

Title: **Evidence-informed education policy advice - the role of
research in a national review**

Author: E. McDonald

Paper No: MCD03262

Organisation: Department of Education, Science and Training

Evidence-informed education policy advice - the role of research in a national review

Abstract: *Governments take an interest in the impact of educational research as is evidenced by the research commissioned by them to answer this question. Different contentions appear in the literature and in the commentary of influential policy actors about the 'value' of educational research. At the same time in the discourse around professions and policy making 'evidence-based' is a descriptor that has gained some prominence, whether as a wish, intent, or a claim to legitimacy. A recent national review, The National Review of Nursing Education, commissioned a body of research and a number of literature reviews to inform its advice to Government. The review provides some insight into the role research can play in the development of advice about policy, the limitations imposed by the lack of available research and the breadth of research that is required to ensure the advice is indeed informed by evidence. This paper examines these three issues and in doing so demonstrates the interconnection between 'educational' research and research into 'practice' in the context of professional education.*

Introduction

In this paper I examine the use of research in the National Review of Nursing Education, which reported to the Australian Government in September 2002. Unlike most of the literature discussing the impact of research on policy, I write from the viewpoint of the user not that of a researcher. In the paper, I argue that public reviews of this type can be regarded as integrating aspects of the policy cycle, although they do not formulate policy, rather public reviews provide policy advice. Consequently, I will be referring to the policy advice role of the review, not to a 'policy-making' role.

The National Review of Nursing Education was announced in April 2001. The review was commissioned by the Commonwealth Education and Health Ministers who appointed a review panel of seven members, five with nursing experience. During the course of the review, the secretariat had a staff of between five and six. The secretariat was located in the Department of Education, Training and Youth Affairs.

The review was asked to make recommendations on the models of nurse education and training to meet the emerging labour force, the types of skills and knowledge required to meet the changing needs of the labour force involved in nursing, and mechanisms for both attracting new recruits to nursing and encouraging the commitment to life-long learning of those already engaged in nursing. The review panel was also to consider the changing context of nursing and health requirements and the levers influencing these changes, and the links between nursing, medicine and other groups in the health workforce. In doing so it was to have regard to regional needs and circumstances, financing arrangements, and the work of current research projects and reviews.

The use of research in policy advice

A question often asked by public policy makers is 'what impact or influence research has on improvements to practice?' Social science research, and here I include

education research, is at a particular disadvantage in providing a convincing response to that question because any influence is both difficult to measure and often widely dispersed in its focus. The question as it relates to education is usually about the influence of research on teaching and learning, which is educational practice, and is often asked by funding providers especially governments and their agencies. These agencies have been less concerned with how policy makers use education research, though there is a growing emphasis on 'evidence-based' policy (Bullock, Mountford & Stanley, 2001).

In the context of reviews commissioned by governments, the formulation of public policy is limited to a policy-advice role since 'policy-making' refers to 'the prerogatives of Ministers to make policy' (Bhatta, 2002, p. 99). Policy formulation may or may not follow from the policy advice provided in the review. To a degree public reviews are unique in that they make visible aspects of the policy development process that normally occur inside government agencies.

In the context of professional education, research into practice as well as educational research provides evidence to inform policy advice. Current developments in theories about learning and its relationship to practice challenge views about how new professionals should be prepared (Gonzi, 2002). While new professionals must bring together theoretical and practical knowledge (OECD, 2000) they must also be prepared for the changes that are occurring in practice. Thus research into practice is essential to influence innovation in the education of new members of a profession.

Evidence based policy, practice and education

There is a growing expectation that research or more broadly 'evidence' should inform practice, whether that of policy advisers, educators or professionals. The descriptor 'evidence-based' is a re-occurring theme in discussions of quality in all these areas. However, what is included in 'evidence' in these different contexts of practice requires careful consideration.

'Evidence-based' policy is an explicit expectation of policy development in a number of countries such as the UK (Cabinet Office, 1999) and Canada (Bhatta, 2002). The UK Cabinet Office's description of an 'evidence-based' approach includes among other things examination of existing research, commissioning new research, and consulting with relevant experts. In a public review, 'evidence' may be obtained from available information/research, commissioned research, expert advice, public submissions and consultations. The latter can be broadly focused or targeted either in terms of content or audience or both. The weight of evidence these various sources bring to the policy process differ. The various sources will often provide diverse types of 'evidence'. The information may address the policy question or provide insights into the cultural, political or resource issues that need to be considered when preparing policy advice to ensure it has a likelihood of being accepted in the political arena of government. The place of research among these different messages is the focus of this paper which documents the commissioning and use of research in the review.

According to Kirst (2000), the literature suggests there are five dimensions that influence the outcome and effectiveness of the dissemination of research findings. First, the source of information can be used as a proxy measure for quality due to

the perception of expertise or association with an organisation known for its expertise in the field. To be effective in dissemination multiple channels and issue networks are most productive. In addition, the communication format needs to provide brief, concise and easily understandable information to increase the likelihood that policy makers will use the research. The dissemination message needs to be relevant to the policy problem, and finally, the characteristics of the recipient, while outside the control of researchers, will have an impact. This latter dimension is commented on by Parry who finds that despite the success of various organisations in communicating and sharing their research with the Dearing Inquiry into Higher Education in the UK, the 'collection of academic and scholarly works which entered into the policy domain' was 'small and unsorted' (1999, p. 238). He notes the impact of time constraints, late identification of a key issue and the workload ascribed to the secretariat, which included research and the coordination of the research effort.

Pawson (2002) presents a realistic perspective on the policy process describing it as 'weighing and balancing of ideas'. Referring to the user of research in policy development, Louis makes the observation that 'the user's world is more complex than we (researchers) typically acknowledge'. She also suggests that there is little recognition of the 'chaotic nature of policy arenas' or the various intersections between political processes and research in the development of policy (Louis, 1999).

Bhatta (2002, p. 102) argues that policy analysts need to apply two criteria to the evidence they come across: 'is it relevant and is it good quality?' Relevance is the more likely of the two criteria to be given primacy in the development of policy advice in the type of environment described above. It is questionable to what degree the policy adviser will be directly engaged in the assessment of the quality of evidence, though it must be part of the criteria for use if policy advice is to be robust.

Modern policy-making is not the only activity for which expectations of being 'evidence-based' or 'research-based' are now assumed to be measures of quality. 'Evidence-based' is commonly associated with the practice of medicine, but it has also become part of the language used about nursing practice and can be found in the terms of reference for bodies such as the National Institute of Clinical Studies (Heath, 2002). Along with healthcare, there are aspirations for education to be evidence-based (Davies, 2000).

Collecting 'evidence' for the review

Among the characteristics of recipients that determine the use of research in policy is the willingness to seek and use evidence (Kirst, 2000). There was considerable motivation for the review secretariat to seek and use research to inform the advice developed during the review. The commitment of a key officer in the department to providing a rich base of research to support the work of the review panel was crucial to the emphasis placed on collecting evidence for the review. This expectation was also reflected in the terms of reference for the review as noted above.

Leading up to the announcement of the review a number of activities were undertaken to provide a base of information to build on during the review. These included a scan of the international environment for relevant material. Based on this material and previous Australian nursing education reviews, a background paper was prepared.

Five studies were also commissioned. This preparation was particularly important as, in contrast to Pawson's description of the characteristics of the 'typical policy maker' (2002, p. 227), no member of the secretariat had any expertise in nursing education, nursing practice or previous policy decisions or programs related to nursing.

The international information collected during the review planning stage was largely from material easily found on the Internet about what was occurring overseas. During these Internet searches an important discovery was the Centre for Health Outcomes and Policy Research, University of Pennsylvania. The Centre provides a list of the journal publications of its researchers. Many of the articles identified through this means were later referenced in the *Discussion Paper* and the final report. As the review progressed and other nursing material was accumulated it became clear that the work of the Centre's researchers is quoted often in the nursing literature.

Policy cycle

The policy cycle is often shown as containing three phases, the problem identification and agenda setting phase, the formulation phase, and the evaluation phase. Feedback loops may link these various phases. While the model appears to assume a contained policy which can be clearly identified in order to be evaluated, it is a useful way to think about the development of more broadly based policy advice obtained through government sponsored reviews.

In areas that are broad and have strong public interest, governments and government agencies often commission public reviews as part of the policy process. By the time a review is announced some problem identification and agenda setting have already occurred. Agenda setting in this context promotes the issue to the level of priority that drives the decision to conduct a review. Then the problem is broadly defined as part of the development of the terms of reference.

Dery (2000) argues that problems are not objective entities but rather they are 'analytic constructs' or 'conceptual entities' and that in policy analysis problems are 'analytic constructs', while in politics they are 'political constructs'. At the time of announcement the problem and agenda are largely political constructs rather than analytic constructs. Some analytic constructs are developed in determining the terms of reference which create the boundaries for more detailed problem definition as well as decisions about what research is relevant.

The first stage of the National Review of Nursing Education was an iterative process involving the evaluation of the current arrangements as part of problem identification and agenda setting, that is, the beginning of the development of analytic constructs to underlying the theory (Pawson, 2002) from which the policy advice would develop. While a public review can be part of the formulation phase of the policy making process, the degree to which formulation of new policy occurs depends on the agency which sponsored the review. The formulation of policy from this advice will depend on not only the acceptability of the advice, but also whether a 'policy window' still exists, that is, whether in a contested political environment the policy advice provides a political and practical answer to an agenda that continues to assume a high priority. The formulation phase of the policy process will determine the outcomes of the review. The discussion in this paper focuses on the evaluation

phase, the problem definition and agenda setting phase and the advice component of the policy formulation phase, after the announcement of the review. Within that framework the following discussion is concerned with the use of research in each of these phases of policy making.

Evaluation Phase

Very early in the conduct of the review a scoping exercise was undertaken to ensure that the research needed to enable the review to address the terms of reference was available. The review commissioned six literature reviews to address the three specific areas on which the review was to make recommendations. The content of the literature reviews was shaped by the proposals received. Four of the literature reviews addressed all three areas listed for recommendations. Nine studies were commissioned in addition to the six literature reviews. A list of all the commissioned work associated with the review can be found at Appendix E to the report, *Our Duty of Care* (Heath, 2002).

In the process of commissioning research all universities that taught nursing were asked to submit proposals for the literature reviews. The selection of researchers for other commissioned research was reliant on the visibility of their expertise on university websites, chance finds and the accessibility of researchers and their interest in being involved with the review.

The role of the research in this phase was to provide the review panel with the factual, historical and national and international contextual source material. This information assisted the review panel to understand the implications of the terms of reference, identify trends that could impact on the future of Australian nursing, and understand the current practices in both education and practice. It also helped in the early identification of the structural, cultural and political factors that would need to be considered as part of defining the problem and setting the agenda for review stakeholders such as key nursing organisations.

There were strict time constraints on the production of the literature reviews and research reports. Along with the initial survey of the international and national nursing activities and research, the 159 submissions addressing the terms of reference, and national consultations, the commissioned research and literature reviews formed the basis of the *Discussion Paper*, which was released in late December 2001.

Problem definition and agenda setting

Research formed an integral part of this problem definition and agenda setting. Two strategies were used to synthesise the research and to test its relevance and its 'weight'. The review panel had the opportunity to directly question the researchers at a presentation of the findings of all six literature reviews. Following that presentation, a workshop which included all the researchers along with the review panel examined the implications of the research findings in the context of the terms of reference. These shared opportunities provided a system for both assessing the research for relevance and testing for quality. Consequently, the weighing of evidence was done in a less formal and structured way than is often proposed, but one in which the critique was shared.

The discussion paper made explicit the policy problems. It set out questions on which the review panel was seeking advice. It also tested what types of proposals were likely to be supported. At the same time, it shared the research findings and information from other sources to inform key stakeholders and by doing so the review panel set the agenda for what the policy advice would ultimately address. In some cases the *Discussion Paper* challenged strongly held perceptions by presenting factual information from the commissioned research.

The responses to the *Discussion Paper* and a further round of consultations and submissions provided the final stage of evidence gathering and testing of the environment.

Formulation phase - advice only

The review report *Our Duty of Care* was released in September 2002. The final report reflects the range of sources of information used to refine the policy questions and develop policy advice. The report sets the context for change, provides an overview of the current situation, along with evidence of successes, and provides policy advice. It attempts to speak to multiple audiences and stakeholders, not only the commissioners of the review.

An examination of the report shows that the policy advice contained there is defined by an explicit theoretical framework (Pawson, 2002) which, in turn, is informed by evidence, rather than based on evidence. While this distinction may be considered one of semantics, it captures the reality of policy making which is not a rational process, but one that engages the rational, the political and the cultural and is, at times, opportunistic. While there was considerable commitment to research as part of the review process, the findings of that research were used in different ways to develop policy advice. Research was only one of many sources of information and ideas considered in the formulation of the recommendations.

Use of research in the review

Louis and Perlman (1985) suggest that commissioned research is used for a range of purposes in policy-making including to establish facts, assist with interpretation and/or understanding or even to provide legitimacy to policy advice. Table 1 summarises the use of the commissioned research based on these three classifications. It does not include the literature reviews which were commissioned to synthesise the research available in areas covering the terms of reference and were used for both fact finding and enlightenment.

Table 1: The Purpose and Use of Commissioned Studies for the National Review of Nursing Education

Purpose	Commissioned Studies	Use
Fact Finding	<ul style="list-style-type: none"> ▪ Nursing education and graduates - Stages 1 and 2 (Ogle et al) ▪ Enrolled nurse education (McKenna et al) ▪ Higher education nursing statistics collection 	<ul style="list-style-type: none"> ▪ Test perceptions and claims in submissions and consultations ▪ Provide context for advice in report ▪ Provide argument for recommendations
Interpretation	<ul style="list-style-type: none"> ▪ Scoping nurse education and practice (McMillan et al) ▪ The scope of nursing in Australia: A snapshot of the challenges and skills needed (Jones & Cheek) 	<ul style="list-style-type: none"> ▪ Challenge paradigms
Enlightenment	<ul style="list-style-type: none"> ▪ Development and analysis of hospital survey instrument (Duffield et al) ▪ Student expectations of nursing education (Saltmarsh et al) ▪ Review of nurse regulation (Chiarella) ▪ Standards for nursing care and the relationship between skill mix and patient outcomes (Crisp) ▪ Nursing career pathways project (Price, et al) ▪ Nursing education in a multicultural context (Eisenbruch et al) ▪ An overview of the issues in nursing education (Johnson & Preston) ▪ Job Growth and replacement in nursing occupations (Shah & Burke) ▪ Nursing workforce 2010 (Karmel & Li) 	<ul style="list-style-type: none"> ▪ Understand culture, environment and structure ▪ Test the 'possible' ▪ Test the 'likely' future impacts ▪ Provide support for decisions

While the above classification system is useful, research does not fall easily into only one category, so the distribution in the table is based on the principal use of each study.

As discussed previously, research was used during the review planning and at the problem definition and agenda setting phase and the policy advice phase. In the final report references to the literature reviews and research are largely in the contextual material which is reflected in the heavy reliance on research for enlightenment. Research based material is used primarily to support the theoretical framework in which the recommendations are developed rather than to argue for particular advice. Specific reference to research is only made in the argument for five of the 36 recommendations.

Limitations on use

For the purposes of policy making there are accepted quality practices in terms of thorough literature searches, such as systematic reviews, and debates about the best ways to synthesis research for the user (Davies, 2000). Outside the commissioned studies, the method for the finding and selecting research during the review could best be described as 'snowballing'. The primary criteria were visibility and accessibility on the Internet and through email requests. Other more serendipitous processes were references to particular work at conferences and the occasional paper that was sent to the review due to either the consultations or meetings with international nursing experts or Australian organisations. The use of the research was decided primarily by its relevance.

Considering the time available it is not surprising that late in the review the need for information on an important group of workers whose roles impinge directly on nursing was identified. The review was alerted to their importance during the consultations. However, the commissioned research while recognising them suggested the numbers were much smaller than the sense coming from people in the industry. Ultimately it was found that their appearance or invisibility in the labour market data was a matter of classification. Existing classification systems capture only some of the group. The limitations of the data sources and the lack of research on the group could not be resolved by the review. Consequently, the review could only make recommendations to overcome these problems.

Another limitation on the use of research was associated with its availability. In the context of a review with its imposed short deadlines, it is not possible to contract research to examine issues identified late in the review or where there is no visibility in the literature. Public reviews rely on the synthesis of existing literature, documented studies or research that can be done very quickly. Literature reviews draw on the research conducted to advance knowledge in the field related to the policy question. The review found that nursing was not well researched as part of healthcare systems or models of care. This omission limited the extent that some areas of the report could be well informed by evidence.

The determinants of which research the policy adviser considers include the policy question, the accessibility of relevant studies or data, the visibility of the information and expertise as well as the motivation, available time and expertise of those doing the research analysis for the purpose of policy advice.

Conclusion

While I strongly endorse the principle that policy advice should rely on the best evidence available, I believe that there are risks associated with the widespread use of the descriptor 'evidence-based'. It is not possible or appropriate to apply the same definition to the term in different contexts of use. Even when strict rules of evidence apply in the selection of research, such as in the NHMRC guidelines, if applied indiscriminately, the application of these rules in the wrong context may reduce the useful ideas available to policy makers. What counts for evidence in different situations requires a sophisticated application of measures of relevance and quality assessment that are appropriate to the situation and the policy question.

The rhetoric and assumptions behind claims to 'evidence-based' policy should be challenged. At the same time practices that support 'evidence-informed' policy both through the actions of policy advisers and researchers should be a high priority. These practices need to value the importance of research in policy but not place too strong an expectation on its use among all the evidence that is available to the policy maker. Rational approaches to research synthesis, such as systematic reviews will have a place along side chance finds and commissioned research. To maximise the likelihood that research will be used in policy making the research community should increase the visibility and accessibility of research and research expertise particularly through websites.

References

- Bhatta, G. (2002) 'Evidence-based Analysis and the Work of Policy Shops'. Australian Journal of Public Administration Vol. 61, No. 3, pp. 98-105
- Bullock, H., Mountford, J., & Stanley, R. (2001) Better Policy Making, Centre for Management and Policy Studies, London (Online)
<www.cmpps.gov.uk/better_policy_making.pdf> [accessed on 2 June 2003]
- Cabinet Office (1999) Professional Policy Making for the Twenty-First Century (Online) <www.cabinet-office.gov.uk/moderngov/199/policy>
- Davies, P. (2000) 'The Relevance of Systematic Review to Educational Policy and Practice'. Oxford Review of Education, Vol. 26, Nos 3&4, pp. 365-378
- Dery, D. (2000) 'Agenda Setting and Problem Definition'. Policy Studies Vol. 21, No. 1, pp. 37-47
- Gonzi, A. (2002) 'Teaching and Learning of Key Competencies'. Paper presented at DeSeCo Symposium, Geneva, 11-13 February (Online)
<www.statistik.admin.ch/stat_ch/ber15/desecco/desecco_symposium_gonzi_120202.pdf> (accessed on 27 June 2002)
- Heath, P. (Chairman) (2002) The National Review of Nursing Education: Our Duty of Care. Canberra, Department of Education, Science and Training
- Kirst, M.W. (2000) 'Bridging Education Research and Education Policymaking'. Oxford Review of Education, Vol. 26, Nos 3&4, pp. 379-391
- Louis, K.S. (1999) 'Making Meaning of the Relationship between Research and Policy', Educational Policy, Vol. 13, No. 1, pp 199-212
- Louis, K.S., & Perlman, R.J. (1985) 'Commissions and the use of social science research: The case of safe schools'. Knowledge: Creation, Diffusion, Utilization, Vol. 7, No. 1, pp 33-62
- OECD (2000) Knowledge Management in the Learning Society: Education and Skills. Paris, OECD
- Parry, G. (1999) 'Education research and policy making in higher education: the case of Dearing'. Journal of Educational Policy, Vol. 14, No. 3, pp. 225-241

Pawson, R. (2002) 'Evidence and Policy and Naming and Shaming'. *Policy Studies*, Vol. 23. No, 3/4, pp. 211-230