The international need for robust and relevant knowledge and how to **benefit from systematic** use of research

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EVIDENCE INFORMED POLICY AND PRACTICE IN EDUCATION IN EUROPE

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The EPPI-Centre is part of the Social Science Research Unit at the Institute of Education, University of London



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EIPPEE ABOUT US GET INVOLVED FINDING RESEARCH USING RESEARCH TRAINING RESOURCES CONTACT US



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Training

The EIPPEE Network can provide training and support for you and your organisation in research synthesis and evidence informed policy and practice. To find out more click the link below.

Learn More

Search portal

Access our search portal to identify quality assured research in education from around Europe. Users are able to search multiple websites and add their own resources.



Getting involved

Do you want to get involved with the EIPPEE Network?

Learn More

Welcome to the EIPPEE Network

The EIPPEE Network is made up of organisations and individuals working together in groups on specific aspects of the use of evidence. They work in dozens of different countries and communicate mainly electronically and occasionally by meeting.

News

 Slides available from @wtgrantfdn seminar 07/05 Current research priorities in the study of evidence

Four gaps we need to attend to -

- To provide and use research knowledge more effectively:
- 1. Awareness and use of research findings
- 2. Synthesis of good relevant research
- 3. Relevance and applicability of research
- 4. Policy and practice on research use (and research on research use)



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An inquiry into the Nature, Caufes, and Cure, of that Difeafe. Medicol. Together with

A Critical and Chronological View of what has been published on the subject.

By JAMES LIND, M. D. Fellow of the Royal College of Phylicians in Edisborg?,

E D I N B U R G H: Frinted by SANDS, MUNEAT, and GOCHANK, For A. KINCAID & A. DOWALDION, MDGCLIIL

1. Awareness and use gap

wifibly produced. But as it is no eafy matter to root out old prejudices, or to overturn opinions which have acquired an eftablishment by time, cuftom, and great authorities; it became therefore requisite for this purpose, to exhibit a full and impartial view of what has hitherto been publifhed on the fourty; and that in a chronological order, by which the fources of those mistakes may be detected. Indeed, before this fubject could be fet in a clear and proper light, it was necessary to remove a great deal of rubbilh. Thus, what

www.jameslindlibrary.org



With thanks for slide to Prof Amanda Burls

Treatment for heart attack: "Door to needle time" (1997) in 48 UK hospitals in West Midlands

Awareness to action gap



With thanks for slide to Prof Amanda Burls



2. Synthesis of good relevant research gap

- Rigour, representativeness and relevance of the research that we use to inform decision making.
- EIPPEE aim to make use of research in education. Lots of research but:
 - Quality / rigour of its execution
 - Fitness for purpose
 - Relevance to use
 - Difficult to access and to synthesize the findings

Systematic reviews – explicit methods of review

- Secondary research bringing together what we know from good relevant research should be the 1st thing we do:
 - What do we want to know?
 - What do we know already (mapping and synthesis)?
 - What more do we want to know?

(research gaps & appropriate methods to fill these)

Systematic reviews more transparent about relevance, representativeness and quality than many traditional reviews and expert views

3. Relevance and applicability gap

- Effectiveness (what works) is a key question, but include important issues of generalizability?
 - Effect so powerful and universal that do not need a RCT (e.g. parachutes)
 - Near universal effect but need a RCT to identify this effect
 - Is this effect context dependent? If so, then when and where does it have effect?



Aggregative approaches in research

Aggregative reviews predominately add up (aggregate) findings of primary studies to answer a review question...

... to indicate the direction or size of effect





RCT forest plot: Does children's participation in structured arts activities improve their cognitive learning outcomes?



Newman M, Bird K, Tripney J, Kalra N, Kwan I, Bangpan M, Vigurs C (2010) Understanding the impact of engagement in culture and sport: A systematic review of the learning impacts for young people. London: Department for Culture, Media and Sport. <u>http://culture.gov.uk/images/research/CASE-systematic-review-July10.pdf</u>



Context dependent

- Many other variables
- Complexity
- Mechanisms
- Fit for purpose user driven questions (not just supply side (push) research



Why might people want to use research?

To know what works but also:

- When and where and why

(12)

- To provide insights and understanding of people's experiences, of causal factors, etc
- To provide data on prevalence and evidence of causal effect, etc.

So similar to the questions asked by researchers. BUT policy makers and practitioners have to make decisions so: contextually bound + many other factors to consider

So need many types of research question

Question	Туре
What do people want?	Needs
What's the balance of benefit and harm of a given approach?	Impact/ effectiveness
Why/how does it work? How does it vary in effect?	Process/explanation
What is happening?	Implementation
What relationships are seen between phenomena?	Correlation
What are people's experiences?	Views/perspectives
What resources are needed ?	Costs



Configure ideas, concepts, hypotheses



The concepts defining the facts

Aggregate data Test hypotheses



Configurative approaches in research

- Configurative reviews predominately arrange (configure) the findings of primary studies to answer the review question....
- ... to offer a meaningful picture of what research is telling us





Philosophy:	Idealist	Realist
Relation to theory:	Generate Ex	plore Test
Approach to synthesis:	Configuring	Aggregating
Methods:	Iterative	A priori
Search:	Theoretical search	'Exhaustive' search
Quality assessment:	Value uniqueness of contribution	Avoid bias
Product:	Emergent concepts	Empirical findings
Review use:	Enlightenment	Even if no Instrumental

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4. Policy, practice and research on 'research use' gap

- Policy makers and teachers work in the real world
- Use (demand/pull) from research may be more important to use than supply/push of research findings
- Consider many other factors other than research
- We need to study these processes



Local Decisions





Slide from Vivian Tseng presentation at SSRU, 7th May 2014

Evidence-to-Use System



Demand side requirements for research to be used by people and organisations

- Motivation: culture; training; accreditation and review; roles and responsibilities
- Resources: skills; resources; products; facilitation; power
- System: structures; procedures; supports for motivation and resources at multiple levels (and evidence advisory bodies)

Need for a policy for research use and studies of such policies and resultant practices (research on research use) *C*PPI



Thank you for your attention

Websites

EIPPEE Website: <u>http://www.eippee.eu</u> Evidence and Policy: <u>http://www.policypress.co.uk/journals_eap.asp</u> EPPI-Centre Website <u>http://eppi.ioe.ac.uk</u>

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An introduction to systematic reviews: Sage Publications Ltd



Gough D, Oliver S, Thomas J (2013) *Learning from Research: Systematic Reviews for Informing Policy Decisions: A Quick Guide.* London: Alliance for Useful Evidence., Nesta. <u>http://www.alliance4usefulevidenc</u> <u>e.org/assets/Alliance-FUE-reviewsbooklet-3.pdf</u>



Gough D, Thomas J, Oliver S (2012) Clarifying differences between review designs and methods. *Systematic Reviews Journal*. <u>http://www.systematicreviewsjournal.com</u>

Gough D, (2013) Meta-narrative and realist reviews: guidance, rules, publication standards and quality appraisal. *BMC Medicine*, **11**:22 <u>http://www.biomedcentral.com/1741-7015/11/22</u>