Public Money & Management

Bridging the academic–policy-making gap: practice and policy issues

Carole Talbot & Colin Talbot

Published online: 17 Mar 2015.

PLEASE SCROLL DOWN FOR ARTICLE

Bridging the academic–policy-making gap: practice and policy issues

Carole Talbot and Colin Talbot

How policy-makers engage with academics is both a current 'hot' topic and a perennial problem. Policy initiatives such as the Research Excellence Framework's (REF) so-called 'impact agenda' have 'pushed' academics towards seeking more such engagement, whilst others 'pull' towards it, such as 'open policy-making'. Apart from some biographical accounts and case studies, surprisingly little is known at a more general level about how policy-makers do actually engage with academic research and expertise. Analysis of these policies, as well as empirical evidence from the British civil service, suggest these engagements may be generating more 'endarkenment' (to use Weiss's term) than enlightenment.

There has been a renewed interest in recent years in the gap between knowledge and practice (Davies *et al.*, 2000; Avey and Desch, 2014). 'Renewed' because there is nothing new about this topic. However, there are some important new elements to recent developments. Variations on the theme of 'evidence-based X' have emerged—including where 'X' equals policy and practice, management (Pfeffer and Sutton, 2006), medicine (Sackett *et al.*, 1996), and even sports management (Silver, 2013). Not all the evidence comes from academic research, but academia is a large contributor to the evidence-base in public policy—the area addressed in this paper.

As Weiss (1979) suggested more than three decades ago, it is highly unlikely that in many cases there will be a direct linear link between the outputs of specific pieces of academic research and changes in public policy. The outputs of academic research—if they have influence at all—are more likely to influence the broad arena of public policy debate and ideas, what Cobb and Elder (1983) called the 'systemic' policy agenda rather than in the formal 'institutional' agenda of governments.

It seems likely that other, exogenous, factors are likely to have greater weight in final policy outcomes than research evidence, however powerful. This is why some in the 'evidence-based policy and practice' (EBPP) movement have moved to talking about 'evidence-*informed* policy' (Nutley *et al.*, 2007). For the sake of neutrality, we use the term 'evidence for policy' in this paper.

The REF and the 'impact agenda'

One important aspect of the 'evidence for policy' (EfP) movement has been attempts to reform the 'supply-side' through policies aimed at improving the quality of academic research outputs in the UK.

This policy developed through arm's-length public bodies such as the higher education funding councils in the 1980s and 1990s. Research assessments took place in 1986, 1989, 1992, 1996, 2001 and 2008. The first full-scale Research Assessment Exercise (RAE) occurred in 1996, replacing the previous 'light touch' exercises. The RAE was replaced by the REF, which assessed universities in 2014.

The purpose of these exercises has evolved over time and most recently they have included the 'impact agenda', which is clearly an attempt to demonstrate the benefits of research funding to society at large, as well as to steer academics towards ensuring the maximum impact of research outputs. 'Impact' includes public policy impacts.

Importantly, for this analysis, the REF 'impact model' is a very linear one—linking, or trying to link, specific research outputs from individuals or research groups in a single institution to specific policy outcomes. The approach was heavily influenced by the ubiquitous 'logic model' employed in much of the 'performance' movement in government in recent years which proceeds from inputs through processes to outputs and then outcomes (Talbot, 2010).

This approach conflicts with much of the public policy analysis literature and with the

Carole Talbot is Lecturer in Public Policy and Management, Manchester Business School, Uk.

Colin Talbot is Professor of Government, University of Manchester, UK.

empirical findings of our survey, which suggest policy-making is a much more pluralistic and complex process than is suggested by overly simplistic linear 'impact' models.

Open policy-making

The second policy potentially shaping the EfP movement in the UK is the 'open policy-making' initiatives, which seek to reform the 'demand side' of the academic–policy divide. The Civil Service Reform Plan was published in June 2012 and set out an agenda for involving more external actors in the policy-making process. This builds on an earlier impetus to 'professionalize' policy-making in UK government (Cabinet Office, 1999; Bullock *et al.*, 2001; NAO, 2001).

The idea of people beyond government being engaged in policy-making is not new (Rhodes, 1988). However, open policy-making has been newly promoted in the UK (NAO, 2001) and has gained traction globally. The OECD (2009, p. 14) defines it as:

> *Open and inclusive policy-making is transparent, accessible and responsive to as wide a range of citizens as possible.*

For the OECD, open policy-making falls into the domain of developing systems of governance and democracy across their membership. In the UK, the idea was taken up by the coalition government as part of its efficiency, transparency and accountability agenda (Cabinet Office, 2012).

Open policy-making is specifically expressed in the coalition government's strategy for the development of the civil service. This strategy fosters reform of the civil service in ways which will make it faster, more digital reliant, less bureaucratic, and more open in relation to policy-making while becoming a smaller body (Cabinet Office, 2012; Policy Profession Board, 2013). The following quotation illustrates this ambition:

> *The Head of the Policy Profession will take personal responsibility for professionalising policy-making and delivering open policy-making as the default approach. This personal accountability will ensure that policy-makers will use new tools, share best practice and work collaboratively with think tanks, academics and other organizations* (Cabinet Office, 2013, p. 15).

While improving policy-making capability is a core strand of the plan, the once separate policy training element has been subsumed under setting direction, arguably weakening its potential (Civil Service Learning, 2012).

Additionally, the UK government aims to develop a model of open policy-making to employ across Whitehall. Details relating to this have yet to emerge. The policy acknowledges the need for joint action between government and external bodies to address some of the current pressing agendas. Furthermore, it acknowledges that policies have been made without 'rigorous external challenge' (Policy Profession Board, 2013). King and Crewe (2013) reviewed 12 cases where they believe policy-making blunders were made, in all cases a lack of deliberation was a factor in the failure.

Simonson (2009) argues open policy-making is not a panacea but that governance processes are the only way to deal with complex societal decisions. If the governance process is to be credible it is reliant on open policy-making.

However worthy the aim of open policy-making, the OECD (2009) found that open policy-making is at best 'work in progress'. The fact that the OECD drew on the UK example of the One North East's SHiNE Project that fed into the regional economic strategy is informative. Participation in the development of regional economic strategies was a prescribed process for the local development of plans (DETR, 1997). While it was an important development at the time, it does not signal evidence of sustained change in this direction.

The UK coalition government's response, in large part, to engaging in open policy-making is repetition of some well-established ways of policy-making such as using pilots; involving delivery experts; the establishment of cross-departmental teams and what they call 'contestable policy-making', which differs little from bidding to do exploratory or pilot work on behalf of government departments.

One example of contestable policy-making was reported in the Institute for Government's (Rutter, 2012) study on open policy-making which focused on the National Planning Policy Framework. They suggested that it was an innovative approach using a policy advisory group (PAG) with the appointment four 'practitioners' to establish a new framework. Even here there are precursors, a similar PAG was utilized in 1965 to 'reappraise British town and country planning practice' (Donnison, 1972).

The Institute for Government argue that the enterprise did not go far enough. A key

weakness was the way in which the appointments were made. Obviously creating an *ad hoc* team in this area had to include experts, but the four practitioners were handpicked by Conservative MP Greg Clark. There were no governance processes exercised in the selection of members, the Nolan processes for public appointments were ignored and the usual informal sounding out of interested parties was not carried out. The report states the department should have been more open about the process as an experiment and provided much clearer terms of reference in relation to the objectives, engagement and how the department would deal with the output. What this appears to be is an example of an open proposal process which was then passed around for comment and amendment in the usual fashion. It is less clear that overall the process was more efficient or effective.

Other examples of open policy-making through the use of contestable bidding processes, such as the IPPR (2013) project on civil service reform, have had less impact. This example is, in any case, more conventional in approach to using external expertise to feed into particular policies.

What is new is the emphasis on web-based tools, such as crowd-sourced 'wikis'. Open policy-making is also being promoted heavily by the Cabinet Office at events where problem-solving techniques are being introduced, such as the creation of policy hubs, the use of decision-supporting software, 'hackathons' and an interest in a design orientation. A new policy lab exists to support teams in policy-making and the What Works Network centres are a potentially important development. However, much activity appears to be operating within government departments or between departments and, at best, their existing established policy network.

The exact status of open policy-making in the UK is difficult to assess. Austerity may be limiting external involvement, particularly by local authorities. Many coalition policies have already floundered or been abandoned in part because policy has been poorly conceived, or poorly implemented, or both. The 'bedroom tax', free school meals and universal credit provide examples in direct opposition of the stated direction of travel for open policy-making.

Regardless, it is widely acknowledged that there has been an appetite for open policy-making over recent years. Waller *et al.* (2009) acknowledged that policy-making was more open, for example the commitment to publish the evidence-base and that more attention was given to implementation. However, they also found increasing opacity around how decisions are made. This it is argued is related to the increasing 'day-to-day informality' in how the affairs of government are carried out. Much less is recorded in detailed written form. This is partly a product of the use of summary presentations in the place of briefing notes and the focus on getting things done in a timely fashion.

One final point about open policy-making—it assumes that policy-making has to involve a much wider group of 'stakeholders' than previous (alleged) forms of more top-down, exclusive, policy-making. In the civil service reform plan this couched in terms like 'co-design', 'shared power', 'teams drawn across organizations and even sectors', 'shared transparent evidence-base from all sources' and 'getting wide public input by "crowdsourcing" questions to shape the definition of the problem'. While this does not go quite as far as much of the 'stakeholder' approaches to policy and management of the 1990s and 2000s, it implies inclusion of a much wider set of actors.

The changes in the Whitehall machinery around policy-making are important in the debate about the knowledge–practice divide. They signal a change in how government will interact around policy-making and also to how academia may be involved. This topic is likely to remain of interest whoever is elected in May 2015. The survey suggests that the routes for involvement are fairly broad, while the REF impact cases are very narrowly conceived.

The survey findings

Our survey was distributed in 2014 to the whole of the senior civil service in the UK and 340 usable responses were received. It captured the opinions of UK senior civil servants with varying roles in policy-making from all major departments. The findings demonstrated a number of key points:

- Knowledge is as relevant for implementation as it is for initial policy-making.
- General expertise is valued highly. The data demonstrated a bias towards general expertise with 36% of respondents placing research and expertise on an equal footing and a further 35% selecting expertise as more important.
- Civil servants use a wide variety of input sources in their roles, suggesting that academic research will have to vie for

attention alongside other forms of input. For example, while research reports topped the table at 79%, newspapers and weeklies were selected by 61%, and academic journals and professional journals were equally selected by 55%.

- A substantial number of respondents were unconvinced by the value of academic work. For example, only 47% were able to agree that 'academic work directly applies to specific components of my work'. While 43% agreed that academic work 'provides the intellectual background/framework of my work' and 22% agreed that academic work 'helps to provide a common language that helps me work with others'.

- What policy-makers value is sometimes at odds with what academics produce often to satisfy REF process rewards. Public policy was rated as the top discipline by 63% of respondents, economics, unsurprisingly was selected by 60%. What is more surprising is that public administration was selected by 54% of respondents. Neither public policy or public administration are viewed as academic disciplines within UK academia.

- Furthermore, in relation to the types of methodologies used there is a disjuncture between what policy-makers find useful and what academics are encouraged to produce in the name of generalization or international recognition. The findings demonstrate that case studies are favoured, albeit marginally, over quantitative analysis at 77% and 76% respectively. This is followed by qualitative analysis (70%), evaluations (69%) and comparative analysis (59%).

These are important points because they highlight the idea that research and expertise are both valued and that the form of research output found to be useful is not necessarily the type which academics are encouraged to produce. The findings echo an earlier study by Avey and Desch (2014), who focused on the US international relations policy community.

What has been presented thus far suggests a slightly negative picture of the role of academia and research outputs. There were, however, some positive messages emerging from the survey. First, few respondents were hostile, any rejection or downgrading of academia as the primary source of research evidence and expertise could be explained by disappointment related to the above points, or the simple result of the clearer bifurcation of the knowledge industry between universities and professional bodies; think tanks and consultancies.

Furthermore, many positive developments on both sides were cited. The REF was cited as having had a positive impact—insufficient perhaps—but it had helped:

The impact agenda in research councils and the REF is definitely making things better.

It is certainly getting easier—probably driven at least in part by the REF/research council focus on outcomes. That said, there is obviously a lot more use that could be made of the intellectual capacity and output that exists in the UK's universities, and making it easier to access this.

More [academics] are getting used to the demands and expectations of policy-makers with the growing emphasis on impact and uptake.

Through these developments, and the growth in social media as an important conduit of communication, academics appear to have a renewed interest in communicating with policy-makers. Universities, as institutions, also see their presence as increasingly important and a growing number are sponsoring websites and blog sites officially. This facilitates easier access to academics and their research, even if it does not address directly the issue of pay walls for academic journals—an issue raised in the qualitative comments. A surprising number of qualitative responses highlighted the importance of social media: 'social media can be very powerful…it's critical'; 'the best of the academic units use Twitter and other social media really well and provide early notice of findings'; 'social media is how I find out about research and if I can't access it directly it's unlikely I would have the time to pursue'; 'articles via Twitter links is by far the most important distribution method now for me'; 'following an academic on Twitter is much easier'.

Having established itself as an important point of access—social media may now be operating as a pull factor on academics and institutions.

Policy-makers in Whitehall, either individually or collectively, are also engaging with academics in more systematic and organized ways, although the extent varies across policy areas. However, civil servants do seek out interaction with academics and do so through various routes. Sometimes this is on an individual basis, sometimes through events organized between departments and external organizations and sometimes facilitated by internal teams focusing on analytics:

We have economists, operational researchers, WRAP [waste and resources action programme], social scientists and natural scientists embedded within our team…they tend to act as intermediaries. They explore our interests with us.

My team and I have established a number of contacts in academia.

I worked in the research [unit] of a Whitehall department and a key part of our job was academic outreach.

The above can be seen as evidence of open policy-making. Importantly, much of this is informal, but nevertheless is highly valued. A proactive approach by academia has potential to access such processes. It has potential to provide multiple channels of influence and engagement to support academic research and expertise having influence within Whitehall. Applying the models of research utilization to the current scenario outlined in this paper demonstrates that the REF is at best a limited approach in this multi-channel environment and may have had and continues to have a deleterious impact on wider engagement.

Research utilization models

Despite the recent emphasis on the need for policy to be evidence-based, a number of barriers remain (Cepiku, 2011; Oliver *et al.*, 2014). Research utilization is conceptualized as either *instrumental,* where there is direct use of findings to shape a policy, its implementation or actual practices; or *conceptual*, where the uses are less direct and detectable—perhaps impacting on policy-makers' understandings and ways of thinking (Caplan, 1979). Nutley *et al.* (2007) argued the latter is more often how research is used. For example, Innvaer *et al.* (2002) found that 60% of health research was reportedly used this way. Nutley *et al.* (2007) posit that research use (i.e. impact) is complex, diverse and messy and as such argue for diversity in the way research impacts are assessed.

Weiss (1979) usefully developed a schema to explain the many ways research is utilized in practice. Now is a good time to reflect on this in order to fully elaborate how the REF and open policy-making does and does not support academic engagement in policy-making. Each model is considered in relation to how research is taken up by policy-makers; its deficiencies; potential outcomes; how the transmission of research to policy-makers can be improved; and, finally, the potential impact the model may have

on academic performance as judged by REF-like systems. This analysis highlights the multiple ways research is utilized, stalled or rejected in policy-making contrasted with the narrow institutional logic of the REF (Friedland and Alford, 1991).

The models (the knowledge-driven model; problem-solving model; interactive model; political model; tactical model; enlightenment model; and intellectual enterprise model) are ideal types and exhibit fuzzy distinctions. They all describe legitimate uses. Indeed, all contain the potential for research to be used for positive and negative purposes (Weiss, 1979). They demonstrate the limitations for impact and open policy-making due to the varying space they provide for interaction.

Out of the seven routes through which research may be used by policy-makers, only the first two allow straightforward recognition of the impact of specific pieces of research in a very direct way. The knowledge and problem-solving models would, though, possibly imply limitations on open policy-making: if 'knowledge' is at a premium in both, then policy-making may be restricted to only those who have valid knowledge to contribute.

Out of the two, the problem-solving model probably has the most direct relevance for social science research, as it is most often employed in problem-solving that involves a large 'human' element. The knowledge-driven model probably applies more directly, or is used more often, in relation to natural science research but the process may also remain relevant for social science, especially for implementation.

The knowledge-driven model assumes a linear process occurs from basic research to the development of associated applications. However, the timeliness of this transformation is problematic, the average time from discovery to application may be reducing from two to three decades (Donnison, 1972) to one or two, for example the Graphene Institute at the University of Manchester, but there is no guarantee that the best solutions get woven into policy.

The institutional logic of the REF appears to be based largely on the knowledge-driven model. It is a rational, linear approach and aims for relatively straightforward measurement of research outputs impacting on the knowledge available to policy-makers. On the other hand, it challenges the 'stakeholder' aspects of open policy-making because it potentially privileges expertise and knowledge over interests and concerns of citizens, interest groups and others.

The problem-solving model is driven by the needs of policy-makers. Research evidence is

directly applied (either from existing studies or new research) to a pending decision, thus solving a problem. The process is linear and logical but encourages over-optimism about the potential for influence. Even if policy-makers have asked for evidence, they may not use it as in the recent international comparisons of drugs policy. To improve the transmission of research, policy-makers must improve the specification and management of research contracts to get better and more useful outputs and, as a result, more research will be utilized. Academics can also aid the search process by badging research accurately as 'policy relevant'. The use of clear communication can also facilitate research into the systemic and institutional agendas.

The major problem with the problem-solving model for measuring performance is that studies have shown that, at best, research tends to influence 'low level, narrow gauge decisions' (Weiss, 1979, p. 428). The obvious flaw is that there is an assumption that consensus exists on the goals and outcomes of research between researchers and policy-makers. The model is functional but, viewed as the way in which research reaches policy-makers, it is quite limited for assessing influence and engagement.

Another potential problem is that the REF process may divert more research energy into this model perhaps for an ever-decreasing return. Furthermore, the UK government is severely limited in its ability to commission research and, when it does, it is increasingly from non-academic institutions (Waller *et al*., 2009). The open policy-making agenda here may actually work against academic research, as policy-makers may prefer non-academic providers as faster, cheaper, and less fastidious sources of 'quick and dirty' answers.

So if academia wants to maintain influence in policy-making, we need to look to the other models. We have seen that research is only one source of influence from the Whitehall survey and that there are issues in accessing and using research despite the positive developments noted earlier. We have also seen that the open policy-making agenda appears to gain momentum within Whitehall. This suggests that the model in the ascendant is the 'interactive model' and may frame a large part of future engagement between academics and policy-makers. In this model a wide variety of views are sought in the policy-making process. Rather than seeing research use as linear the process is characterized as a 'disorderly set of interconnections' (Weiss, 1979, p. 428). There is potential for popular opinion to override research evidence and final decisions may lack coherence due to the compromises made to appease different actors.

Measuring impact in the interactive or political models is difficult. The policy outcome may be shaped by many inputs from a range of sources, and not all of them 'knowledge' or 'research' based. No single person may produce the research or have all the expertise that may impact on a policy. The outcome will be the product of interactive processes, so the idea of improving transmission becomes an issue of effective interpersonal communication.

Donnison (1972) argued that members were allocated positions in the 'interactive' policy-making arena. Seeking wider input from user groups, for example, would also be necessary for an updated version. This wider input suggests that the outcomes for policy are influenced to a further extent by the quality of the intermediaries responsible for 'managing' the process. This model raises the issue of researchers having general expertise that is valued as much as research output. Policy-makers in our survey were clear, expertise was as important as research, a notion eschewed by the REF.

Open policy-making may also imply that the political model also gains more traction. In this model, research influence relies on a constellation of political interests and may be used for purely political reasons. There may be a danger that poor research used as ammunition in one period of office by the opposition may be used without further scrutiny if they become the governing power.

To capitalize on this model, academics need to better engage with whole 'policy communities' or 'policy networks' and not just directly with central policy-makers.

What this means for researchers keen to bring ideas to the policy table and continue the dialogue about policy is that we cannot subscribe solely to the knowledge or problem-solving models rewarded through the REF. We need also to be involved where possible in engagement that may have no easily discernible or measureable 'impact'.

The final four models have very little direct relevance to the topic of research impact, although the REF may, in some cases, have deleterious consequences for the potential of the enlightenment model in particular.

It might be argued that as the REF is rational, by definition, it excludes a political awareness. Practically, the importance of publishing in academic journals has diminished 'political' engagement. While in the areas of science it may well be true that 'good science' is more likely to prevail, it certainly is not true for most areas of government policy to which social science attempts to contribute. In the political

model, research, regardless of quality, may be stalled or rejected due to the political landscape. The model suggests researchers seek out politicians sharing appropriate views for maximum (or immediate) impact. However, impact on debate cannot be counted and the possibility of impact on policy-making in some future administration may likely fall into a later cycle of performance management and so may not be acknowledged.

The tactical model, where research is used as a way of delaying or deflecting issues, suffers from similar problems and perhaps has the additional problem that any impact might be difficult to trace as the utilization process can be complex and lacks the transparency and relative simplicity of the political model. Transmission may be improved but the impact is very much less certain. Again, either impact cannot be traced or impact may emerge in a future performance cycle.

What the tactical and, to a lesser extent, the political model share is the benign influence of the REF—it neither adds nor detracts from the processes by which researchers and policy-makers may attempt to interact. The same cannot be said for the final models.

The enlightenment mode is where conceptualizations and theoretical perspectives permeate into 'informed publics'. But also where bodies of research are seen as increasingly nuanced and complex perhaps increasing the chances of misunderstandings, partial or simplistic use leading to endarkenment (Weiss, 1979)—or as we often see—no use at all (Avey and Desch, 2014). Weiss argued that this was the way in which 'social science research most frequently enters the policy arena' (1979, p. 429). Avey and Desch (2014) found it to be unconvincing as a route to research utilization, or even recognition. Whatever its status, it also defies identification in rational processes such as the REF. A key part of the theory being that the findings and authorship are dislocated in the diffuse absorption process. In these circumstances, the quality of transmission is irrelevant as impact is unlikely to be identified.

The final and least developed model is the intellectual enterprise model. This has clear cross-over with the political model as research may in its diffuse absorption be tainted by political concerns. The Troubled Families Programme is an example where research findings are spun in line with Conservative party philosophy.

It might be argued that performance assessment systems within UK higher education institutions have led to a refocusing of academic work towards achieving institutional success and away from producing timely academically sound analyses of public policy problems and proposed solutions. Performance assessment has almost certainly contributed towards an improvement in some narrow areas of impact. However, it has also fed the growing gap between researchers and policy-makers as evidenced by our research. This issue is particularly relevant for the enlightenment model as it recognizes that bodies of research become increasingly nuanced and complex leading to the lack of use or even the lack of impetus to search for relevant research.

The intellectual enterprise model in many ways represents the other side of the same coin, in that researchers need to play safe and avoid getting into research areas which might be the flavour of the month now but will be off the agenda by the time the research is reported. It might be unclear where publications could be placed or what conceptual tools may be drawn on. As new and underdeveloped areas of societal interest may seem risky for academics, the most able may not be willing to bid for funds. A further weakness with this model is that while research funds may be committed for exploratory work, funds for the development of interventions may be unforthcoming.

Conclusions

This paper has outlined the contextual developments in the REF and open policy-making and has added empirical findings concerning the academic–policy-making gap. By applying Weiss's models of research utilization, the REF is viewed as firmly embedded in rational linear processes of policy-making. We conclude that the REF is a limited tool for addressing weaknesses in the theory/ policy gap. Further developments, such as the impact accelerator fund, won't necessarily support the interactive model of policy-making which is on the ascendant, in part, because unlike the current REF process, 'messier' processes would be difficult for logical models of performance to ascribe success.

In addition to the direct influences of the REF, it limits in indirect ways adding to the already high barriers to research informing policy by encouraging the production of ever more nuanced analyses. In the UK, the REF has had some impact on academia through the impact agenda and policy-makers remain proactive and hopeful of the potential for utilizing research. The message, though, is clear that there is a disconnect between what is wanted or needed and what is provided. This

aspect not least applies to the argument that general expertise is as valuable to policy-makers as individual research outputs. The interactive model relies on engagement and interaction between academics, policy-makers and others in order for difficult issues to be adequately dealt with. A failure to address these needs could increase the acknowledged gap between academic work and policy-making processes and potentially leave difficult social issues unresolved.

Indeed, it is the pressure for individual research outputs that has led to the perverse outcomes identified in the enlightenment model, which previously was considered an important route for research utilization. Each output has to make some additional contribution to knowledge, either empirical or theoretical, so the focus of data-gathering and analysis becomes more specific and methodologically sophisticated. The stock of research outputs has grown exponentially, while diversifying in their nature. This is not intrinsically problematic, but outputs have less to contribute to the broad policy problems which society and governments wish to address through drawing on relevant research studies. Furthermore, they are increasingly difficult for policy-makers to identify as useful or not. There may well be value in the enlightenment model through permeating informed publics' perceptions of issues and solutions, but such haphazard processes of research dissemination need expertise to help policy-makers understand the particular complexities of their production. Comments from the survey suggest that 'endarkenment' could emerge as policy-makers struggle to find appropriate material.

References

Avey, P. C. and Desch, M. C (2014), What do policy-makers want from us? Results of a survey of current and former national security decision-makers. *International Studies Quarterly, 58,* pp. 227–431.

Bullock, H., Mountford, J. and Stanley, R. (2001), *Better Policy-Making* (Centre for Management and Policy Studies).

Cabinet Office (1999), *Professional Policy Making for the Twenty-First Century.*

Cabinet Office (2012), *The Civil Service Reform Plan.*

Cabinet Office (2013), *Civil Service Reform Plan: One Year On Report.*

Caplan, N. (1979), The two-communities theory of knowledge utilization. *American Behavioural Scientist, 22,* 3, pp. 459–470.

Cepiku, D. (2011), Two ships passing in the night? Practice and academia in public management.

Public Money & Management, 31, 2, pp. 131–138.

Civil Service Learning (2012), *Civil Service Competency Framework 2012–2017.*

Cobb, R. and Elder, C. (1983), *Participation in American Politics* (John Hopkins University Press).

Davies, H. T. O., Nutley, S. M. and Smith, P. C. (2000), *What Works? Evidence-Based Policy and Practice in Public Services* (Policy Press).

DETR (1997), *Building Partnerships for Prosperity: Sustainable Growth, Competitiveness and Employment in English Regions* (HMSO).

Donnison, D. (1972), Research for policy. *Minerva, 10,* pp. 519–536.

Friedland, R. and Alford, R. (1991), *Bringing Society Back In* (University of Chicago Press).

Innvaer, S., Vist, G., Trommald, M. and Oxman, A. (2002), Health policy-makers' perceptions of their use of evidence: a systematic review. *Journal of Health Services Research Policy, 7,* pp. 239–244.

King, A. and Crewe, I. (2013), *The Blunders of Governments* (Oneworld).

NAO (2001), *Modern Policy-Making: Ensuring Policies Deliver Value for Money.*

Nutley, S., Walter, I. and Davies, H. T. O. (2007), *Using Evidence: How Research Can Inform Public Services* (Policy Press).

OECD (2009), *Focus on Citizens: Public Engagement for Better Policy and Services.*

Oliver, K. *et al.* (2014), A systematic review of barriers to and facilitators of the use of evidence by policy-makers. *BMC Health Services Research, 14.*

Pfeffer, J. and Sutton, R. (2006), *Hard Facts, Dangerous Half Truths and Total Nonsense* (Harvard Business School Press).

Policy Profession Board (2013), *Twelve Actions to Professional Policy Making.*

Rhodes, R. A. W. (1988), *Beyond Westminster and Whitehall* (Unwin Hyman).

Rutter, J. (2012), *Opening Up Policy-Making* (Institute for Government).

Sackett, D. L. *et al.* (1996), Evidence-based medicine: what is it and what it isn't. *British Medical Journal, 312,* pp. 71–72.

Silver, N. (2013), *The Signal and the Noise: The Art and the Science of Prediction* (Penguin).

Simonson, A. (2009), And the winner is trust and credibility. In OECD *op. cit.*

Talbot, C. (2010), *Theories of Performance: Organizational and Service Improvement in the Public Domain* (Oxford University Press).

Waller, P., Morris, R. M. and Simpson, D. (2009), *Understanding the Formulation and Development of Government Policy in the Context of FOI* (The Constitution Unit, UCL).

Weiss, C. H. (1979), The many meanings of research utilization. *Public Administration Review, 39,* 5, pp. 426–431.