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Reviewing Reviews: Towards a better understanding of the role of research reviews

There has been widespread debate about the role and purpose of reviews of research. Advocates of systematic reviewing argue that traditional, scholarly reviews of research have been unclear about how and why particular studies have been included in the review. In turn systematic reviewing has been criticised. Debate at the BERA 2004 conference was followed by two seminars organised under the auspices of TLRP which continued the discussion and mapped the arguments. A further symposium at BERA 2005 led to TLRP sponsorship of this document which is intended to offer greater clarity about the purpose of different forms of review.

- Research reviews serve different purposes and audiences
- Need to contextualise reviews why this review? why now? why this/these review question/s? who is involved? what is it intended to contribute?
- A broad distinction can be drawn between 'scholarly'/research purposes and policy/practice purposes, though these may overlap
- Both the approach and the criteria adopted for judging validity and appropriateness need to reflect this fitness-for-purpose issue
- Within each of these purposes further categories were identified, e.g. within scholarly reviews: journal articles, research proposals, doctorates, etc
- Reviews should satisfy criteria of 'relevance' and 'sufficiency' with respect to their review question(s)
- The policy-making community is not homogeneous, with different information needs, timescales, responsibilities and priorities
- Prior negotiation of review questions with multiple stakeholder inputs is needed. Review designs should respond to diverse needs and timetables e.g. encompassing an initial mapping
- Key challenge is to engage with the evidence whilst retaining an open and reflexive mind
- Involve colleagues with different responsibilities including 'users' such as policy-makers and practitioners





The research

Background

This thematic work commissioned by the TLRP programme arose from heated debates on the role, purposes and approaches used in systematic reviewing. Some promoting systematic reviews have argued that traditional reviews of research usually focus on summarising findings, rather than evaluating the quality of the research which produces the findings (Gough and Elbourne 2002). Whether or not these criticisms are warranted (Hammersley 2001, MacLure 2005), they have been taken as an indication that research reviews need to be more explicit about their processes, their criteria of inclusion and exclusion, and the ways in which conclusions are drawn (Boaz, Ashby & Young 2002). Moreover, these debates have taken place within a wider context of discussion across the social sciences about how evidence, particularly research evidence, can inform public policy and professional practice (Boaz, Solesbury & Sullivan 2004; Davies 2007; Levin, 2004; Nutley et al 2003; 2007). Such issues have also been raised in

the United States (Boote & Beile 2005, Maxwell 2006, Slavin 2002) and it is important to be clear that this is not a debate restricted to educational research, much less British educational research.

Discussion of research reviewing has tended to focus on the role of reviews in informing policy, and how reviews can be developed for this purpose (e.g. Boaz, Solebury & Sullivan 2004, Dixon-Woods et. al. 2006). However, the general issue of purpose, approach and validity of findings goes well beyond simply developing research reviewing to inform policy. Such matters are of importance to many different forms of reviewing and the purpose of this short paper is to affirm the need to recognize diversity in the academic community, to sketch out the many and various forms of research reviews which might be undertaken and to argue for fitness-for-purpose as a key criterion in the evaluation of research reviews.

A diverse range of types of review emerged from the discussions. These included literature reviews of the type traditionally associated with the academic or scholarly purposes of locating a study in a disciplinary field (e.g. in a journal

article, or more extensively in a doctorate); summarising the debates in a field; contributing to 'blue skies research'; or re-conceptualising an issue. Additionally we identified more specifically commissioned reviews for policymakers and practitioners who wish to make judgements about practice (e.g. review of pupil grouping, Kutnick et al, 2005); what policies are effective (e.g. the school size review, Garrett et al, 2004); and what new empirical research, if any, needs to be commissioned. These latter purposes address the need to build research knowledge within the policy-making community, rather than have each successive generation of decision-makers start from scratch by commissioning new primary research. The diverse purposes of reviews could result in products as varied as textbooks for students and research proposals for funding, through to specific policy-oriented reviews for government departments.

It was noted that these broad categories might be construed in terms of overarching characteristics such as 'summarising' on the one hand and 'reconceptualising' on the other. They could also be sub-divided further for example, on the basis of user purposes,

Academic & Scholarly Purposes	Policy and Practice Purposes
1. Teaching texts: Summarising key work in the field, often in relation to curriculum topics and assessment criteria; selective rather than comprehensive; written with introductory and/or instructional purpose	1. Policy supporting: a) rapid reactive: very short term in-house departmental 'desk research' and/or expert witnesses (a few days); 'rapid evidence appraisal'; addressing urgent policy problem; b) rapid informative: short term expert panel and report (a few weeks); informing likely policy initiatives
2. PhDs or similar pieces for academic accreditation and induction (MPhil, MA dissertations): Summarising and evaluating research in relation to a particular topic or problem; evaluative of previous substantive findings and/or methodological approaches; a need to be comprehensive but nevertheless shaped and honed to build a rationale for the primary research reported in the rest of the thesis; an induction into scholarly activity for researchers	2. Policy informing: a) summarising field prior to commissioning primary research: what is known on an issue? Is new research needed? Commissioned by government departments and agencies to inform policy development and possibly by other agencies (charities/advocacy groups) to challenge policy (a few months); b) comprehensive review re. 'what works': The paradigm case for systematic review arguments: intending to produce conclusive, generalisable, politically defensible knowledge for action; informing possible policy scenarios and interventions (12-24 months).
3. Journal papers/research reports: a) as a preamble to/basis for reporting primary research: Truncated form of PhD model: narrative and/or evaluative synthesis of previous work; again building an argument, not just summarising for the sake of it; could be very short preamble to typical 5000 word journal article; b) definitive of the field: much lengthier piece of work summarising the current 'state of knowledge' in a field: the traditional scholarly 'narrative' review; often published in 'review' journals; c) reconceptualising the field: similar to (b) but with an emphasis on problematising the field re. what is argued to be a previously narrow focus or restricted set of theoretical perspectives and/or methodologies employed	3. Evidence for Practice: a) producing evidence to regulate and/or guide practice: i) Professional practice/license to practice/legal practice: what standards should be set and assessment criteria employed? ii) effective practice: what works to produce desired effects in terms of curriculum, pedagogy and outcomes; link to the 'what works' policy agenda but could also review and disseminate local knowledge(s) of practice; iii) efficient practice: what works re. organisation and management to produce desired outcomes; again link to overall policy agenda but could similarly identify and disseminate local knowledge(s) of practice
4. Proposal writing: Very truncated form of PhD model; building an argument towards a research problem and design; indicative rather than comprehensive summary of the field; indexical referencing, readership assumed to be already informed	Resources for Practice: Producing evidence and materials to inform practice; supporting voluntaristic development; produced from primary research and reviews of research, including theoretical resources; possible links to teaching texts

Figure 1: Towards a Typology of Research Reviews and Reviewing

needs and capabilities. Issues of utility and speed were noted, with the policy push for 'rapid reviews' or 'rapid evidence appraisal' (Boaz, Solesbury & Sullivan 2004; 2007). In this context, the complex conditions under which policymakers engage with research evidence was raised as a somewhat unexplored issue. Opportunity costs for funders were debated with a tension acknowledged between spending funds on a research review or new empirical work. These differences are not necessarily just about purpose and audience. There can also be significant underlying epistemological differences with different assumptions being made about what it is possible 'to know' and about whether or not generalisations can be made. This implies that there are different assumptions about the degree of confidence which a reader can have in the outcomes of different forms of review and their conclusions for particular contexts of action and application.

Towards a typology of research reviews

Given this background, developing a typology of research reviews may be considered neither desirable nor feasible. Experience suggests that the commissioning of reviews lacks clarity about the categories of reviews, with even systematic reviews not always being undertaken with anything like the degree of precision that the method implies (Boaz et. al. 2004; 2007). Rather, reviewing 'on the hoof' tends to be a much messier business than a typology might imply, largely depending on the time and resources available for the activity and the prior knowledge and expertise of the reviewer. Nevertheless, it is important to recognise that reviewing research in different contexts for different purposes is likely to call for different approaches at different times. Thus, we think it helpful to try to sketch out the various possible types, with their potentially different purposes, audiences and hence criteria of fitness-for-purpose, even if these overlap, depending on audience requirements and the resources available.

We summarise the thinking of this TLRP Thematic Development Group in the following chart initially in terms of a broad distinction between 'Academic and Scholarly' purposes and 'Policy and Practice' purposes, then subdivided within these broad categories. We welcome feedback on the typology: its desirability, its exhaustiveness, how clear and coherent the brief descriptions of categories are, and suggestions for new categories or subcategories and expansions of the descriptions provided. We intend to try to identify key exemplars of each category to review in order to identify a range of criteria for fitfor-purpose and would also welcome suggestions for such exemplars. In relation to each form of review, we aimed to consider how 'high quality' might be understood, identified and further encouraged.

Major implications

Implications of a better understanding of reviews: towards generic characteristics

Given that such a diverse range of possible reviews are likely to demand different fitness-for-purpose criteria, judgements about validity and appropriateness in context, are there nevertheless general qualities which we might wish to see reflected across all forms of review?

From successive discussions a level of agreement emerged with respect to:

1. The need to contextualise any review Why this review? Why now? Why this (set)

Why this review? Why now? Why this (set) of review questions? Where did they come from? Who was involved in determining them? This is partly about delineating the scale and scope of the review, but also about justifying it in terms of purpose, audience, and significance – why is it important to do conduct this review now? Which debate, policy or practice is it intended to contribute to and/or critique?

2. The sufficiency and weighting of evidence

Some reviews within the typology will not be exhaustive and indeed do not set out to be. Perhaps, rather, reviews should satisfy criteria of 'relevance' and 'sufficiency' with respect to the review question(s). As with much qualitative research, continuing to search 'the data' if no new categories are emerging is not necessary. However, consciously searching for negative instances, disconfirming cases or alternative explanations is likely to be important. Similarly, expert judgement is likely to be called into play when weighing limited studies which nevertheless provide new insights, against more substantial investigations which miss key issues.

3. Reviewing for policy making

The typology indicates that 'reviewing' can mean different things within the policymaking community itself - it is by no means homogenous, operating with different information needs, timescales, responsibilities and priorities with respect to reviewing and commissioning research. Review designs and methods need to be responsive to such diverse needs and timescales e.g. by encompassing an initial 'mapping' of the field.

4. Clarification of review questions

If a review is specifically oriented to policy, prior negotiation over the review question will be important, with multiple inputs from diverse stakeholders. This 'prior negotiation' will also be important in itself with respect to the communication and indeed creation of knowledge across stakeholder communities (researchers, policymakers, etc).

5. Membership of review groups

With respect to constituting review groups, policy and user stakeholders may bring particular interests and perceptions, just as academics/scholars may bring particular perspectives on theory and methodology. The key challenge in reviewing, as in other forms of analysis, is to engage with the evidence with an 'open', 'reflexive' mind and to apply appropriate criteria and judgement to its evaluation and synthesis, even if different stakeholders contribute to different parts of the process.

6. Resources, models and expert judgement

Extensive review procedures can be timeconsuming and potentially very expensive. One investigation (Boaz, Solesbury & Sullivan 2007) noted that the range of timescales devoted to producing a commissioned research review varied from 15 days - 30 months. Costs can run up to £75,000 or more (Oakley 2003). Selecting the model for the conduct of a review involves balancing user consultation, team activity and expert judgement, and the extent to which detailed procedures are adopted. Expert judgement may provide better 'value-for-money' because experts in a substantive field bring much prior knowledge to the process which is not costed. However, this must be balanced against the possibility of bias and the entrenching of expert opinion. More explicitness about approach and method is appropriate, whatever the purpose.

The story so far

In summary, while many issues remain unresolved, a commitment to 'multivocalism' in review processes has emerged from this TLRP Thematic Development. A range of types of review will meet different purposes for different audiences and require different 'fitness for purpose' methods and criteria. If multiple perspectives cannot be sought through group consultation across stakeholders, then researchers should seek out literature offering alternative and challenging views. Similarly, a commitment to a self-conscious reflexivity on the part of reviewers and review groups about the formulation of the review question and the pursuit of the review process is an important part of such a process.

Further information

Further information on systematic reviewing is available from a number of sources and websites. Both the author's web pages have links to relevant papers:

http://www.esri.mmu.ac.uk/resstaff/profile.php?name=Harry&%20surname=Torrance

http://www.sussex.ac.uk/education/profile53047.html

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The warrant

These findings emerged from TLRP Thematic Development initiative of carefully structured discussions and seminars that included a range of researchers, policymakers and practitioners. These included: Margaret Brown, Becky Francis, David Gough, Seamus Hegarty, Maggie MacLure, Andrew Pollard, Richard Pring, Catrin Roberts, Lesley Saunders, Judy Sebba, Gary Thomas, Harry Torrance, Geoff Whitty. Their views represented a wide range of perspectives on this topic and this Research Briefing has attempted to present these to offer the reader a broad view of the issues. Every meeting was documented and each draft of the notes was circulated to 'verify' the representation of the contributions made.

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Contacts:

Professor Harry Torrance

The Education & Social Research Institute, Manchester Metropolitan University, 799 Wilmslow Road, Didsbury, Manchester, M20 2RR

+44 (0)161 2472320 h.torrance@mmu.ac.uk

Professor Judy Sebba

Sussex School of Education, The Sussex Institute, Essex House, University of Sussex, Falmer, Brighton, East Sussex, BN1 9QQ

+44 (0)1273 678260

J.C.Sebba@sussex.ac.uk

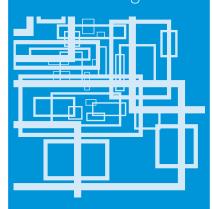
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TLRP Directors' Team

Professor Andrew Pollard | London Professor Mary James | London Professor Alan Brown | Warwick Professor Miriam David | London e-team@groups.tlrp.org

TLRP Programme Office

Sarah Douglas | sarah.douglas@ioe.ac.uk James O'Toole | j.o'toole@ioe.ac.uk tlrp@ioe.ac.uk

TLRE

Institute of Education University of London 20 Bedford Way London WC1H 0AL

Tel +44 (0)20 7911 5577

