

Percolated or *Espresso*?
**The ways in which education research influences policy development in
Australia**

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Abstract

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There is an increasing diversification of education research communities in Australia and some of these communities appear to have a disproportionate impact on public policy. The author explores why this is the case and discusses the implications of research diversity for educational policy researchers.

The author explores the nature of the policy development cycle and identifies the ways in which academic education researchers might seek to influence that cycle more directly. While a number of strategies appear to be successful in terms of influencing public policy development, seeking a direct influence on policy poses risks for academic researchers. The limitations of the RQF approach to measuring the impact of academic research are also discussed.

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Introduction

Most research in the social sciences, including education, can at best, have an indirect influence on public policy (Wiltshire 1993). Research in the social sciences is rarely aligned with government policy priorities and is often dismissed as inconclusive or irrelevant to the requirements of decision makers. A common view is that the value of social science research is realised over the long term, as the findings of a body of work “percolate” through policy communities rather than influence policy development directly (Weiss 1979). Under the “Percolation model”, the major public contribution of research in the social sciences is indirect in that it provides theoretical breakthroughs and paradigm shifts that ultimately influence the *context* of policy development, rather than driving specific policy decisions.

The Australian government has announced its intention to measure both the quality and impact of research in Australian universities under the Research Quality Framework (RQF) to be introduced in 2008. As the outcomes of the RQF will influence the distribution of research funding to universities from 2009, there is an urgent need to examine the ramifications of the government’s decision to assess research impact for the field of education.

This paper explores the ways in which education research influences policy and discusses strategies for education researchers who seek a more direct influence on government. It identifies the pitfalls and risks of the various approaches to policy influence and concludes with a discussion of the implications of the RQF approach to measuring the impact of academic research.

How does research influence policy?

Many models of policy development have been proposed by political scientists to explain the creation and application of public policy. The purpose of these models is to identify and explain how policy is developed, predict the development of public policies and assess the consequences of types of policy development (see Dye 1992). In exploring how research influences public policy development, the most useful model is one that sees policy making as a *process*. The process model aims to identify various processes occurring within the political system that contribute to policy formulation. These processes are:

- *Identification* of policy problems through public demands for government action;
- *Agenda-setting* – focusing the attention of the mass media and public officials on specific problems;
- *Formulation* of policy proposals through the initiation and development of policy proposals by policy-planning organisations, interest groups, and government;
- *Legitimation* – the selection and enactment of policies by parties, interest groups and government;
- *Implementation* of policies through organised bureaucracies, budget decisions, and the activities of executive agencies; and
- *Evaluation* of policies by government agencies, external consultants, the media and the public.

(Dye 1992: 328)

The processes of policy development rarely occur in an orderly way. Simple sequential models of the “policy development cycle” can be quickly thwarted by the manoeuvres of stakeholders, the influence of lobbyists and personal predilections of those in power. As parties jockey for influence and make “deals” in pursuit of a policy objective, the end result will be a diluted and weakened policy compromise rather than a well-considered policy decision. In other words, there may be very little serious “policy deliberation” behind decisions that are ultimately made (Dye 1992).

Nonetheless it is useful to understand the different processes operating within a policy cycle if one is seeking to influence them through education research. Generally speaking, research can contribute to policy development and has the potential to influence decisions. But the policy utility of social sciences research such as education is more difficult to define than the utilisation of research from other many other disciplines. Outputs from fields such as biological science, chemistry, or engineering for example, are often patented and commercialised, thus providing tangible evidence of their “worth” to an end user. Medical science research plays a major role to play in health policy, where the outcome of clinical trials directly influences government authorisation for the use of particular drugs or forms of treatment. Measuring the impact of research in the social sciences, such as education, is much more difficult.

Weiss’ models of research utilisation

When we judge the impact of education research on public policy using traditional concepts of research utilisation based on the natural sciences, it is easy to conclude that educational research is under-utilised in the policy development process. To counter this view, Carol Weiss (1979) identifies seven ways in which research influences public policy, taking into account the unique characteristics of research in the social sciences. Weiss’ seven models of research utilisation are:

1. Knowledge-driven
2. Problem-solving
3. Interactive
4. Political
5. Tactical
6. Enlightenment (“percolation”)
7. Intellectual Enterprise.

The Knowledge – driven model derives from the natural sciences and assumes the following sequence of events: basic research → applied research → development → application. The model assumes that the mere existence of new knowledge presses it towards development and utilisation. This is often the case in biomedical and natural sciences, particularly when there are commercial applications. Weiss points out that this model has limited relevance to the social sciences for three reasons. First, social science knowledge is rarely so compelling or authoritative as to drive inevitably towards implementation. Social science research tends to be contradictory in the sense that many studies do not come up with one single answer to a policy

problem, and when they do, the findings can be disputed, sometimes by the same author in a subsequent publication. Second, social science knowledge does not readily lend itself to conversion into replicable technologies, either material or social. And third, the processes of policy development work against the direct adaptation of social sciences research.

... unless a social condition has been consensually designed as a pressing social problem, and unless the condition has become fully politicised and debated, and the parameters of potential action agreed upon, there is little likelihood that policy-making bodies will be receptive to the results of social science research (Weiss 1979: 427)

The Problem – solving model of research utilisation involves the direct application of the results of a specific social science study to a pending problem. The assumption is that the research provides empirical evidence and conclusions that help to solve a policy problem. In other words, the policy decision drives the research. The expected sequence of events is: problem identification → decision required → information lacking to make decision → research provides missing knowledge → policy decision made. This model suggests two possible ways for social science research to enter the policy-making arena. The first, less direct way, is for the research findings to pre-exist and be drawn on by policy makers, who are aware of it through their own efforts or its presentation in the media or through stakeholders. There is an element of chance in this process and research utilisation depends heavily on the effectiveness of the communication between researchers and policy makers. The alternative route is the purposeful commissioning of research to fill the knowledge gap in the expectation that it will have direct and immediate applicability to the policy problem. The Coleman report¹ on educational opportunity in America that was used to justify the promotion of racially balanced schools through busing is an example of this type of research (Dye 1992:7-9). Australian examples could include the Karmel report² into Commonwealth schools funding in 1973, and Dr Bruce Chapman's work on income-contingent loans commissioned by the Commonwealth government prior to the introduction of the Higher Education Contribution Scheme (HECS) in 1988.

Under the Problem-solving model, government agencies are closely involved in the sponsoring and supervising of research projects which are intended to address defined policy problems. This involvement tends to enhance the research's relevance to, and perceived impact on government policy (Van de Vall and Bolas 1979). One limitation of undertaking commissioned research is that the research will usually need to be conducted according to explicit terms of reference and the outputs and will be required in a very short time. It is very difficult to conduct original, high quality research in the time frames required by commissioning agencies. A thoughtful analysis of previous research findings is usually the best that can be achieved. A second limitation is the necessity for an "alignment of perspectives" between policy makers and researchers engaged in the commissioned research.

Writing in 1979, Weiss declares the expectation of policy alignment between government and social science researchers to be "wildly optimistic". However in Australia over the past two decades, the Problem-solving model has become very common in education research.

¹ James S Coleman 1966. *Equality of Educational Opportunity*. Government Printing Office: Washington DC.

² Peter H Karmel 1973. *Schools in Australia: Report of the Interim Committee for the Australian Schools Commission*. Canberra: AGPS.

Education departments regularly commission academics and consultants to conduct policy-related research with clear terms of reference and specific time frames for delivery. Weiss accurately predicts that the consequence of this type of research activity is to “increase government control over both the specification of requested research and its conduct in the field” (Weiss 1979: 428). In Australia, this type of research continues to create tension over issues of intellectual property rights, when the commissioning agency tries to suppress the publication of research that does not align with the government position.³

The Interactive model of research utilisation is one in which social science researchers enter the decision-making arena as part of an interactive search for knowledge. It implies that those developing policy invite input from researchers on a regular basis through expert committees, consultation and networking. The input of researchers is simply one among many inputs from a range of sources and it is not presumed that they have conclusions available or a body of convergent evidence. While not as direct as the Problem-solving model, Weiss describes the Interactive model as “a familiar process by which decision-makers inform themselves of the range of knowledge and opinion in a policy area” (Weiss 1979: 429). This model assumes that the process of policy development is orderly and well-planned, which may not always be the case.

The Political model applies when the opinions of decision makers are so hardened – for reasons of ideology or interest – that they are not receptive to new evidence from research. Under this model research can only be used as “ammunition for the side that finds its conclusions congenial” (Weiss 1979: 429). The use of research for partisan political purposes often means that findings are reported out of context and conflicting evidence is ignored or suppressed. Weiss views this model as a legitimate use of social science research, provided that the research is available to all participants (so that misrepresentations of findings can be countered by the opposite side). She also assumes that social scientists would never willingly produce research to support partisan political objectives, or to deliberately provide “ammunition” for one side of a political debate. In Australia over recent decades, there is much evidence to the contrary.

The Australian experience suggests that many researchers and research communities are ready and willing to “tailor” their research findings to support partisan political positions, particularly when undertaking commissioned research. Privately funded policy “think tanks,” such as the Centre for Independent Studies and the Australia Institute are examples of research communities which appear to have a direct impact on policy development under the Political model, because they publish research that is used as “ammunition” in political debates.

The Tactical model applies to situations where policy makers use the fact that research is being done to justify delaying action (“we’re doing research on this important issue right now”) or to deflect criticism of unpopular policy outcomes (“we were acting on the recommendations of the research”). Other tactical moves involve the provision of funding to a research agency or researcher for the purposes of being allied with social scientists of high repute or to build a constituency of supportive academics. Weiss says these tactics are

³ Examples from the 1990s are the ACTU’s refusal to publish a commissioned history of the union movement, and the Commonwealth Department of Education’s reluctance to publish commissioned research that implied criticism of government policies.

“illustrations of uses of research” while acknowledging that the conclusions of the research may have no impact on policy (Weiss 1979: 429).

Under the Enlightenment (or “percolation”) model, no one piece of research or even a body of research ever directly influences policy. Rather, the concepts and theoretical perspectives engendered by social science research permeate the policy-making process over time.

The imagery is that of social science generalisations and orientations percolating through informed publics and coming to shape the way in which people think about social issues. Social science research diffuses circuitously through manifold channels – professional journals, the mass media, conversations with colleagues – and over time the variables it deals with and the generalisations it offers provide decision makers with ways of making sense of the world (Weiss 1979: 429)

Inevitably, policy makers influenced by this model of research utilisation will never be able to cite the findings of a specific study that influenced their decisions. At best, they may have a sense that social science research has contributed ideas and orientations that have influenced the policy agenda. The role of research under this model is to “sensitise” decision makers to new issues and help “turn what were non-problems into policy problems”. It “helps to change the parameters within which policy solutions are sought” and “in the long run, along with other influences, it often redefines the policy agenda” (Weiss 1979: 430). Examples of policy issues influenced by the percolation of research from the social sciences might include the removal of corporal punishment in schools or the pursuit of equity as a policy goal in education.

In contrast to the previous five models, the Percolation model does not expect decision makers to be receptive to, or aware of, any research findings from the social sciences. Nor do research findings have to be compatible with decision-makers’ values and goals in order to be useful. It is assumed that through the process of percolation, the powerful “truths” revealed by social science research will eventually overturn accustomed values and patterns of thought. While the model has the inherent inefficiencies of an indirect and unguided process, Weiss concedes that it is “perhaps the way in which social science research most frequently enters the policy arena” (Weiss 1979: 429).

However Weiss also points out that the percolation model is an extremely unreliable method of disseminating research outcomes because the public interpretation of research findings is largely beyond the researchers’ control.

When research diffuses to the policy sphere through indirect and unguided channels, it dispenses invalid as well as valid generalizations. Many of the social science understandings that gain currency are partial, oversimplified, inadequate, or wrong. There are no procedures for screening out the shoddy and obsolete. Sometimes unexpected or sensational research results, however incomplete or inadequately supported by data, take the limelight. (Weiss 1979: 430)

Wiess’ seventh model of research utilisation is to view research as part of the Intellectual Enterprise of the Society. This model portrays social science research as an intellectual pursuit that is not context-free, but that responds to the currents of thought and the fads and fancies of the period. In this sense, “social science and policy interact, influencing each other and being

influenced by the larger fashions of social thought”. Weiss points out that it is often an emerging policy interest in a social issue that leads to the appropriation of funds for social science research and that “both the policy and research colloquies may respond, consciously or unconsciously, to concerns sweeping through intellectual and popular thought” (Weiss 1979: 430).

Weiss concludes with a plea to social science researchers to use the models of research utilisation to “pay attention to the imperatives of policy making systems” and consider what they can do to “improve the contribution that research makes to the wisdom of policy” (Weiss 1979: 431).

Enhancing the influence of education research on policy

Weiss’ categorisation of research utilisation provides insight into the potential for education research to influence policy and may offer comfort to those who lament that education research is under-appreciated in the policy-making process. While most education research is destined to influence policy through a “percolation” process over a long period of time, other models of more direct policy influence, such as the Problem-solving and Political models, are applicable to education researchers and could be employed more proactively. This section explores the way in which education researchers might pursue greater policy influence through the three models of Percolation, Problem-Solving and Political, with a particular emphasis on the latter two.

Constraints on policy makers

A key principle underlying any strategy to increase the policy impact of education research is to understand one’s client or “end user”. Delivering research more directly to policy makers requires a keen appreciation of the constraints within which policymakers work. Husén (1994) identifies five key constraints within which policymakers work that might influence their capacity to utilise research, summarised in Table 1.

The first constraint on policymakers is that they are primarily or even exclusively interested in research output that addresses problems on their agenda. Policy agendas are largely determined by the political platforms or election promises of governments. For example, research on education vouchers (both for and against) flourished during the Reagan era in the USA and issues of civics and citizenship have dominated the Howard government agenda in Australia. The dominant policy agenda will inevitably “spawn” research studies and a key strategy for all researchers is to frame their research in terms of current policy issues requiring a solution.

The second constraint on policymakers in using research is party political biases. Research of a very high quality can be dismissed or demonised by politicians if they think it is less than unanimous in supporting their view. Unfortunately, increasing numbers of politicians do not appreciate the value of ‘frank and fearless’ debate on controversial topics. In responding to overt political bias, some researchers publish work that shores up ideological positions (usually with government financial support) while those critical of government will have to

rely on financial support from other sources. Inevitably, the researchers writing pro-government policy reports and receiving government funding are likely to receive greater public recognition through the mass media.

Table 1 Constraints on policy makers

Constraints	Strategies for Researchers seeking policy influence
1. Dominance of Current Policy Agendas	Emphasise the way in which research relates to contemporary policy issues. Frame research debates in terms of issues requiring a solution
2. Party political bias	Sacrifice intellectual independence and academic rigour to support a dominant political position or seek research funding from other sources
3. Limited time horizons	Draw on existing research and data. Plan exit points within long-term studies that enable preliminary findings to be disseminated along the way
4. Narrow portfolio interests	Propose policy solutions that fall within the scope of one government department
5. Lack of familiarity with academic discourse	Present research findings in a way that facilitates understanding among the general population

Source: Husén (1994)

Third, researchers need to appreciate that policymakers have very limited time horizons, depending on the circumstances of the day. They can require information for next week's budget or a Ministerial Council meeting in a few months. Their willingness to consider new issues varies according to the electoral cycle. In its first term, a newly elected government is usually receptive to new ideas but by their third year in office, the government of the day will be "playing it safe" and the number of new policies under consideration will diminish. The short policy horizon of policy makers may explain why very few high quality longitudinal studies are funded by government. The research sponsored by government usually requires an output within a few months, fuelling the production of short-term research projects based on a weak methodology and producing limited findings. Researchers seeking to influence government policy development must work within these constraints, by drawing on published research, or ready-made data sets. Whatever strategies researchers employ, the short time constraints of policy makers can result in limited research findings and policy is impoverished as a result.

A fourth constraint on policymakers is their tendency to be concerned only with research relevant to their particular portfolio interests. They are usually not interested in, nor aware of, research that is more broadly based. Given that policymakers are required to work within portfolio boundaries, research that suggests a solution involving more than one portfolio or more than one level of government is likely to be relegated to the "too hard" basket. While governments are now attempting to address this limitation in some areas of program delivery, for example, through Indigenous policy co-ordination, progress remains slow. Researchers

seeking a more direct influence on government would be wise to propose policy solutions that fall within the scope of one government department.

Finally, policymakers are generally not familiar with the discourse of research in the social sciences. Academic discourse that strives for precision is usually dismissed as jargon by those outside the field. Research findings should therefore be presented publicly in a way that facilitates understanding among the general population. Whether the research is to be disseminated through models of percolation, problem-solving or politicisation, education researchers need strategies to communicate their findings beyond their immediate research communities. A fundamental first step is to publish summaries of research findings in the popular press. Research is more likely to influence decision-makers through popular reports or the mass media rather than through academic journals or technical reports. And by taking more control over the dissemination of their work, researchers limit the risk of their findings being misquoted or used out of context.

Complexity of policy process

Policy decisions are rarely taken in an orderly or rational way by governments in power. The process of decision-making can be extremely complex, involving a myriad of stakeholders and interest groups. In a federal system of government like Australia's, rational policy development is also hampered by jurisdictional issues. Most ministerial portfolios are in areas of responsibility shared with states and territories and the field of education policy, in particular, is highly contested. Education policy development occurs in the context of complex and dynamic interactions between interest groups and government and decisions are usually the product of a negotiated compromise between disparate interests, rather than a consensus or alignment of opinion. The policies that emerge from this process may then be thwarted by strategic cost-shifting, administrative inertia or the sheer size and scale of education systems. This complex, contested and nuanced process of policy development has been described a "decision accretion" (Husén 1994: 1862) or "incrementalism" in the public policy literature. The message for education researchers is that while some of the models of research utilisation might work some of the time, they won't work all of the time.

Education researchers should expect a high degree of "hit and miss" when they aim to influence policy. Given the complexity of the policy development process and the fact that researchers have other priorities and responsibilities, such as teaching, it will always be difficult for researchers to influence policy development, regardless of the strategies they use. As Weiss says,

It probably takes an extraordinary concatenation of circumstances for research to influence policy decisions directly: a well defined decision situation, a set of policy actors who have responsibility and jurisdiction for making the decision, an issue whose resolution depends at least to some extent on *information*, identification of the requisite informational need, research that provides the information in terms that match the circumstances within which choices will be made, research findings that are clear-cut, unambiguous, firmly supported, and powerful, that reach decision-makers at the time they are wrestling with the issues, that are comprehensible and understood, and that do not run counter to strong political interests. (Weiss 1979: 428)

Measuring the impact of education research

The Research Quality Framework (RQF) has been designed by the Commonwealth Department of Education, Science and Training (DEST) to measure the “quality and impact” of research carried out in Australian universities and other publicly funded research agencies. A recommended RQF has been accepted by the Government and DEST is currently developing arrangements for implementing the framework, with universities’ submissions to be made by the end of April 2008. It is intended that the results of the RQF will influence the formula that drives universities’ funding from 2009.

The RQF departs significantly from current research quality evaluation practice by attempting to measure the impact or use of original research outside the peer community (ie. the extent to which research is successfully “applied” to an external problem or issue). Through the RQF process, the government aims to measure the level of “recognition by qualified end users that methodologically sound and rigorous research has been successfully applied to achieve social, economic, environmental and/or cultural outcomes” (Development Advisory Group 2006: 10)

Research submitted for an impact rating must have achieved a “threshold” quality rating of 2, which is “research that is recognised as methodologically sound in its field and of high originality, significance and rigour” (Development Advisory Group 2006: 21). Provided it has this rating, it will be assessed on a five-point scale for Research Impact. The Rating Scale for Research Impact is provided in Table 2.

Table 2 The Rating Scale for Research Impact

Rating	Description
A	Adoption of the research has produced an outstanding social, economic, environmental and/or cultural benefit for the wider community, regionally within Australia, nationally or internationally
B	Adoption of the research has produced a significant social, economic, environmental and/or cultural benefit for the wider community, regionally within Australia, nationally or internationally
C	Research has been adopted to produce new policies, products, attitudes, behaviours and/or outlooks in the end user community
D	Research has engaged with the end user community to address a social, economic, environmental and/or cultural issue regionally within Australia, nationally or internationally
E	Research has had limited or no identifiable social, economic, environmental and/or cultural outcome, regionally within Australia, nationally or internationally

Source: Development Advisory Group 2006.

Research Groups may make a claim that their research should not be assessed for research impact on the grounds that it is not at an appropriate stage of development. If the Assessment Panel agrees with this claim for exclusion, the impact rating of the Research Group will be “not assessed” (Development Advisory Group 2006: 22).

The basis of the impact assessment for a Research Group will be an Impact Statement of up to ten pages in length. The Impact Statement is expected to include:

- an evidence-based statement of claims for the Group against generic and panel-specific impact criteria, including verifiable indicators in support of those claims;
- up to four case studies that illustrate the Group's claims of impact; and
- details of end users who can be contacted by Assessment Panels to verify the Research Group's claims

The government's decision to measure research impact under the RQF has profound consequences for many researchers in the social sciences, which are discussed below.

End users and assessable impact

Research impact is defined under the RQF as “the social, economic, environmental and/or cultural benefit of research to *end users* (my italics) in the wider community regionally, nationally and/or internationally”. End users are defined as people who “come from industry, business, the public sector or community organisations” and “persons who can legitimately verify claims of impact” (Development Advisory Group 2006: 19-21).

Measuring research impact in terms of how it is adopted by an “end user” reflects a narrow concept of research utilisation based on the natural sciences (the Knowledge-driven model). The idea that research can have an impact beyond that of an “end user” is not acknowledged under the RQF. Yet the Percolation model, which characterises the impact of most research in the social sciences, suggests that there are no identifiable end users of research output, because social science generalisations and orientations shape the way in which people think about social issues over a long period of time. Inevitably, policy makers influenced by social science research will never be able to cite the findings of a specific study that influenced their decisions.

Research impact under the RQF must be based on “actual outcomes and their assessable impact” and the process will not measure the *prospective* impact of research (Development Advisory Group 2006: 21). The emphasis on “actual assessable outcomes” verified by “end users” suggest that the researchers most likely to be recognised as having an impact under the RQF process will be those who undertake research commissioned directly by government (the Problem-solving model) or produced for political purposes (the Political model). As discussed above, this is the minority of education research output and the type of output most likely to be compromised in terms of intellectual integrity.

Length of time to demonstrate impact

Recognising the length of time that it takes for research to be deemed to have had an impact, the RQF Development Advisory Group recommends that research conducted up to six years prior to the assessment period should be taken into account. As the assessment period for the first cycle of the RQF is January 2001 to December 2006, research conducted between January 1995 and December 2000 will be eligible for assessment under the impact criteria. However

this will only apply to research where a “*direct relationship* (my italics) between that research and the impact being claimed can be verified”. (Development Advisory Group 2006: 10).

While the requirement to demonstrate a “direct relationship” between a piece of research and its impact will disqualify most education research under the RQF, the expectation that the impact of a body of work will be apparent within 12 years is also problematic. As Gillies (2005) points out in regard to the examples from science and medicine, research that produces revolutionary theories is often greeted with hostility and scepticism when it is first published even within its own research community. It usually takes several decades for the implications of revolutionary findings and theories to be appreciated.

Nobel prize winners are usually recognised for their ground-breaking research decades after it was published. For example, Australian-born Peter Doherty and his Swiss colleague Rolf Zinkernagel won the Nobel Prize for Medicine in 1996, for their discovery of the “single T cell receptor altered self” while at the John Curtin School of Medical Research at ANU in 1971. Peter Doherty wrote this account of the initial reception to the research findings that would earn him and Rolf Zinkernagel a Nobel Prize 25 years later:

The basis of the "single T cell receptor altered self" hypothesis was fairly much worked out by the time of the Second International Immunology Meeting in Brighton, England. I travelled through the United States and gave the same talk in about 20 institutions . . . This was probably the first time that the immunology establishment became fully aware of what we were saying. Our ideas both contradicted the accepted North American model for the role of immune response genes, and turned the perception of the transplantation system on its head. Many people have told me years later that they heard this seminar, came away with the sense that the findings were significant, but did not fully grasp the import. *Evidently some were also infuriated by what we were saying* (my italics) . . . (Doherty 1996).

A more extreme example of lack of recognition given to ground-breaking research is the story of American geneticist Barbara McClintock. In 1951, McClintock discovered genetic transposition, the moving chromosomal parts that came to be called “jumping genes”. But her idea was so ahead of its time that her work was dismissed *by her research colleagues* as an obscure exception to the then general rule that genes were fixed. For the next twenty years, McClintock continued to report on the transposable elements of genetic systems and the body of evidence to support her theory grew. In 1976, Susumu Tonegawa, a Japanese researcher working at MIT made the same discovery as McClintock and was awarded a Nobel Prize. Finally in 1983, at the age of 81, Barbara McClintock was awarded a Nobel Prize in Medicine and Physiology for her discovery of “jumping genes” thirty years before (Keller 1983).

The government’s intention to link research funding to RQF impact ratings has the potential to divert or destroy the potential of ground-breaking research in all disciplines. For example, if the Australian RQF research impact criteria had been applied to Barbara McClintock within the first 12 years of her discovery in 1951, her ranking would have been “E”. Australian research into anthropology would have fared equally poorly under an RQF impact assessment 50 years ago. Anthropology researchers studied Aboriginal society and culture throughout the 20th Century without having to demonstrate the impact of their research findings. Demonstrating the policy relevance of research into Aboriginal society and culture would have been difficult at a time when government policy was simply to “soothe the pillow of a dying

race”. But the value of anthropologists’ research increased markedly after the High Court’s “Mabo Ruling” on Native Title in 1996. Since Mabo, anthropologists’ detailed accounts of Aboriginal life and customs have been of enormous social and economic value to “end users,” as governments have drawn on this research to respond to the High Court decision.

The limitations of measuring research impact

In trying to “pick winners” by measuring research impact through the RQF, the government overlooks the fact that there is no set formula for producing successful discoveries through research. Major discoveries can be as much the result of serendipity as the product of a systematic process of painstaking endeavour. While in some areas of applied science, research has a clear impact on an end user through commercialisation, in the majority of disciplines, including the social sciences, specific “end users” are difficult to identify. The inherent danger of participation in the RQF process is that universities will focus their attention and resources on research activity that has an immediate and recognisable impact on an identifiable “end user”. Such an outcome has the potential to distort the research environment in which people work.

People who engage in research and discovery need a particular type of environment in order to perform. It must be an environment that values creativity more than impact, and provides sufficient structure to support – without stifling – the generation of ideas (Florida 2002, Gillies 2005). Florida observes that creative people work best in environments that value individualism, are meritocratic and promote diversity and openness. These qualities are necessary to foster discovery and innovation because “creative work is often downright *subversive*, because it disrupts existing patterns of thought and life” (Florida 2002: 31 – original emphasis). Although creativity is seen as an individual phenomenon, it is also a social process, exercised in creative teams and with a range of contributors and collaborators. University researchers are usually motivated more by an intrinsic interest in their work than its likely impact on end users or any financial returns⁴. Florida cites studies that found a reliance on extrinsic motivation to be actually detrimental to the creative process (Florida 2002: 34).

Given the complexity of the relationship between education research and policy, and the many ways in which research in the social sciences can influence policy, the government’s intention to measure the impact of research through the RQF has the potential to foster a narrow and instrumental approach to the allocation of research funding to Australian universities. If Australian universities make financial decisions on the basis of the outcomes of the RQF process, particularly in regard to measurement of research impact, researchers will receive clear messages about what type of research is considered a priority and the focus of research activity is likely to change.

Conclusion

The main option for education researchers seeking to influence policy more directly than

⁴ Although he had a dependent young family, Nobel Laureate Peter Doherty gave up a tenured academic job in the UK to accept a short-term post-doctoral fellowship at the ANU in 1971, purely for intrinsic reasons. “I left my permanent research position, and turned down the offer of another, to take this opportunity to learn basic immunology” (Doherty 1996).

through “percolation,” is to align their research more closely with government policy agendas. This may be pursued by undertaking commissioned policy research (the Problem-solving model) or by fashioning their research to promote partisan political positions (the Political model). Both of these approaches are likely to involve some compromise of the researcher’s independence, which appears to be the price paid for a more direct influence over policy.

Delivering research more directly to policy makers requires a keen appreciation of the constraints within which policymakers work. If a researcher or research community can exploit these constraints effectively, they may be able to have a more direct influence on policy development. The common lament that education research is underappreciated in the policy-making process is understandable in light of the complex processes through which education policy is developed. When so much energy is devoted to negotiating between competing interests, policy makers in education have limited time to consider research outputs and the final policy decision is more likely to be the product of political compromise rather than deliberative policy development. Given the complexity and unpredictability of the policy development process, it will always be difficult for education researchers to influence policy development – usually through no fault of their own.

The process proposed for measuring research impact through the RQF is based on a narrow concept of research utilisation most appropriate to the natural sciences (the Knowledge-driven model). In fields of research that do not have a direct commercial application, impact is very difficult to assess. It will be very difficult for education researchers to demonstrate the impact of their output in the RQF process. The type of education research most likely to have a demonstrable impact under the RQF process is research commissioned by policy makers and research that provides political ammunition for governments. If Australian universities make financial allocations on the basis of the outcomes of the RQF process, particularly in regard to measurement of research impact, the emphasis of research activity in education is likely to become more directly linked to short term government policy agendas.

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