Tracking Evidence in Use in the Policy Process

This is the outline of a novel method for tracking evidence use in the policy process. The aim of this method is that it be practical for all institutions, both small and large, context relevant, easy to use, and efficient in time and labour resources. The method follows three simple stages:

1. Actors are grouped by policy preferences on a range of issues – those local to the policy issue and wider deep core beliefs;
2. Contingent Valuation Method (CVM) analysis is run of evidence source preferences of policy actors;
3. Actor evidence source and policy preferences can be analysed with relation to a set of evidence classification criteria: i) source credibility; ii) expert status; iii) ideology; iv) technical characteristics (presentation, format, methodology etc).

What does this method tell us?

- Provides statistical data on evidence source preferences.
- Tracks use *and* defines characteristics of those evidence sources with highest preference score.
- Focuses on the individual preferences of policy actors, aggregated across the policy system.
- Classification criteria can be adjusted to suit the context and concerns of each research impact assessment.

Mr. R.N. Lawton
Doctoral Student
Environment Dept.
University of York
rnl503@york.ac.uk

This method tracks the impact of a diffuse body of evidence, or of a single research product within this body of evidence, across the development and implementation of a particular policy outcome. In this method, evidence only has impact to the extent that it composes a consistent and compelling body of work capable of affecting societal thinking in a paradigmatic fashion. This moves away from overly simplistic assessments of instrumental impact, which focused on disaggregating the impact of one research product in isolation from all other around it.

Context is given centrality of place in this model on two levels. Firstly, the theory and methodology used for tracking research impact must be selected with due consideration of the substantive area under analysis: the impact context. This requires a practical set of methodologies, each suited to the aims and outcomes associated with particular contexts – political, academic, economic etc. - which can be used by actors in the academic, private and government spheres to assess the impact of an organization or investment project on the 'real world'.

The methodological options which currently exist for measuring research utilisation in the policy sphere suffer from problems of non-commensurability (monetary assessments), over-specificity (academic journal impact), and practical constraints (social network analysis).

My impact assessment method is fit for use by any number of organisations, no matter how small or constrained in time and resources. Whichever assessment method is chosen, there will necessarily be a trade-off with scarce organizational time and resources. There is no catch-all approach to research impact assessment, and the chosen method must be sensitive to the types of impact relevant to aims and outcome, and the organizational and contextual variables present. The advantage of the method outlined in this paper is that it is not as resource intensive as, say, social network approaches, which are realistically beyond the

reach of all but the most resource-rich and time-unconscious organisation. The aim throughout this research has been to produce a method for measuring research impact on the policy making process which can be undertaken in under six months by a team of less than two if necessary.

Policy outcome

It is important to outline early on the non-linear nature of evidence in the policy process envisaged by this research. Evidence is not assumed to influence policy directly, but rather through the gradual and diffuse accumulation of conceptual and instrumental evidence (Weiss, 1977; Beyer and Trice, 1982; Amara et al., 2004). There is also a strong focus on the importance of policy windows in the acceptance and utilisation of evidence, in line with the context focus of the method. Finally, policy outcome is not defined merely by the publication of a policy document. Evidence continues to have an iterative and reflexive influence on policy throughout the implementation phase that follows the publication of the policy document in the short, medium and long-term. The aim below is to present a method capable of the flexibility required to track evidence use throughout these stages

A method for tracking diffuse evidence impact in the policy process

What follows below is a stage-process outline of a novel method for measuring diffuse evidence impact on the policy process. This method measures impact through aggregate statistical analysis of individual preferences. Impact is measured across the policy subsystem through survey responses of policy actors involved in the development and implementation of the policy output under analysis. Using the Advocacy Coalition Framework (Sabatier and Jenkins-Smith, 1993; Sabatier and Weible, 1999), policy actors

Mr. R.N. Lawton
Doctoral Student
Environment Dept.
University of York
rnl503@york.ac.uk

are clustered by shared core beliefs, and the policy system analysed as an aggregate of these individual preferences.

This provides an important technique for mapping the policy arena into which evidence is being sent. Efforts to track evidence use in the policy process must necessarily take into consideration those contextual features and barriers - what I term 'policy challenge variables' - which exist in the arena into which an evidence source is destined. Evidence which is produced with insufficient reconnaissance leads to policy uptake failure. These 'policy context variables' are crucial to a true understanding of the factors and processes affecting the policy uptake of evidence.

The object of this impact assessment is the diffuse body of evidence surrounding a policy area, and the impact that this has alongside policy context variables in the development of the policy outcome. Your organisation's evidence product can then be tracked for impact within this diffuse body of evidence, and in comparison with other key evidence sources present in the policy system. The aggregate body of diffuse evidence can subsequently be broken down into its composite parts for detailed analysis of key source characteristics features such as source, credibility, expertise and ideology.

Stage one: Preliminary analysis of the policy subsystem.

To provide a preparatory assessment of subsystem actors, coalition structure, substantive policy core and deep core beliefs and central evidence sources, in particular the final policy paper outcome. This stage will also involve the development of a full sample of subsystem actors. Preliminary subsystem data is also used to develop a set of survey questions to identify actors based on their deep, policy core and secondary beliefs.

Stage two: Clustering by actor preferences

A set of maxdiff survey questions (Louviere, 1991) will provide Likert scale responses on deep core and policy core issues identified in preliminary subsystem analysis. These will be clustered and tested for variance against actor organizational background.

Stage three: Diffuse body of evidence

This will be assembled by gathering a list of around 24 key evidence sources from within a wider body of evidence around key substantive issues in the policy subsystem. Evidence in this sense can include both scientific reports and expert advice prepared for government by external organisations or within government departments. This sample should represent 25% of the total evidence list assembled from snowball sampling of evidence sources cited in the key policy output paper in the relevant policy subsystem. This sample should be tiered into those cited directly in the policy output paper (tier 1) and those cited within tier 1 sources (tier 2).

Stage four: Tracking evidence use by policy actors

Evidence use will be tracked through reported policy actor preferences provided by survey responses to a Contingent Valuation Method exercise (CVM) (Cummings et al., 1986; Mitchell and Carson, 1989; Carson et al., 1996). All 24 evidence sources are fed into the exercise, with repeated tests identifying the most preferred sources. The CVM analysis should consist of a minimum of eight questions with six evidence source options in each.

The sample frame will be divided between those working on the preliminary evidence gathering stage, the paper development stage, and the implementation stage. This allows for comparison of evidence preferences across different stages of the policy process. This avoids a reliance on linear conceptions of evidence informing policy making, and policy-

Mr. R.N. Lawton
Doctoral Student
Environment Dept.
University of York
rnl503@york.ac.uk

making leading directly to implementation. Instead, evidence is seen as active at all stages in an iterative and reflexive manner.

Stage five: Evidence source classification

Evidence sources will be classified according to a predefined set of criteria (Table 4.1):

i) The type and format of the evidence source;

ii) Substantive key issues identified in the policy output document and preliminary subsystem analysis. For example, in the biodiversity conservation subsystem, substantive issues would include the ecosystem approach, ecosystem services valuation, landowner rights and political issues like the Big Society and localism agendas. These are the 'totems' around which diffuse bodies of interrelated evidence sources are collected;

iii) Evidence source refers to the class of organisation producing the evidence source. Each source has sub-categories of organisation specific to their source: expert is divided between research institution and academic; NGOs are divided between national, international and private sector, and; government sources are divided between research, government department, agency, quasi-governmental and European.

iv) Empirical authority is represented on a scale capturing the differences between empirical and value-based information. At the highest level of empirical robustness are natural science sources; while at the other extreme are more issue-driven sources from policy, business and NGO's respectively. In the middle are economic and other social science disciplines.

v) Source ideology is captured by documentary analysis of the public statements and mission statements of the source organisations. This is achieved following public value mapping methodologies (Bozeman and Kingsley, 1997; Bozeman, 2003,

2007), in line with Lawton (2012)(Belief Article). The scale will vary depending on the subsystem. In the case of environmental policy, the scale could be seen to travel from environmentalist groups at one end, to strongly pro-development groups at the other, with those groups claiming a position of neutral objectivity in the middle.

Stage six: Multivariate analysis of evidence source against diffuse body of evidence and policy actor preferences

The interaction between the characteristics of the evidence source – signifiers of ideology, objectivity and trustworthiness – and the core beliefs of the recipient are a central process in the utilization of evidence in the policy process. Multivariate analysis will compare policy actor preferences between each evidence source. The purpose of this stage is to test which evidence characteristics are preferred by policy actors. The range of classificatory criteria allowed by this method allows for the testing of these hypotheses alongside other independent variables such as format and empirical authority. Statistical tests will be run to identify which source identity signal have the greatest correlation with policy actor evidence preferences. By extension, this source identity signal can be seen to have greater impact: 1) within the diffuse body of expert evidence, and; 2) as a driver of policy change.

Conclusion

I have outlined a novel method for tracking the impact of diffuse bodies of expert evidence in the policy process using a method that analyses individual preferences as aggregates of plural subsystem beliefs, maps policy context variables in the policy system, and incorporates independent source criteria variables into analysis of policy actor evidence preferences. This method allows us to go beyond traditional simplifications of a linear

Mr. R.N. Lawton
Doctoral Student
Environment Dept.
University of York
rnl503@york.ac.uk

policy process, and of the context-independent disaggregation of instrumental research impact. The aim of subsequent research will be to test this methodology on range of policy systems, both adversarial and collaborative, and developed and developing polities.

Figure 3.1 Model of diffuse evidence policy impact