EVIDENCE-BASED POLICY-MAKING IN CANADA
EDITED BY SHAUN P. YOUNG

[CATCH]

OXFORD
UNIVERSITY PRESS

CONTENTS

Chapter 1

❖

Policy Advisory Systems and Evidence-Based Policy: The Location and Content of Evidentiary Policy Advice

Michael Howlett and Jonathan Craft

"There is nothing a government hates more than to be well-informed; for it makes the process of arriving at decisions much more complicated and difficult."

John Maynard Keynes

INTRODUCTION

Evidence-based policy-making (EBPM) represents a contemporary effort to reorient policy processes by prioritizing the utilization of evidentiary forms of policy advice (Nutley, Walter, and Davies 2007; Pawson 2006; Sanderson 2006). The expectation is that, via close examination and attentiveness to existing empirical analyses, governments can avoid policy failures or apply new techniques, or new information, to better resolve various policy problems (Sanderson 2002a; May 1992; Howlett 2012).

That having been said, many have underscored the contentiousness of exactly what constitutes EBPM[1] and questioned whether the approach actually results in improved policies or outcomes (Boaz et al. 2008; Jackson 2007; Marston and Watts 2003; Packwood 2002; Pawson 2002). Several concerns have been raised about this increased emphasis on evidence in contemporary policy-making. First, it has been noted that evidence is merely one consideration involved in policy-making, and not something that is necessarily able to overcome other factors such as constitutional divisions of powers or jurisdictions. These can arbitrarily assign locations and responsibilities for particular issue areas to specific levels or institutions of government and diminish the rationality of policy-making by so doing (Davies 2004; Radin and Boase 2000; Young et al. 2002). Second, data collection and analytical techniques employed in the gathering and analysis of evidence by specially trained policy technicians

may not be necessarily superior to the experiential judgments of politicians and other key policy decision-makers (Jackson 2007; Majone 1989; Zussman 2003).

Third, the kinds of "high-quality" and universally acknowledged evidence initially proposed when "evidence-based policy-making" first entered the lexicon of policy analysts in the health care field—especially the "systematic review" of clinical findings—often has no analogue in many policy sectors (Innvaer et al. 2002; Pawson et al. 2005). Fourth, an increased emphasis on EBPM can stretch the analytical resources of participating organizations, be they governmental or non-governmental, to the breaking point (Hammersley 2005; Laforest and Orisini, 2005). Fifth, the EBPM approach is not without costs, with some pointing to the inherent tensions the approach raises related to democratic notions of equity and majority rule (Young 2011). Finally, a focus on evidentiary forms of policy advice may serve to exclude some actors from participation in policy advisory or formulation activity, by privileging only those with the requisite resources, expertise, or access to evidentiary forms of policy advice (Stone 2001; Fischer 2009).

Despite such concerns, however, the underlying logic of the EBPM approach remains attractive to many theorists and practitioners who agree with its animating premise that better decisions are those that incorporate the best available information. Thus it is expected that enhancing the information basis of policy decisions will improve the results flowing from their implementation, while iterative monitoring and evaluation of results in the field will allow errors to be caught and corrected. In such a model of policy-making, the role of evidentiary-based policy advice is prized and central to the EBPM approach.

Policy advice, however, is in itself a subject that can be investigated from many angles—from a broad perspective on knowledge utilization in government (Dunn 2004; Peters and Barker 1993; MacRae and Whittington 1997; Webber 1991) or, more specifically, in relation to policy formulation processes (Scott and Baehler 2010; James and Jorgensen 2010). A persistent conceptual issue with significant methodological and practical consequences for EBPM approaches involves the identification of the sources and patterns of influence among "advisory system" actors.

That is, the specific components of a policy advice supply system, along with their sourcing, can be combined in different ratios in different policy-making situations (Dluhy 1981; Prince 1983; Wollmann 1989;

Hawke 1993; Rochet 2004). This has significant implications for the kinds of advice generated and utilized by government. Descriptive and analytical study of the nature of advisory systems is therefore important for comparative policy and public administration and management research, including that which explores EBPM (MacRae and Whittington 1997; Leigh 2009).

EBPM's explicit emphasis on "evidence"—that is, upon a particular form of advice—places the *content* dimension of policy advice at the fore of analysis. However, such an emphasis can operate to the neglect of "influence." That is, to have an effect not only must evidence be present (content), but it also must be used, and used in a way that significantly affects policy outputs (influence).

This is particularly problematic for many existing studies of policy advice, since these have traditionally relied on "locational" approaches to understand policy advisory influence rather than content-based considerations. That is, scholars have traditionally focused on broad questions about the supply and demand of policy advice (Page and Jenkins 2005; Howlett and Newman 2010; Peters 1996), upon individual policy workers as sources of policy advice (Meltsner 1979; Dluhy 1981), and have employed an insider-outsider logic that associates influence with locations proximate to authoritative decision-makers (Saint-Martin 2005; Lomas and Brown 2009; Pierre 1998).

These locational approaches have been useful for a number of reasons. For example, they have facilitated descriptive accounts of the nature and configuration of disparate sources of policy advice, and permit basic determinations of the likely impact of such advisory sources vis-à-vis policy decision-making to be made. However, locational models based solely on spatial measures and insider-outsider logics can also obscure sources of influence that are less directly related to institutional location—such as the role of ideas or electoral calculations in affecting decision-makers' receptiveness to advice, including "evidentiary forms."

This chapter reviews the literature on "policy advisory systems" and elaborates the basics of a more sophisticated approach to understanding influence in advisory systems. It argues for the adoption of a new model of thinking about policy advisory systems in order to facilitate an improved understanding of the propensity for decision-makers to engage in evidence-based versus other types of policy-making and knowledge-utilization practices.

POLICY ADVISORY SYSTEMS AND LOCATIONAL MODELS OF POLICY ADVICE

Policy advisory systems can be thought of as interlocking sets of actors, with a unique configuration in each sector and jurisdiction, who provide information, knowledge, and recommendations for action to policymakers (Halligan 1995). Such advisory systems are key parts of the working behaviour of governments as they go about their policy formulation and governance activities (Plowden 1987; Heinrichs 2005; Brint 1990).

Most existing models of policy advisory systems are predicated on locational dimensions and typically array sources of policy advice based on their position relative to decision-makers (Howlett 2011; Van Damme, Brans, and Fobé 2011). For example, many deploy a "market" approach that parses the supply and demand of policy advisory sources into discrete "sets" of analytical activity: a supply of policy advice, its demand on the part of decision-makers, and a set of brokers whose role it is to match supply and demand in any given conjuncture (Lindquist 1998; Clark and Jones 1999; March et al. 1999; Nutley et al. 2010; Cappe 2011).

These components are then often linked to the positions actors hold in the policy advisory "market." For example, proximate decision-makers such as parliaments or professional public services are conceived of as the consumers of policy analysis and advice. A second set of so-called knowledge producers, such as statistical agencies, academe, or think-tanks, provide basic scientific, economic, and social scientific data. A third set of actors, knowledge brokers, serve as intermediaries between sources of knowledge generation and the decision-makers, repackaging data and information into usable form (Lindvall 2009)—for example, permanent specialized research staff inside government, advisory boards or commissions, task forces, or interest groups. In these models, proximity to decision-makers equals influence, with policy brokers playing a key role in formulation processes given their ability to "translate" research results into useable forms of knowledge—policy alternatives and rationales for their selection—to be consumed by decision-makers (Verschuere 2009; Lindvall 2009).

Expanding on the locational approach, Halligan (1995) coupled spatial considerations with a second "government control" dimension (see Table 1-1) to depict a conventional model of influence in advisory systems. Defining policy advice as encompassing the "analysis of problems

Table 1-1. Locational Model of Policy Advisory System

Location	Government control	
	High	**Low**
Public Service	Senior departmental policy advisors	Statutory appointments in public service
	Central Agency advisors/ strategic policy unit service	
Internal to government	Political advisory systems	Permanent advisory policy units
	Temporary advisory policy units	Statutory authorities
	Ministers offices	Legislatures (e.g., US Congress)
	First ministers offices	
	Parliaments (e.g., a House of Commons)	
External	Private sector/non-governmental organizations (NGOs) on contract	Trade unions, interest groups
	Community organizations subject to government	Community groups
	Federal international organizations	Confederal international communities/organizations

Source: Adapted from Halligan (1995)

and the proposing of solutions," Halligan (1998, 1,686) emphasized the degree to which influence was linked to the ability of governments to control actors, as well as the proximal location of those actors.

From this perspective, not only knowledge "brokers" but also other actors located exogenously to government proper may exercise continued influence upon decision-makers (Craft and Howlett 2013). Hence, not only is location important, but so is the expected congruency of policy advice with the aims and ambitions of government (the basis of the "control" dimension).

In the simple locational model, EBPM is merely a matter of supply and demand, mediated by the existence of suitable policy brokers. That is, the effectiveness of EBPM is a function of the existence of a supply of evidence from actors such as academics or researchers, a demand for it on the part of decision-makers, and some brokers—such as professional policy advisors in government, think-tanks, or some other actors—who can "translate" research findings into useable form (Laforest and Orsini 2005; Lomas and Brown 2009). Whether evidence is produced and/or

brokers exist is a function of the structure and capacity of the advisory system, while the existence of demand is an existential matter linked to the nature of decision-makers both personally and organizationally.

Influence models such as that found in Table 1-1, however, suggest both that evidentiary forms of policy advice, like all others, may emanate from numerous sources inside and outside governments, and that questions of utilization are less existential than "political," thus suggesting that evidence is more likely to be used when it comes from sources under government control. Evidence-based advice, or any other kind of advice, provided within government by senior departmental policy advisors (or central agency advisors/strategic policy units, to use Halligan's example), would have a high likelihood of influence versus those located outside of government and over which government has limited control (such as international organizations or academics, among others).

Halligan's locational control-autonomy model was elaborated as a means to grapple with the advisory landscape existing in most Anglo-Celtic public services in the early 1990s, including Canada's.[2] Halligan noted that the situation appeared to be changing, concluding his analysis by surmising: "In terms of overall trends the internal government category has expanded at the expense of the internal public service. But, in turn, the rise of external forms has been at the expense of internal mechanisms" (Halligan 1995, 158). How such shifts in the sources and patterns of use of policy advice are related to the reception of evidence and propensities for EBPM, however, is unclear.

THE IMPACT OF SHIFTING PATTERNS AND SOURCES OF POLICY ADVICE ON PROPENSITIES TO USE EVIDENCE

Radin (2000), Prince (2007), and Parsons (2004), among others, have emphasized considerable changes pertaining to the sources of policy advice and public sector patterns of use thereof in many jurisdictions and sectors. A shared finding among them is the observation that the well-known traditional bilateral "speaking truth to power" model of policy advice (Wildavsky 1979) has given way in many policy-making circumstances. Instead, a more fluid, pluralized, and polycentric advice-giving reality now characterized as "sharing truth with many actors of influence" or "weaving" policy knowledge prevails (Prince 2007; Parsons 2004).

This dispersed advisory capacity combines technical knowledge and political viewpoints in ways that differ from the manner in which advice was generated, and conceived of, in early thinking on advisory systems based on producer-broker-consumer or autonomy-control considerations. Extant studies in a plethora of countries have noted that government decision-makers now increasingly sit at the centre of a complex web of policy advisors. These include "traditional" professional public service and political advisors in government, as well as non-governmental actors in civil society, such as think-tanks, NGOs, and less formal or professional forms of advice from colleagues, friends and relatives, and members of the public and political parties, among others (Dobuzinskis, Howlett, and Laycock 2007; Prasser, 2006a; Peled 2002; Weaver and Stares 2001; Rhodes, Wanna, and Weller 2010; Weible 2008). Moreover, the provision of evidence-based or "technical" policy advice is assuredly no longer, if it ever was, monopolized by governments. Various exogenous sources of policy advice are well-documented suppliers of substantive and procedural policy advisory content used by policy-makers to support existing policy positions or as sources of new advice (Bertelli and Wenger 2009; McGann and Sabatini 2011; Howlett and Migone 2013). Professional policy analysts, for example, are now employed by advisory system members external to government, ranging from private sector consultants to experts in think-tanks, universities, political parties, and elsewhere who are quite capable of providing specific suggestions about factors such as the costs and administrative modalities of specific policy alternatives or the views of the public and other actors on government plans and achievements (Boston 1994; Boston et al. 1996; Rhodes et al. 2010).

Reflecting on the last quarter-century of policy advisory practice in Canada, Prince (2007) usefully traces the considerable changes that now characterize the contemporary ideal-type model of advice-giving compared to its traditional counterpart (Table 1-2). The shifts set out in Table 1-2 have important consequences for thinking about the nature of influence in policy formulation and the role of content in policy advisory activities. As Peters and Barker (1993, 1) put it, if policy advice is conceived of as a means by which governments "deliberately acquire, and passively receive . . . advice on decisions and policies which may be broadly called informative, objective or technical," then content becomes

Table 1-2. Two Idealized Models of Policy Advising

Elements	Speaking truth to power of ministers	Sharing truth with multiple actors of influence
Focus of policy-making	Departmental hierarchy and vertical portfolios	Interdepartmental and horizontal management of issues with external networks and policy communities
Background of senior career officials	Knowledgeable executives with policy-sector expertise and history	Generalist managers with expertise in decision processes and systems
Locus of policy processes	Relatively self-contained within government, supplemented with advisory councils and Royal commissions	Open to outside groups, research institutes, think-tanks, consultants, pollsters, and virtual centres
Minister/deputy minister relations	Strong partnership in preparing proposals with ministers, trusting and taking policy advice largely from officials	Shared partnership with ministers drawing ideas from officials, aides, consultants, lobbyists, think-tanks, media
Nature of policy advice	Candid and confident advice to ministers given in a neutral and detached manner	Relatively more guarded advice given to ministers by officials in a more compliant or preordained fashion
	Neutral competence	Responsive competence
Public profile of officials	Generally anonymous	More visible to groups, parliamentarians, and media
Roles of officials in policy processes	Confidential advisors inside government and neutral observers outside government	Active participants in policy discussions inside and outside government
	Offering guidance to government decision-makers	Managing policy networks and perhaps building capacity of client groups

Source: Adapted from Prince (2007, 179)

at least as important as location in determining the nature of the influence of policy advice and advisors.

This is an encouraging and possibly positive sign for proponents of increased or enhanced EBPM, since their main concern is to elevate "content" over other considerations in policy-making. However, not all content is necessarily "evidence" in the sense that the term is used in the EBPM movement and literature. Enhanced content can just as easily refer to political or partisan advice as it can to technical evidence or

research findings. It is to this dimension of contemporary policy advisory systems that we now turn.

MODELLING THE CONTENT OF POLICY ADVICE: EVIDENCE-BASED POLICY ADVICE AND BEYOND

In the context of the more porous, fluid, and diversified contemporary policy advisory landscape, the spatial distinction lying at the base of orthodox conceptions of advice systems has been thoroughly weakened. The possibility of substantial influence over policy deliberations by actors external to governments and outside their control is now omnipresent. But what kind of advice is being proffered by these groups and actors?

Early thinking about the content of policy advice often contrasted "political" or partisan-ideological value-based advice with more "objective" or "technical" advice, stressing the latter while devaluing or downplaying the former, and associating the latter with internal actors and the former with outsiders (Weller 1987). This "positivist" or "modern" approach to understanding the nature of policy analysis dominated the field for decades (Radin 2000; Colebatch 2006) and presupposed a sharp division between internal governmental advisors armed with technical knowledge and expertise,[3] and non-governmental actors armed with only non-technical skills and knowledge (Irwin 2003; Weimer and Vining 1999).

Although often implicit, such a "partisan-political" versus "rational-technical" advisory dichotomy underlay both early and later locational models of influence. Earlier efforts at improving policy through analysis often relied on an underlying apolitical, technocratic view of optimal policy-making, which attempted to enhance the rationality of policy-making by insulating internal actors from external ones while promoting non-partisan analytical techniques such as cost-benefit analysis (Sanderson 2006; Mintrom 2007).

While EBPM represents a compromise between political and technocratic views of policy-making, with policy-making not understood as a purely rational affair but as an exercise in pragmatic judgment, it, too, assumes that "facts" can override "beliefs" and thereby exercise greater weight on policy decisions and outputs. In most models of EBPM, therefore, political, ideological, or other forms of non-evidentiary knowledge are expected to be tempered by policy specialists who are well-located and equipped to present evidence supporting or refuting specific policy

proposals as appropriate (or inappropriate) to resolve identified policy problems based on strict technical criteria (Head 2008; Tenbensel 2004; Sanderson 2002b). However, such highly insulated analytical systems for EBPM are precisely the ones undermined by recent developments empowering non-governmental and exogenous sources of policy advice.

As Eichbaum and Shaw (2008, 343) have contended, the "procedural politicisation" found in countries like Canada and Australia involves actions "intended to or . . . [having] the effect of constraining the capacity of public servants to furnish ministers with (technical) advice in a free, frank, and fearless manner." This is manifested when a "political" advisor "intervenes in the relationship between a minister and his or her officials." This is in addition to "substantive politicisation," which deals specifically with "an action intended to, or having the effect of coloring the substance of officials' advice with partisan considerations" (Ibid., 343–4).

Prasser, in his studies of Royal Commissions in Australia (2006a) and, more generally, in his work concerning the nature of policy advice (2006b), has also suggested that distinguishing between "political" and "non-political" content of policy advice in current circumstances is less insightful than distinguishing between the content of the advice provided in terms of factors such as its short- or long-term nature: what he termed "cold"—typically long-term and proactive—versus "hot"—short-term and crisis driven—types of advice (see Table 1-3). Although he noted some overlaps between these categories and the old "politics" versus "administration" divide, the general situation he describes is one in which neither partisan nor civil service actors have an exclusive monopoly of one type of advice over the other.

Connaughton (2010a, 2010b) has similarly dealt with the content dimensions of policy advice and developed a set of what she terms "role perceptions"—Expert, Partisan, Coordinator, and Minder—for classification of general advisory roles. While some of these distinctions reinvent aspects of the politics versus administration dichotomy and are less useful, her analysis of the activities of these different actors is based on two content-related dimensions but, significantly, *not* whether advice was partisan or administrative, but whether it involves *substantive* on-the-ground policy formulation/implementation activities—ranging from "policy advice" to "policy steering"—or a more *procedural,* often "communications," function, which could be "technical/managerial" or "political" in nature.

Table 1-3. Comparing "Cold" and "Hot" Advice

Long-Term/Anticipatory or "Cold" Advice	Short-Term/Reactive or "Hot" Advice
Information-based	Relies on fragmented information, gossip
Research used	Opinion/ideologically-based
Independent/neutral and problem solving	Partisan/biased and about winning
Long-term	Short-term
Proactive and anticipatory	Reactive/crisis driven
Strategic and wide range/systematic	Single issue
Idealistic	Pragmatic
Public interest focus	Electoral gain oriented
Open processes	Secret/deal-making
Objective clarity	Ambiguity/overlapping
Seek/propose best solution	Consensus solution

Source: Adapted from Prasser (2006b).

This notion of distinguishing between content in terms of substance and process fits well with the findings of other studies assessing the "politicization of policy-making," such as that by Eichbaum and Shaw (2008). Although he interprets content slightly differently than the others, Prasser's distinction between short-term "hot" and longer-term "cold" advice can usefully be combined with the Connaughton and Eichbaum and Shaw's distinction between substantive and procedural advice.

Together, they can differentiate between types of policy advice content in a way that is more useful for the conceptualization of the activities of policy advisory system actors than that offered by older locational models; distinguishing between short-term crisis driven advice, purely political or partisan advice, and other sub-types, including propensities for EBPM (see Table 1-4).

This work revising locational models to account for differences in the content of advice suggests that the specific configuration of an advisory system is a significant factor affecting the propensity for the use of evidence—and hence, EBPM—in the policy process. It suggests that traditionally conceived evidence-based forms of policy advice (based on applied research) will be most influential when they are anticipatory

Table 1-4. Types of Policy Advisory Systems

	Short-Term/Reactive	**Long-Term/Anticipatory**
	"Pure" Political and Policy Process Advice	*Medium- to Long-Term Policy Steering Advice*
Procedural	Based on complex bargaining between multiple endogenous and exogenous policy advisors and decision-makers	Based on relatively stable networks of internal and external advisors and decision-makers, but without any necessary evidentiary basis
Substantive	Weakly evidence-related, but without time and resources to conduct full inquiries	Based on statistical or applied research

Source: Howlett and Craft

or "long-term" in perspective and when they provide substantive-based content to policy-makers.[4]

Other forms of policy advice, such as short-term crisis and fire-fighting advice (as per Table 1-4), would be more influential when policy-makers seek substantive content-based policy advice on any given policy but face temporal constraints, or react to policy circumstances on the immediate horizon. In such cases, comprehensive evidence may simply not be available or the policy area may be marked by high degrees of contestation (Young 2011; Mulgan 2005).

Both these types of advisory systems may be "evidence-oriented." But other possibilities exist as well in which policy advisory activity may involve policy advice dealing specifically with process aspects of policy-making. Pure political and policy process advice, for example, would be policy advice pertaining to the processes around consultations with various stakeholder groups, or to legislative processes, and require no evidence whatsoever. Conversely, longer-term or proactive process-based medium- to long-term policy steering advice would be expected to be influential when policy-makers are seeking proactive process-based advice, or do not face impending temporal constraints, but such advice also has no necessary evidentiary content.

THE CANADIAN SITUATION

Recent empirical investigations of the actual policy work undertaken by Canadian policy workers reveal that government capability to provide or

integrate exogenous sources of evidence-based policy advice is limited (Howlett and Newman 2010; Howlett and Wellstead 2012; Rasmussen 1999). They identify a government-dominated policy analytical community characterized by a mixed pattern of policy analytical capacity across different jurisdiction and administrative units—that is, some central and departmental-level units in the federal government displaying the highest capacity and some provincial and local government agencies the lowest, with all involved primarily in short-term fire-fighting kinds of activities (Bédard and Ouimet 2012; Howlett and Newman 2010; Howlett and Wellstead 2012; Rasmussen 1999; Wellstead, Stedman, and Howlett 2011).

As argued above, this is a particularly problematic structure for efforts desiring to meet the challenges of improving policy-making through the adoption of evidence-based techniques. *Prima facie*, a predilection toward short-term or "fire fighting" types of policy work is ill-suited for the development of the ongoing and long-term solutions required to deal with complex multi-faceted contemporary problems such as those in the health care or environmental policy sectors (Mintrom and Bollard 2009; Weber and Khademian 2008). Further, attention to the process dimension of policy-making and policy advice has also become increasingly important and can be seen in the prominent role of public consultation and engagement, as well as "stakeholder" interventions in contemporary governance (Edelenbos and Klijn 2005; Bingham et al. 2005; Woodford and Preston 2011; Papadopoulos and Warin 2007; Howlett and Migone 2013).

CONCLUSION: CONTENT, INFLUENCE, AND CAPABILITY FOR EBPM IN POLICY ADVISORY SYSTEMS

Critics of EBPM are quick to point out that a focus on the need for evidentiary forms of policy advice rooted solely in applied research or empirical scientific data obscures the reasons for the existence and domination of many policy processes by other types of knowledge. These other "lenses" (Head 2008a) or knowledge cultures (Shonkoff 2000) are suggested to be equally valid forms of policy advice, at least on a theoretical basis, if not more appropriate in particular policy-making circumstances (Pawson et al. 2003; Schorr 2003). This chapter has set out a model of policy advisory systems that offers a revised approach to the subject of EBPM, suggesting different systems have different propensities and preferences for EBPM and other types of policy-making and policy advice.

Examining policy advisory systems in terms of the content of advice provided and not just locational aspects of influence is a useful conceptual frame in which to understand these propensities and preferences for the generation and utilization of specific types of policy-relevant information.

The call for greater inclusion of evidentiary forms of information requires careful consideration of the changing nature of influence in policy advisory systems and its impact on the kinds of information likely to be influential within such systems. In many sectors in Canada, the situation is not necessarily conducive to efforts to enhance the evidentiary nature of policy advice, and proponents of greater use of EBPM in this country must take these circumstances into account in their analyses and recommendations.

NOTES

1. As Nutley et al. (2010, 133) contend, there is a spectrum of broad-to-narrow definitional approaches, including understanding EBPM as a "movement that promotes the use of systematic reviews of research studies aimed at assessing the effectiveness of health and social policy interventions and the translation of these into evidence-based intervention programmes, tools and guidelines—to broader, all-encompassing views about what it represents" (see also, Nutley, Walter, and Davies 2007).
2. Various authors have explored the potential definitions of governance and debates about shifts from governing to governance (see Rhodes 2007; Pierre 2000; Kjaer 2004).
3. The extent to which this information is used and to what extent it can be considered "objective" and "expert" is, of course, a continuing controversy in the policy sciences. See, for example, Rein and White (1977) and Lindblom and Cohen (1979), and the very similar arguments made twenty to twenty-five years later in Shulock (1999) and Adams (2004).
4. This supports Grey's (1997) and Mulligan's (2003) contention that, over time, "opinion-based" policy, or policy sectors with limited knowledge bases, will be replaced by more systematic and rigorous forms of evidence-based policy advice.

REFERENCES

Adams, David. 2004. "Usable Knowledge in Public Policy." *Australian Journal of Public Administration* 63 (1): 29–42.

Andrews, Clinton. 2006. "Rationality in Decision Making." In *Handbook of Public Policy Analysis: Theory, Politics, and Methods*, edited by Frank Fischer, Gerald Miller, and Mara Sidney, 161–71. Boca Raton: CRC Press.

Bédard, Pierre-Olivier, and Mathieu Ouimet. 2012. "Cognizance and Consultation of Randomized Controlled Trials among Ministerial Policy Analysts." *Review of Policy Research* 29 (5): 625–44.

Bertelli, Anthony, and Jeffrey Wenger. 2009. "Demanding Information: Think Tanks and the US Congress." *British Journal of Political Science* 39 (2): 225–42.

Bingham, Lisa, Tina Nabatchi, and Rosemary O'Leary. 2005. "The New Governance: Practices and Processes for Stakeholder and Citizen Participation in the Work of Government." *Public Administration Review* 65 (5): 547–58.

Brint, Steven. 1990. "Rethinking the Policy Influence of Experts: From General Characterizations to Analysis of Variation." *Sociological Forum* 5 (3): 361–85.

Cappe, Mel. 2011. *Analysis and Evidence for Good Public Policy: The Demand and Supply Equation*. The 2011 Tansley Lecture, April 19, Johnson-Shoyama Graduate School of Public Policy. Regina, Saskatchewan.

Clark, Julian, and Alan Jones. 1999. "From Policy Insider to Policy Outcast? Comite des Organisations Professionnelles Agricoles, EU Policymaking, and the EU's 'agri-Environmental' Regulation." *Environment and Planning C: Government and Policy* 17 (5): 637–53.

Colebatch, H.K., ed. 2006. *The Work of Policy: An International Survey*. Lanham, Maryland: Rowman & Littlefield.

Connaughton, Bernadette. 2010a. "Ireland." In *Partisan Appointees and Public Servants: An International Analysis of the Role of the Political Adviser*, edited by Chris Eichabaum and Richard Shaw, 151–79. Cheltenham: Edward Elgar.

———. 2010b. "Glorified Gofers, Policy Experts or Good Generalists: A Classification of the Roles of the Irish Ministerial Adviser." *Irish Political Studies* 25 (3): 347–69.

Craft, Jonathan, and Michael Howlett. 2013. "The Dual Dynamics of Policy Advisory Systems: The Impact of Externalization and Politicization in Policy Advice." *Policy and Society* 32 (3): 187–97.

Davies, Philip. 2004. "Is Evidence-Based Government Possible?" Jerry Lee Lecture, 4th Annual Campbell Collaboration Colloquium, February 19, Washington, DC.

Dluhy, Milan. 1981. "Policy Advice-Givers: Advocates? Technicians? or Pragmatists?" In *New Strategic Perspectives on Social Policy*, edited by Milan Dluhy, 202–16. New York: Pergamon Press.

Dobuzinskis, Laurent, Michael Howlett, and David Laycock, eds. 2007. *Policy Analysis in Canada: The State of the Art*. Toronto: University of Toronto Press.

Dunn, William. 2004. *Public Policy Analysis: An Introduction*. Upper Saddle River, New Jersey: Pearson/Prentice Hall.

Edelenbos, Jurian, and Erik-Hans Klijn. 2005. "Managing Stakeholder Involvement in Decisionmaking: A Comparative Analysis of Six Interactive Processes in the Netherlands." *Journal of Public Administration Research and Theory* 16 (3): 417–46.

Eichbaum, Chris, and Richard Shaw. 2008. "Revisiting Politicization: Political Advisers and Public Servants in Westminster Systems." *Governance* 21 (3): 337–63.

Fischer, Frank. 2009. *Democracy and Expertise: Reorienting Policy Inquiry*. Oxford: Oxford University Press.

Gray, J.A.M. 1997. *Evidence-Based Healthcare: How to Make Health Policy and Management Decisions*. New York/Edinburgh/London: Churchill Livingstone.

Hammersley, Martyn. 2005. "Is the Evidence-Based Practice Movement Doing More Good than Harm? Reflections on Iain Chalmers' Case for Research-Based Policy Making and Practice." *Evidence & Policy* 1 (1): 85–100.

Hawke, Gary. 1993. *Improving Policy Advice*. Wellington: Victoria University Institute of Policy Studies.

Head, Brian. 2008. "Three Lenses of Evidence-Based Policy." *The Australian Journal of Public Administration* 67 (1): 1–11.

Heinrichs, Harald. 2005. "Advisory Systems in Pluralistic Knowledge Societies: A Criteria-Based Typology to Assess and Optimize Environmental Policy Advice." In *Democratization of Expertise? Exploring Novel Forms of Scientific Advice in Political Decision-Making*, edited by Sabine Maasen and Peter Weingart, 41–61. Dordrecht: Springer.

Howlett, Michael. 2011. *Designing Public Policies: Principles and Instruments*. New York: Routledge.

———. "The Lessons of Failure: Learning and Blame Avoidance in Public Policy-making." *International Political Science Review* 33, (5): 539–55. doi:10.1177/0192512112453603.

———, and Joshua Newman. 2010. "Policy Analysis and Policy Work in Federal Systems: Policy Advice and Its Contribution to Evidence-Based Policy-Making in Multi-Level Governance Systems." *Policy and Society* 29 (2): 123–36.

———, and Adam Wellstead. 2012. "The Nature of Policy Work and Policy Capacity at the Sub-National Level: Institutional Autonomy and Canadian Policy Analysis." *Canadian Public Administration* 55 (1): 53–68.

———, and Andrea Migone. (2013) "The Search For Substance: Externalization, Politicization and the Work of Canadian Policy Consultants 2006–2013." *Central European Journal of Public Policy* 7 (1).

Innvaer, Simon, Gunn Vist, Mari Trommald, et al. 2002. "Health Policy-Makers' Perceptions of Their Use of Evidence: A Systematic Review." *Journal of Health Services Research and Policy* 7 (4): 239–45.

Irwin, Lewis. 2003. *The Policy Analysts Handbook: Rational Problem Solving in a Political World*. Armonk: M.E. Sharpe.

Jackson, Andrew, and Bob Baldwin. 2007. "Policy Analysis by the Labour Movement in a Hostile Environment." In *Policy Analysis in Canada: The State of the Art,* edited by Laurent Dobuzinskis, Michael Howlett, and David Laycock. Toronto: University of Toronto Press.

James, Thomas, and Paul Jorgensen. 2009. "Policy Knowledge, Policy Formulation, and Change: Revisiting a Foundational Question." *Policy Studies Journal* 37 (1): 141–62.

Kjaer, Anne. 2004. *Governance*. Cambridge: Polity Press.

Laforest, Rachel, and Michael Orsini. 2005. "Evidence-Based Engagement in the Voluntary Sector: Lessons from Canada." *Social Policy and Administration* 39 (5): 481–97.

Leigh, Andrew. 2009. "What Evidence Should Social Policymakers Use?" *Australian Treasury Economic Roundup* 1: 27–43. http://www.treasury.gov.au/documents/1496/PDF/ER_Issue_1_2009_Combined.pdf

Lindblom, Charles, and David Cohen. 1979. *Usable Knowledge: Social Science and Social Problem Solving*. New Haven: Yale University Press.

Lindquist, Evert. 1998. "A Quarter Century of Canadian Think Tanks: Evolving Institutions, Conditions and Strategies." In *Think Tanks Across Nations: A Comparative Approach*, edited by Diane Stone, Andrew Denham, and Mark Garnett, 127–45. Manchester: Manchester University Press.

Lindvall, Johannes. 2009. "The Real but Limited Influence of Expert Ideas." *World Politics* 61(4): 703–30.

Lomas, John, and Adalsteinn Brown. 2009. "Research and Advice Giving: A Functional View of Evidence-Informed Policy Advice in a Canadian Ministry of Health." *Milbank Quarterly* 87 (4): 903–26. doi:10.1111/j.1468-0009.2009.00583.x.

Mackenzie, G. Calvin., ed. 1987. *The In-and-Outers: Presidential Appointees and Transient Government in Washington*. Baltimore: Johns Hopkins University Press.

MacRae, Duncan, and Dale Whittington. 1997. *Expert Advice for Policy Choice: Analysis and Discourse*. Washington, DC: Georgetown University Press.

Majone, Giandomenico. 1989. *Evidence, Argument, and Persuasion in the Policy Process*. New Haven: Yale University Press.

Maloney, William, Grant Jordan, and Andrew McLaughlin. 1994. "Interest Groups and Public Policy: The Insider/Outsider Model Revisited." *Journal of Public Policy* 14 (1): 17–38.

Marston, Greg, and Rob Watts. 2003. "Tampering with the Evidence: A Critical Appraisal of Evidence-Based Policy-Making." *The Drawing Board: An Australian Review of Public Affairs* 3 (3): 143–63.

May, Peter. 1992. "Policy Learning and Failure." *Journal of Public Policy* 12 (4): 331–54.

McGann, James, and Richard Sabatini. 2011. *Global Think Tanks: Policy Networks and Governance*. New York: Routledge.

Mintrom, Michael. 2007. "The Policy Analysis Movement." In *Policy Analysis in Canada: The State of the Art*, edited by Laurent Dobuzinskis, Michael Howlett, and David Laycock, 145–62. Toronto: University of Toronto Press.

———, and Rebecca Bollard. 2009. "Governing Controversial Science: Lessons from Stem Cell Research." *Policy and Society* 28 (4): 301–14.

Mulgan, Geoff. 2005. "Government, Knowledge and the Business of Policy Making: The Potential and Limits of Evidence-Based Policy." *Evidence & Policy*, 1 (2): 215–26.

Nutley, Sandra, Isabel Walter, and Huw T.O. Davies. 2007. *Using Evidence: How Research Can Inform Public Services*. Bristol: Policy Press.

———, Sarah Morton, Tobias Jung, et al. 2010. "Evidence and Policy in Six European Countries: Diverse Approaches and Common Challenges." *Evidence & Policy* 6 (2): 131–44.

Papadopoulos, Yannis, and Philippe Warin. 2007. "Are Innovative, Participatory and Deliberative Procedures in Policy Making Democratic and Effective?" *European Journal of Political Research* 46 (4): 445–72.

Pawson, Ray, Annette Boaz, Lesley Grayson, et al. 2003. "Types and Quality of Knowledge in Social Care." *Knowledge Review No. 3*, Social Care Institute for Excellence. Bristol: Policy Press.

———, Trisha Greenhalgh, Gill Harvey, et al. 2005. "Realist Review—A New Method of Systematic Review Designed for Complex Policy Interventions." *Journal of Health Services Research Policy* 10 (Supplement 1): S1:21–S1:34.

Peled, Alan. 2002. "Why Style Matters: A Comparison of Two Administrative Reform Initiatives in the Israeli Public Sector, 1989–1998." *Journal of Public Administration Research and Theory* 12 (2): 217–40.

Peters, B. Guy. 1996. *The Policy Capacity of Government*. Ottawa: Canadian Centre for Management Development.

———, and Anthony Barker. 1993. *Advising West European Governments: Inquiries, Expertise and Public Policy*. Edinburgh: Edinburgh University Press.

Pierre, Jon. 1998. "Public Consultation and Citizen Participation: Dilemmas of Policy Advice." In *Taking Stock: Assessing Public Sector Reforms*, edited by B. Guy Peters and Donald J. Savoie, 137–63. Montreal and Kingston: McGill-Queen's University Press.

———, ed. 2000. *Debating Governance: Authority, Steering, and Governance*. New York: Oxford University Press.

Plowden, William, ed. 1987. *Advising the Rulers*. Oxford: Basil Blackwell.

Prasser, Scott. 2006a. "Providing Advice to Government." Paper Based on a Lecture Presented in the Senate Occasional Lecture Series at Parliament House, Canberra, Australia, February 24.

———. 2006b. "Aligning 'Good' Policy with 'Good' Politics." In *Beyond the Policy Cycle: The Policy Process in Australia*, edited by H.K. Colebatch, 266–92. Sydney, Australia: Allen and Unwin.

Prince, Michael. 1983. *Policy Advice and Organizational Survival*. Aldershot: Gower.

———. 2007. "Soft Craft, Hard Choices, Altered Context: Reflections on 25 Years of Policy Advice in Canada." In *Policy Analysis in Canada: The State of the Art*, edited by Laurent Dobuzinskis, Michael Howlett, and David Laycock, 95–106. Toronto: University of Toronto Press.

Radin, Beryl. 2000. *Beyond Machiavelli: Policy Analysis Comes of Age*. Washington, DC: Georgetown University Press.

———, and Joan Boase. 2000. "Federalism, Political Structure, and Public Policy in the United States and Canada." *Journal of Comparative Policy Analysis* 2 (1): 65–90.

Rasmussen, Ken. 1999. "Policy Capacity in Saskatchewan: Strengthening the Equilibrium." *Canadian Public Administration* 42 (3): 331–48.

Rein, Martin, and Sheldon White. 1977. "Can Policy Research Help Policy?" *The Public Interest* 49: 119–36.

Rhodes, R.A.W. 2007. "Understanding Governance: Ten Years On." *Organization Studies* 28 (8): 1243–64.

———, and Patrick Weller, eds. 2001. *The Changing World of Top Officials: Mandarins or Valets?* Buckingham/Philadelphia: Open University Press.

———, John Wanna, and Patrick Weller, eds. 2010. *Comparing Westminster*. Oxford: Oxford University Press.

Rochet, Claude. 2004. "Rethinking the Management of Information in the Strategic Monitoring of Public Policies by Agencies." *Industrial Management and Data Systems* 104 (3): 201–8.

Saint-Martin, Denis. 2005. "Management Consultancy" In *Oxford Handbook of Public Management*, edited by Ewan Ferlie, Laurence Lynn Jr., and Christopher Politt, 671–94. Oxford: Oxford University Press.

Sanderson, Ian. 2006. "Complexity, 'Practical Rationality' and Evidence-Based Policy Making." *Policy and Politics* 34 (1): 115–32.

———. 2002a. "Evaluation, Policy Learning and Evidence-Based Policy Making." *Public Administration* 80 (1): 1–22.

———. 2002b. "Making Sense of 'What Works': Evidence Based Policymaking as Instrumental Rationality?" *Public Policy and Administration* 17 (3): 61–75.

Schorr, Lisbeth. 2003. "Determining 'What Works' in Social Programs and Social Policies: Towards a More Inclusive Knowledge Base." Washington, DC: Brookings Institute.

Scott, Claudia, and Karen Baehler. 2010. *Adding Value to Policy Analysis and Advice*. Sydney: University of New South Wales Press.

Shonkoff, Jack. 2000. "Science, Policy and Practice: Three Cultures in Search of a Shared Mission." *Child Development* 71 (1): 181–87.

Shulock, Nancy. 1999. "The Paradox of Policy Analysis: If It Is Not Used, Why Do We Produce So Much Of It?" *Journal of Policy Analysis and Management* 18 (2): 226–44.

Stone, Deborah. 2001. *Policy Paradox: The Art of Political Decision Making*, 2nd edition. New York: W.W. Norton.

Tenbensel, Tim. 2004. "Does More Evidence Lead to Better Policy? The Implications of Explicit Priority Setting in New Zealand's Health Policy for Evidence-Based Policy." *Policy Studies* 25 (3): 190–207.

Van Damme, Jan, Marleen Brans, and Ellen Fobé. 2011. "Balancing Expertise, Societal Input and Political Control in the Production of Policy Advice: A Comparative Study of Education Councils in Europe." *Halduskultuur—Administrative Culture* 12 (2): 126–45.

Verschuere, Bram. 2009. "The Role of Public Agencies in the Policy Making Process." *Public Policy and Administration* 24 (1): 23–46.

Weaver, R. Kent, and Paul Stares. 2001. "Overview." In *Guidance for Governance: Comparing Alternative Sources of Public Policy Advice*, edited by R. Kent Weaver and Paul Stares, 71–88. Tokyo: Japan Center for International Exchange.

Webber, David. 1991. "The Distribution and Use of Policy Knowledge in the Policy Process." *Knowledge and Policy* 4: 6–35.

Weber, Edward, and Anne Khademian. 2008. "Wicked Problems, Knowledge Challenges, and Collaborative Capacity Builders in Network Settings." *Public Administration Review* 68 (2): 334–49.

Weible, Christopher. 2008. "Expert-Based Information and Policy Subsystems: A Review and Synthesis." *Policy Studies Journal* 36 (4): 615–35.

Weimer, David, and Aidan Vining. 2004. *Policy Analysis: Concepts and Practice*, 4th edition. New Jersey: Prentice Hall.

Weller, Patrick. 1987. "Types of Advice." In *Advising the Rulers*, edited by William Plowden, 149–57. Oxford: Basil Blackwell.

Wellstead, Adam, Richard Stedman, and Michael Howlett. 2011. "Multi-Level Policy Analytical Capacity in Canada: A Structural Equation Model (SEM) Study of Federal, Provincial and Territorial Policy Analysts and Analysis." *Public Policy and Administration* 26 (3): 353–73.

Wildavsky, Aaron. 1979. *Speaking Truth to Power: The Art and Craft of Policy Analysis*. Boston: Little Brown.

Wilson, Richard. 2006. "Policy Analysis as Policy Advice." In *The Oxford Handbook of Public Policy*, edited by Michael Moran, Martin Rein, and Robert Goodin, 152–68. New York: Oxford University Press.

Wollmann, Hellmut. 1989. "Policy Analysis in West Germany's Federal Government: A Case of Unfinished Governmental and Administrative Modernization?" *Governance* 2 (3): 233–66.

Woodford, Michael, and Susan Preston. 2011. "Strengthening Citizen Participation in Public Policy-Making: A Canadian Perspective." *Parliamentary Affairs*: 1-19. doi:10.1093/pa/gsr065.

Young, Ken, Deborah Ashby, Annette Boaz, et al. 2002. "Social Science and the Evidence-Based Policy Movement." *Social Policy and Society* 1 (3): 215–24.

Young, Shaun. 2011. "Evidence of Democracy? The Relationship between Evidence-Based Policy and Democratic Government." *Journal of Public Administration and Policy Research* 3 (1): 19–27.

Zussman, David. 2003. "Evidence-Based Policy Making: Some Observations of Recent Canadian Experience." *Social Policy Journal of New Zealand* 20: 64–71.