

Research for Real Life Problems: Relevant, reliable and readable

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**Leading education
and social research**

Institute of Education
University of London

Research for real life problems: relevant, reliable & readable

Podcast for SEDL's Center on KTDRR
Austin, Texas

Sandy Oliver and Rebecca Rees
www.ioe.ac.uk/ssru





Sandy Oliver



Rebecca Rees

The Evidence for Policy and Practice Information and Co-ordinating Centre (EPPI-Centre) is part of the Social Science Research Unit at the Institute of Education, University of London.

It is dedicated to making reliable research findings accessible to the people who need them, and supporting the use of evidence in policy, practice or personal decisions.

Outline

- Why research is left on the shelf
- Solutions include making research more
 - Reliable by using multiple studies
 - Relevant by involving stakeholders
- Getting research used



Drawing on your own experience...

Why do you think research findings are unread or unused?

Alternatively, can you think of some research findings that have really made a difference?

Influenced decisions?

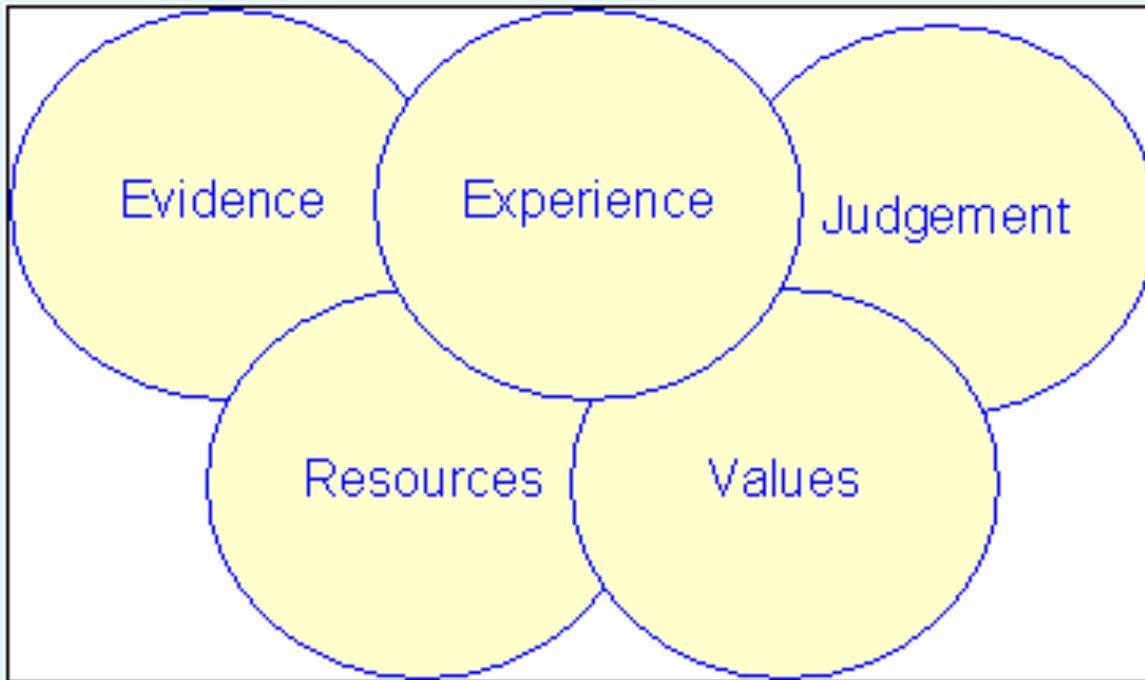
Made change happen?

Where do policy makers get their ideas?

- ‘Experts’ evidence (incl. consultants and think tanks)
- Opinion-based evidence (incl. lobbyists/pressure groups)
- Ideological ‘evidence’ (party think tanks, manifestos)
- Media evidence
- Internet evidence
- Lay evidence (constituents’, citizens’ experiences)
- ‘Street’ evidence (urban myths, conventional wisdom)
- Research Evidence

Source: Phil Davies, 2007 Policy Makers’ Hierarchy of Evidence

Basis of decisions



Barriers to impact of research (1)

Barriers to researchers engaging in research impact activities:

- lack of resources – money and time
- lack of skills
- lack of professional credit for disseminating research.

» Nutley S. Increasing research impact: early reflections from the ESRC EvidenceNetwork. ESRC UK Centre for Evidence Based Policy and Practice: Working Paper 16. ESRC UK Centre for Evidence Based Policy and Practice, 2003.

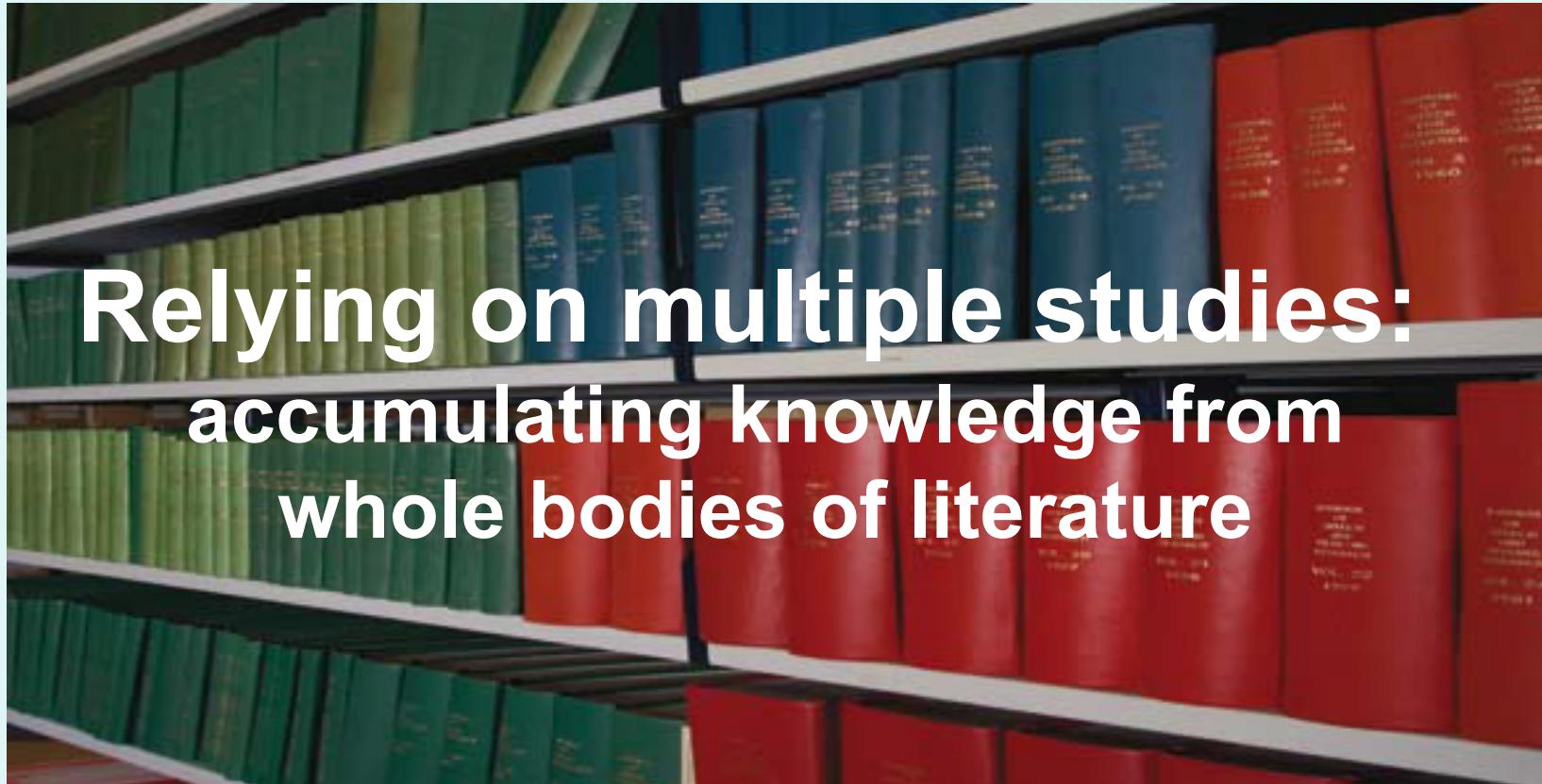
Barriers to research impact (2)

Barriers to users' engagement with research:

- Lack of time
- Poor communication of research
- Perceptions of research
 - Not timely or relevant
 - Controversial or upsetting status quo
 - Threat to 'craft skills' and experience
- Other sources of information valued more, esp. policy makers
- Failure to value research at an organisational level, or an actively hostile organisational culture.
 - » Nutley S. Increasing research impact: early reflections from the ESRC EvidenceNetwork. ESRC UK Centre for Evidence Based Policy and Practice: Working Paper 16. ESRC UK Centre for Evidence Based Policy and Practice, 2003.

Getting research off the shelf...

- Researchers entering the world of decision-makers,
- Decision-makers entering the world of researchers, or
- Creating a shared world for doing and using research



Dangers of research-informed decisions

Individual studies may...

- Be too small
- Be poorly done
- Not share the same context
- Have spurious results

Considering more studies together...

- Increases the size of the evidence
- Offers a choice of better studies
- Offers a range of contexts
- Offers ‘average’ results/range or diversity of results

Choosing studies to consider?

Choosing...

- Those we know?
- Those we like?
- Those in journals to hand?
- Those in English?
- Those we've done?

= Traditional approach

Choosing...

- Those that are relevant?
- Those that are well done?
- All that can be found?

= Systematic approach

US Congress in the late 1990s

- “Overall, the evidence does not conclusively establish that [blood alcohol limit] laws, by themselves, result in reductions in the number and severity of alcohol-related crashes,”
General Accounting Office’s narrative review of individual studies
- Report seen as favouring the alcohol industry,
- A subsequent systematic review suggested such laws could be expected to drop alcohol-related traffic fatalities by about 7 percent.
- “When you looked at all of the data, aggregated into the same table, it became very clear that whatever problems the studies had, they were all coming to roughly the same conclusion.”
- Findings sent to federal legislators
- Congress then withheld federal highway construction funds from states that did not pass such laws.
- Thought to save at least 400-600 lives each year

Aggregating research
predominately add up
(aggregate) findings of
similar primary studies to
answer a research
question...

... to provide a reliable
measure and indicate a
way forward



Configuring research
predominately arranging
(configuring) the findings
of primary studies to
answer a research
question....

... to offer a meaningful
picture of what research is
telling us





Smoking cessation in pregnancy

Practitioner response to systematic reviews

1995

Statistical meta-analyses

No mention of

- Potential harms
- Theory underpinning interventions
- Emotional and social outcomes
- Social context of women smoking
- Information for implementation

**Totally inadequate justification
for intervening in women's
lives**



Smoking cessation in pregnancy

stakeholder influence of evidence

1995

Statistical meta-analyses

No mention of

- Potential harms
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- Emotional and social outcomes
- Social context of women smoking
- Information for implementation

**Totally inadequate justification
for intervening in women's**

21

2005

Women's views sought

Health promotion practitioners' views sought

Review addresses

- Potential harms
- Theory underpinning interventions
- Emotional and social outcomes
- Social context of women smoking
- Information for implementation

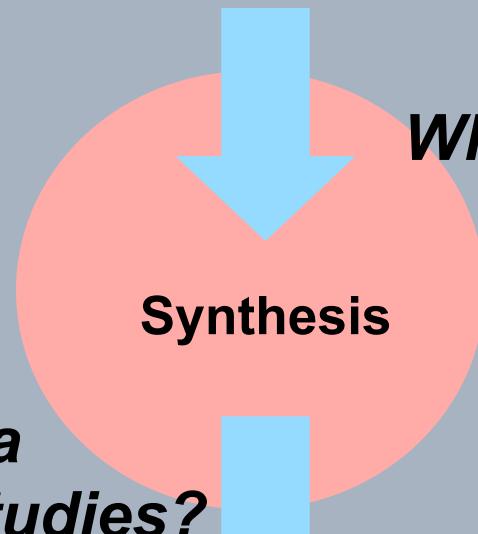
Cited in policy support documents internationally



Who asks the review question?

Review Question

Who authored the included studies?



Who designs the review and the review tools?

Who provided data for the included studies?

Who conducts the review; handles the data?

Review Findings

Who interprets the review findings?



Participatory reviews

Young People in Research: How to involve us
Guidance for researchers from the PEAR young people's public health group

Who we are

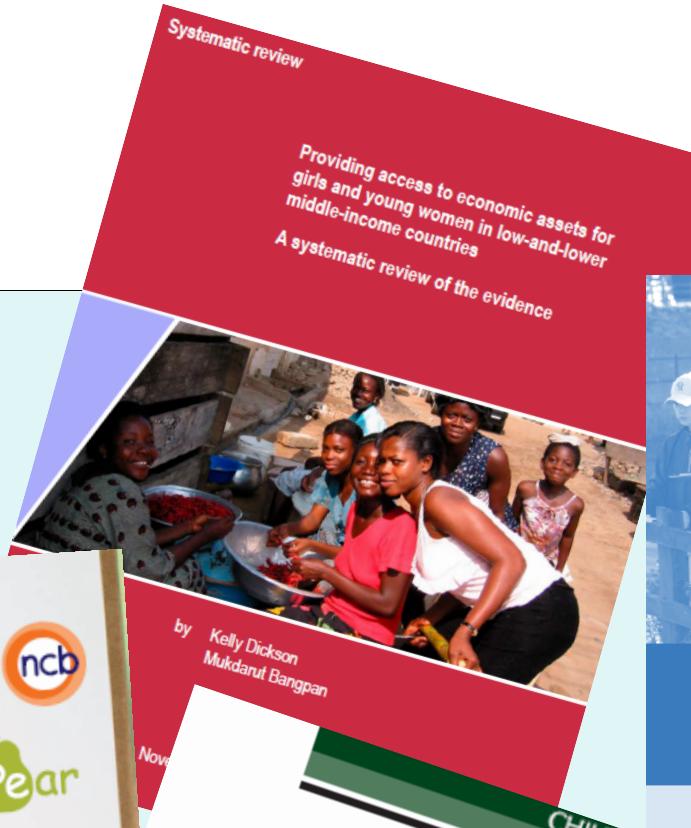
- PEAR – which stands for Public health, Education, Awareness, Research – was an NCB Research Centre project supporting young people's involvement in public health research. The project ran from 2008–2010, supported by the Wellcome Trust. The PEAR group was made up of us – 20 young people, aged 13–18, from London and Leeds. We have:

Who these guidelines are for

- Because the PEAR group has been involved in quite a few different research projects, lots of adults have asked us for our views on how to involve young people in research.

INTRODUCTION
The educational needs of young people are poor.

ncb
Pear



Conflict resolution, peer mediation and young people's relationships

Review conducted by the Personal, Social and Health Education (PSHE) school-based Review Group

Report written by Jo Garcia, Jennifer Sinclair, Kelly Dickson, James Thomas, Jeff Brunton, Marc Tidd and the PSHE Review Group

EPPi-Centre
Social Science Research Unit
Institute of Education
University of London

Report no. 1406R - April 2006

GETTING RESEARCH USED

Push models

Recent news

The latest press releases from the IOE

UK children are not getting sufficient exercise according to new research

Half of all UK 7 year olds are sedentary for six to seven hours every day, and only half take the recommended daily minimum of moderate to vigorous physical activity, according to research based on the Millennium Cohort Study.

22 August 2013

Reaching policy makers

The power of stories

- Stories are a powerful way to get a message across, academic research can be used to justify decisions and donors want to see data.
- Stories are important as they offer ‘hooks’ by which policy makers can get hold of an issue; this does not negate the need for the background base of evidence but shows how the evidence can be formatted to reach an audience.

Communicating research



national
co-ordinating centre
for public engagement

HOME

WHAT IS PUBLIC
ENGAGEMENT?

WHY DOES IT
MATTER?

HOW TO
DO IT

HOW TO
SUPPORT IT

HOW WE
CAN HELP

HE STEM Online Tools

Communication skills for public engagement

This module is designed to help you develop your skills in presenting, writing for different audiences, poster design and busking.

You can either work through the tutorials in sequence, or dive in to any of them for a refresher on the subject.

In addition, you might like to visit the 'How to' section of our website to access a full range of public engagement guides, methods, case studies and more.



Working with mass media

- Structured press releases – for accurate, balanced info
- Fact boxes – for illustration
- Press conferences – for general or specialist press
- Providing stories – to personalise a message
- Avoiding jargon – plain language (and technical language in brackets)
- Providing access to experts – for interviews
- Tip sheets – what to ask the experts
- Training – for understanding research

Oxman AD, Lewin S, Lavis J, Fretheim A. SUPPORT Tools for evidence-informed health Policymaking (STP) 15. Engaging the public.
Health Research Policy and Systems 2009, 7(Suppl 1):S15 (Open Access)

Teaching critical appraisal skills in healthcare settings (Review)

Horsley T, Hyde C, Santesso N, Parkes J, Milne R, Stewart R



This is a reprint of a Cochrane review, prepared and maintained by The Cochrane Collaboration and published in *The Cochrane Library*
2011, Issue 11

<http://www.thecochranelibrary.com>



Pull models

Critical appraisal skills training for

- clinicians and managers
- consumer health information services
- health promotion specialists

Perpetuating Myth or Discovering Reality in Research: Part 1

Can you read a research paper and decide whether it is useful or not? Gill Gyte and Phyll Buchanan of the NCT Research and Information Group help you to assess research papers and make judgements on their conclusions.

In looking at the myths and realities of research, we do not intend to discuss the possibility of researchers inventing or changing data, although this does very occasionally occur. Rather, we want to look at the more common problem of the conclusions that are drawn not being in line with the data presented, and so myths are perpetuated rather than realities. This problem can be exaggerated when the media report on research findings because, in shortening the article and simplifying the language for their readers, the findings and conclusions can be misrepresented.

In deciding for yourself between the myths and realities in research, you need to look at the questions being asked and the tools that have been chosen to try to answer the questions. If you think that the right tools have been used and that the tools have been used

Examples of the sort of research questions that might be asked and the tools that might be used

What is the incidence of perineal trauma in our maternity unit?

This could be answered by:

- a questionnaire to midwives;
- a questionnaire to a representative sample of mothers;
- collecting information from hospital notes.

Here, collecting information from hospital notes will probably give the best data, as you are very unlikely to get everyone responding to a

Combines the best of Evidence-Based Health Care and information technologies to provide a unique tool for people making decisions concerning clinical or health-policy questions.



Search in your own language, or in English.
<http://www.epistemonikos.org/>

Relationship models

A review with consultations - impact of involvement

In order that our review might be informed by those closest to observing any interaction between obesity and attainment, we sought the perspectives of teachers and young people to identify the causal pathways that seemed most pertinent to them.



Childhood obesity and educational attainment

A systematic review

Report written by Jenny Caird, Josephine Kavanagh, Kathryn Oliver, Sandy Oliver, Alison O'Mara, Claire Stansfield and James Thomas

..the variables used in statistical analyses failed to capture many of the potential causative factors identified by the teachers and young people



A participatory review - impact of involvement

Research question
**What is known about
the barriers to and
facilitators of
HIV health promotion for
men who have sex with men?**

Advisory Group (3, 2hr meetings & supporting materials)

Funder	Department of Health, England
Researchers	Epidemiology, gay men's health
Other stakeholders	Service provision /advocacy groups

Through discussion

**Changed the theoretical
Framework – control, not risk**

Through a formal
identification and
voting process

**Selected priority population
groups – young men, HIV + ...**

Selected priority outcomes

Research findings

Rees and Oliver (2007) in Coren. Using knowledge in social care
RESEARCH RESOURCE 02. SCIE

Systems models

At the heart of government: Cabinet Office, Social Exclusion Taskforce

“Think Research: Using research evidence to inform service development for vulnerable groups”

- Locating relevant research evidence
- Appraising and reviewing research
- Using research evidence in service planning
- Outcome focused evaluation

<http://toolkit.iriss.org.uk/system/files/Thinkresearchevidence.pdf>
(2008)

In Government agencies

NICE

Published public health guidance

- Community engagement
- Methods to increase physical activity
- Quitting smoking in pregnancy and after childbirth
- Maternal and child nutrition
- Needle and syringe programmes
- etc.



NICE welcomes new users from the former
National electronic Library for Medicines
(NeLM). [Click Here for Information](#)

Evidence Search
Health and Social Care

Turning knowledge into action

- **‘Linear’ , push-pull models**
 - Knowledge seen as a product to be offered or sought
 - Effective communication is essential
- **Relationship models**
 - Close collaboration between those generating and using knowledge
 - Shared ideas and mutual learning are central
- **Systems models**
 - Works for complex, adaptive systems
 - Change happens through interrelated stakeholders

‘Linear’, push-pull models

Press releases, critical appraisal skills, briefings etc

are helpful for planning and understanding change when

- Ideas pass easily between people because
 - They are clear, simple, easy and cheap to try
 - There are strong institutional structures and resources, a supportive structure and incentives for changing behaviour

Google

Relationship models

Advisory groups, collaborative projects etc

are helpful for planning and understanding change when

- Ideas are more complex, local knowledge is valuable
- Complex problems need changes in systems that are supported by a range of people
- Two-way communication and close collaboration is well supported

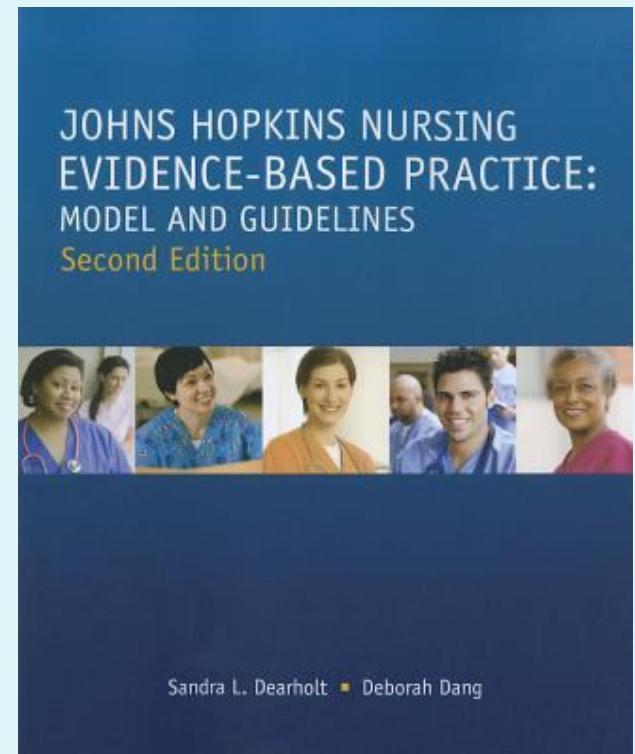


Systems models

Developing formal guidance

is helpful for planning and understanding change when

- All the key stakeholders can play a role in understanding problems and seeking solutions
- Organisations invest time and resources
- Getting knowledge into action is part of organisational strategies



Reminder

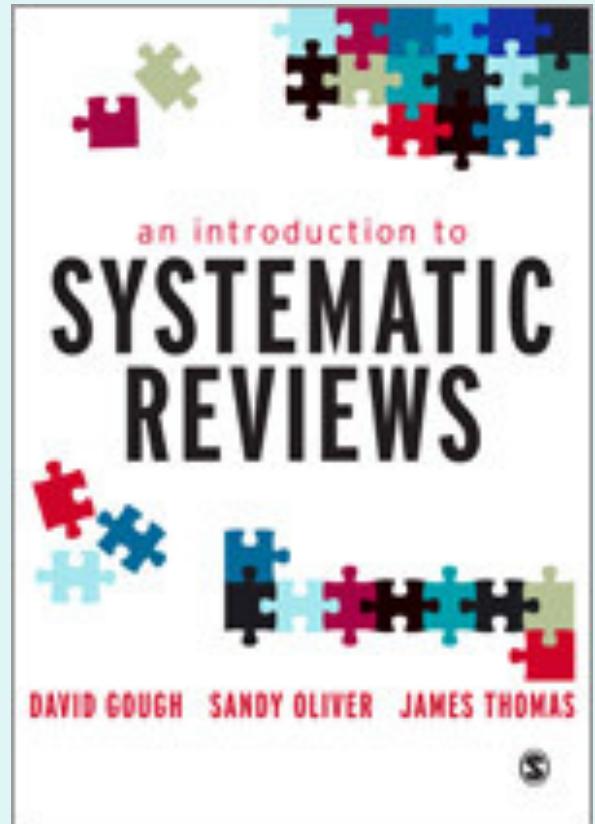
Getting research off the shelf requires...

- Researchers entering the world of decision-makers,
 - Decision-makers entering the world of researchers, or
 - Creating a shared world for doing and using research
-
- How it is done depends on the complexity of the change required, the resources and contextual support available and enthusiasm for entering different worlds.

More ideas at...

<http://www.uk.sagepub.com/books/Book234152/toc>

<http://eppi.ioe.ac.uk/>





Thank you

*Please fill out the
brief evaluation form:*

<http://survey.sedl.org/efm/wsb.dll/s/1g160>