalists, with respect to education the Australian states have been 'coerced into an era of cooperation'. It is reminiscent of the English solution to radical teachers in the 1920s; of 'indirect rule' or 'high policy' that granted apparent autonomy to teachers while retaining central control by binding local identities into the existing administrative system (Lawn 1987).

But, as I have already mentioned, influence is not confined to particular fields or to particular positions within those fields. Appreciation of this by the conservative right (that others can also have influence), was apparent in the way in which two education researchers were separately maligned earlier this year by Federal and state ministers of education: named under the cover of parliamentary privilege or with veiled and disparaging references in the press to the researcher's considerable legacy. I speak, of course, of Wayne Sawyer and of Allan Luke and the competing philosophy embedded in their advocacy of critical literacy. It would seem that the current cluster of ruling politicians are not comfortable with social actors with competing views occupying positions of influence. It is also interesting to note that both of these researchers' interests are in literacy and its policy and politics. Perhaps they understand more than others the language of influence, although I do not want to make too much of this. Education researchers generally are currently under attack, particularly in the US, illustrated in 'Bush advisor Reid Lyon's call to "burn down the faculties of education"' (Luke 2005b: 3) and by Terry Moe (of Chubb and Moe fame) who during a recent visit to Australia gave this assessment of the value of education researchers and their research claims:

If you were in political science [at Stanford University] and you proposed something like vouchers [enabling families to choose their own schools], there'd be a big theoretical discussion ... [whereas] In [faculties of] education, they're thinking, what is the impact on the system which we all really care about and are invested in? ... As a result, a lot of education research is, I think, of poor quality. A lot of it is mixed with ideology ... [whereas] in [Stanford's political science] department ... our work doesn't really have anything to do with our own personal ideology (in Lane, 2005, p. 26).

Cognitive activism in contexts of policy making

I do not want to paint too grim a picture of the way in which education researchers have been positioned in the field. Nevertheless, unless we begin to develop a theory and politics of policy engagement that includes contexts of influence, we are destined to continue to respond to policy rather than contribute to its construction. To move in this direction, we need to develop what Graham Lakoff (2004) refers to as 'cognitive activism', to complement Yeatman's (1998) policy activism and Sachs' (2003) activist professionals. As an aside – if you wish to pursue my earlier theme of the centrality of language in bursting in to the context of influence – it is interesting to note that Lakoff is an academic in the US who applies his cognitive linguistics to the study of politics and also to its practice.

In the contexts of influence in which he operates, it seems to me that there are two interrelated aspects to this kind of activism, which can usefully be expressed as framing and naming (Schon 1979) or which my colleagues in the British Educational Research Association euphemistically describe as 'being in the right place at the right time' and 'making the most of it'; their explanation of how to reposition the field of education in relation to the Research Assessment Exercise (the RAE). Of course, framing is more about constructing the right place to be in, rather than waiting for some serendipitous moment that thrusts us into the spot light for all the right reasons.

That is, cognitive policy activists are in the business of taking their laboratories to the farm, as Bruno Latour (1983) would say. This requires translating the central concepts of a critical education science into terms used by the dominant, so that working on their terms is also working on the field. The place to begin is not with *their* framing but with one's own and then to reconceive of the relative importance of these terms in keeping with one's own frame. Having made the translation, the task becomes one of naming what the field lacks and then to become the source of its resolution. It is not strictly a matter of conceiving of policy problems that meet the solutions on hand, as Peter Beilharz (1987) would say, but it is close.

Let me illustrate what I mean with two examples. Consider first the recently established Australian Council for Humanities, Arts and Social Sciences (or CHASS), which has been in operation now for almost two years and of which AARE is a member. Already CHASS is positioned as the peak body in the social sciences and humanities and has secured extraordinary levels of DEST funding (\$260,000) for research, basically to help the government flesh out its quality research agenda in the 'soft' sciences. One result of this has been the CHASS Occasional Paper No. 2, *Measures of Quality and Impact of Publicly Funded Research in the Humanities and Social Sciences*, which incidentally does not mention Education at all. CHASS was able to position itself in this way because it translated its own interests into terms DEST can understand, specifically in the language of the RQF, and then identified the gaps of understanding and in resources that required their involvement.

But such engagements with policy formation are not really that surprising. Policy actors in contexts of influence are typically overwhelmed by the volume of information they

must consume and the tasks to which they must attend, so that they need filtering devices. A community of knowledge experts, such as CHASS, able to speak in the language of the field, makes an excellent filtering device. Luke's (2005a: 3) engagement in "high stakes" senior policy meetings' is similarly illustrative of this possibility for providing direction in policy making contexts. When Luke first became Deputy Director-General of Education Queensland:

Policy formation appeared to entail far more of an arbitrary play of discourse and truth, power and knowledge than I had anticipated, notwithstanding how it is justified in press releases, Hansard, or Green Papers, or how it is critiqued in our own critical theory ... [It] appeared far less systematic, far less 'calculating' than Rose's [1999] account, and far less indicative of a dominant ideology than many of our own critical policy analyses since Apple (1982) have led us to believe. (Luke 2005a: 4)

However, as I suggested earlier, it is what policy actors do in such contexts that determines the level of their influence. For example, Luke became convinced:

that we could only move systematically towards a redressive educational agenda and project of social justice if, indeed, we reworked and reappropriated an evidence-based approach to policy development away from narrow, neoliberal educational orientations to accountability. (Luke 2005a: 4)

Evident here is that Luke's social justice project has not been reframed, but translated into new terms and the field reorganised and expanded to accommodate it. It is not just about 'being in the right place at the right time' and certainly it is more than acting on instinct. It takes systematic sustained preparatory work. As Luke (2005a: 4) notes in his own experience, 'without a broad array of evidence and data, targeting and moving into specific redressive strategies was difficult, arbitrary and piecemeal, more likely to entail add-on strategies and token distribution of funds'. It is for such reasons that Latour (1983: 159, emphasis original) argues for 'study [of] *the very content* of what is being done' in and through policy.

Conclusion

What does all this mean, then, for AARE and its involvement in education politics and policy making? First, it highlights that our alliances are in disrepair even disarray, both internally and externally. We are not well connected with and supportive of one another and we are even less well connected with others in contexts of influence. The virtual exclusion of AARE members and education academics generally from the September *Schooling for the 21st Century* conference, organised by the Australia and New Zealand School of Government and held at the University of Sydney, to the surprise of significant members of the University itself, is indicative of our poor standing in the field. Consider too, the exclusion of faculties of education from current government commissioned research to benchmark Australian primary school curricula, evaluate national literacy standards among students and student teachers, or construct teaching and leadership standards for the nations teaching workforce. And, as I mentioned at the start of this

address, our representation as a field of education researchers at the National Stakeholders Forum was minimal to say the least.

Secondly, a focus on contexts of influence highlights the current hollowing out of our research efforts. The importance we hold for our research is no longer shared by others or at least by those who currently dominate most contexts of education policy making. To evoke Latour (1983), our exclusion from contexts of influence is directly related to the very content of our research and to its inaccessibility, couched in language that makes little sense to and does not contribute much in arenas of the dominant. Consider, for example, a recent newspaper article, which appeared in February this year (2005) and followed hot on the heels of our 2004 conference; for which, incidentally, we received unprecedented and overwhelmingly positive media coverage. Yet this one particular aberrant article, titled 'the problem with education research', claimed that:

With a few notable exceptions, most of which exist outside university education faculties, a great deal of empirical educational research in this country would not withstand much scrutiny (*The Australian*, 28 February 2005)

In the article, AARE comes in for special if not exclusive attention. The author invites us to:

Look at the papers presented at the [2004] conference for the Australian Association for Research in Education and you'll find that the findings presented are often based on case studies, or small sample sizes. (*The Australian*, 28 February 2005)

Even within our own ranks our research efforts have been publicly chastised in the media as irrelevant, having no impact on schools and ignored by policy makers (*The Age*, 2 July 2005). In brief, we do not have a coherent voice and a voice that others or even ourselves want to listen to. We are not all 'singing from the same page', to borrow from Linda Smith's opening address to this conference.

To be fair, these examples may not be representative of the research by AARE members as a whole or of its engagement with education policy making in particular. And they do not give adequate regard for how others, including government, have chosen to represent us. For example, it could be argued that the very reason we are being maligned is because the work we are doing is having an impact; an impact that others are not all that happy with. Nevertheless, in my view the matters I have raised do lend considerable weight to arguments for new theories and politics of policy making in contexts of influence. In the words of Latour (1983: 169), it is clear to me that this is the way in which the field of education research and education policy can be rebuilt in keeping with the constraints now set by a neo-liberal / neo-conservative education politics. And that, it seems to me, is our collective challenge. The only way forward is to act.

References

- Beilharz, P. (1987). "Reading politics: Social theory and social policy." *Australian and New Zealand Journal of Sociology* 23(3): 388-406
- De Bono, E. (1971) *The use of lateral thinking*. Harmondsworth: Penguin.
- Expert Advisory Group (EAG) (September 2005) Research Quality Framework: Assessing the quality and impact of research in Australia - The Preferred Model. Canberra: AGPS.
- Gale, T. (2003) Realizing policy: The who and how of policy production. *Discourse: Studies in the Cultural Politics of Education*, 24(1), pp. 51-66.
- Gale, T. & Densmore, K. (2003) *Engaging Teachers: Towards a radical democratic agenda for schooling*. Buckingham, UK: Open University Press.
- Latour, Bruno (1983) Give me a laboratory and I will raise the world. In K. Knorr-Cetina & M. Mulkay (eds.) *Science Observed*. London: Sage, pp. 141-170.
- Lawn, M. (1987) The spur and the bridle: Changing the mode of curriculum control. *Journal of Curriculum Studies*, 19(3), pp. 227-236.
- Nelson, B. (2 June 2005) Opening Address to the National Stakeholders Forum, http://www.dest.gov.au/sectors/research_sector/policies_issues_reviews/key_issues/research_quality_framework/nsf.htm
- Sachs, J. (2003) *The Activist Teaching Profession*. Buckingham, UK: Open University Press.
- Schön, D. (1979) Generative Metaphor: A Perspective on Problem-Setting in Social Policy. In A. Ortony (ed.) *Metaphor and Thought*, pp. 254-83. Cambridge: Cambridge University Press.
- Troyne, B. (1994) Critical social research and education policy. *British Journal of Educational Studies*, 42(1), 70-84.