

Evaluation of the Stronger Families and Communities Strategy

**Evidence-based
policy and practice**

Issues Paper



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Funding for the evaluation of the SFCS 2000-2004 was provided by the then Commonwealth Department of Families and Community Services

Published 2008

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The opinions, comments and/or analysis expressed in this document are those of the authors and do not necessarily represent the views of the Minister for Families, Housing, Community Services and Indigenous Affairs or the Australian Government Department of Families, Housing, Community Services and Indigenous Affairs, and cannot be taken in any way as expressions of Government policy.



Annotated Acronyms

AIFS Australian Institute of Family Studies

AIFS hosted the Stronger Families Learning Exchange and has an ongoing role in the SFCS 2004-2009 hosting the Communities and Families Clearinghouse Australia (CAFCA). www.aifs.gov.au

ARACY Australian Research Alliance for Children and Youth

ARACY is a national collaboration of researchers, policy makers and practitioners from a broad range of disciplines to generate and translate knowledge to enhance the well-being and life chances of children and young people. ARACY is now using online conferencing technology to conduct presentations and discussions with the Communities for Children Facilitating Partners at 45 sites around Australia.

www.aracy.org.au

CAFCA Communities and Families Clearinghouse Australia

Funded by the SFCS 2004-2009 the CAFCA, within the AIFS, aims to improve access to current information and resources to assist those working in the field of early childhood and community development. It continues the work of the [Stronger Families Learning Exchange](#) which supported the 2000-2004 Stronger Families and Communities Strategy.

www.aifs.gov.au/cafca/index.html

FaCS Department of Family and Community Services

The Australian Government department with responsibility for administering the Strategy until January 2006. www.facs.gov.au

FaCSIA Department of Families, Community Services and Indigenous Affairs

The Australian Government department with responsibility for administering the SFCS 2004-2009 since January 2006. www.facsia.gov.au

SFLEx Stronger Families Learning Exchange

A research unit of AIFS funded by the SFCS 2000-2004 to provide support to projects funded under the Stronger Families Fund in the 2000-2004 Strategy, to implement action research. www.aifs.gov.au/sf

Under the new Strategy, this type of support will be provided by Communities for Children (CfC) Facilitating Partners. In addition through CfC and Invest to Grow (ItG) the department has funded Local Evaluators to assist with project design, action research, and evaluation. Three streams of the new Strategy (all streams except for small equipment grants) are provided with support through the Communities and Families Clearinghouse Australia (CAFCA) and the Australian Research Alliance for Children and Youth (ARACY).



SFCS Stronger Families and Communities Strategy - also referred to as the Strategy www.facsia.gov.au/sfcs

The first version of the Strategy, 2000-2004, funded 7 linked community based initiatives, as well as several broader initiatives, to strengthen families and communities.

The renewal of the Strategy (Phase 2) was announced in April 2004 with funding of \$365 million, which was subsequently increased to \$490 million, with a specific early childhood focus. In the new SFCS, attention has been focussed on early intervention in early childhood and is the primary vehicle for implementing the Government's National Agenda for Early Childhood (NAEC), which focuses on improving national coordination.

Phase 2 of the Strategy commenced in 2004 and will continue over five years until 2009. It aims to help families and communities build better futures for children; build family and community capacity; support relationships between families and the communities they live in; and improve communities' ability to help themselves. Phase 2 of the Strategy comprises four streams, the Communities for Children initiative, Invest to Grow, Local Answers and the Choice and Flexibility in Child Care initiative.



Summary

There is now an increasing interest in evidence-based policy and practice in Australia and internationally. This paper sets out some key ideas in evidence-based policy and practice and discusses different approaches. This paper was developed as part of the evaluation of Stronger Families and Communities Strategy 2000-2004 and sets out the conceptualisation of evidence-based policy and practice that was used in that evaluation.

The paper is being made available to organisations managing projects funded under the Strategy 2000-2004 and 2004-2008, to staff in the Department of Families, Community Services and Indigenous Affairs, and to other interested individuals and organisations to inform future policy and program development. Feedback on this paper is most welcome, and can be sent to the Evaluation Project Director Dr Patricia Rogers, CIRCLE at RMIT University, 124 Latrobe Street Melbourne VIC 3000, fax (03) 9925 2998, email Patricia.Rogers@rmit.edu.au.

Key activities in evidence-based policy and practice

This paper describes a cycle of six activities involved in evidence-based policy and practice:

1. Retrieving or generating evidence
2. Validating evidence
3. Synthesising evidence
4. Communicating evidence
5. Using evidence to guide policy and/or practice
6. Further contributing to the evidence base.

Particular approaches to evidence-based policy and practice undertake these activities in different ways.

The activity of retrieving or generating evidence can focus on formal research or draw from a larger pool of information, including local project information and corporate and community memory.

Validating evidence, determining whether the evidence is sufficiently credible and relevant, may involve researchers assessing research designs or practitioners assessing the credibility of the source of the evidence.

Synthesising evidence, combining information from different sources to generate a summary of current knowledge, can use statistical meta-analyses, literature reviews or realist synthesis.

Communicating evidence can be done by publication in peer reviewed journals, presentations at conferences or meetings, documents available at publicly available websites and community education campaigns. Communication processes may be tailored for different audiences.



Using evidence in policy and practice can be done through establishing and following prescriptive guidelines for practice, or by supporting practitioners to draw on evidence selectively to be more responsive to local or individual needs.

Further contributing to the evidence base can be done by documenting and analysing the implementation of policy or practice, or by developing further research projects to fill identified gaps in evidence.

Approaches to evidence-based policy and practice

In this paper we describe four particular approaches to evidence-based policy and practice, which vary in terms of each of the six activities outline above: how and by whom evidence is located or generated; how and by whom evidence is validated; how and by whom diverse evidence is synthesised; how this is communicated; how it is expected to have an impact on policy and practice; and how further evidence is generated.

The four approaches discussed in this paper are:

1. What works?
Statistical meta-analysis of experimental and quasi-experimental research studies
2. What works for whom?
Realist synthesis of diverse evidence
3. Proven practices
Literature review of demonstrably effective projects or policies
4. Corporate and community memory.
Information held by an organisation or a community about previous projects and policies and current needs

Some discussions of evidence-based policy and practice advocate strongly for a particular approach. This paper argues instead that effective evidence-based policy and practice draws on an appropriate mix of these different approaches. Where there is agreement about outcomes and certainty about how these can be achieved, a prescriptive approach is appropriate; where there is not, a more adaptive and responsive approach is more appropriate.

The term 'evidence-based policy and practice' can, in some contexts, imply a particular approach – the development and enforcement of centrally developed policies and practice guidelines based on a meta-analysis of experimental research studies. For this reasons, many researchers and practitioners are suggesting that 'evidence-informed' might be a more appropriate term than 'evidence-based', as it suggests a use of evidence that is locally adaptive, and takes into account other relevant factors, rather than rigid rule-based processes that may not be universally appropriate.

In this paper the term evidence-based is used in a broad sense that includes the range of different types of evidence and doesn't preclude local adaptations.



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1 Introduction

The rising interest in evidence-based policy and practice

The utilisation of evaluation and research findings has been a focus of researchers for several decades. More recently, there has been increasing interest internationally in evidence-based policy and practice (EBPP) in areas such as medicine and health care, social work and welfare, substance misuse, and education.

Some examples of the organisations involved in supporting evidence-based policy or practice are described briefly below.

Table 1: Some organisations involved in supporting evidence-based policy or practice

Organisation	Role in supporting EBPP
National Institute of Clinical Studies, AUS http://www.nicsl.com.au Established by the Australian Government in December 2000	Supports the processes involved in implementing evidence based practice in health care Aim is to close the gap between the best available evidence and current clinical practice.
The Campbell Collaboration http://www.campbellcollaboration.org An international non-profit organization established in 2000	Prepares, maintains and disseminates systematic reviews of studies of interventions in the social, behavioural and educational arenas to help people make well informed decisions.
The Evidence Network UK http://www.evidencenetwork.org Established in 2000 through funding by the Economic and Social Research Council	Conducts research Builds skills in EBPP Disseminates information and provides a forum for debate.
What Works Clearinghouse USA http://www.whatworks.ed.gov/ Established in 2002 by the U.S. Dept. of Education's Institute of Education Sciences	Collects and screens studies of the effectiveness of educational interventions – emphasis is on experimental or quasi experimental research.
Promising Practices Network USA http://www.promisingpractices.net/ Organised by the RAND Corporation	Summarises research into proven or promising practice (only research that uses control or comparison groups)



This paper builds on the foundation developed by Nutley et al in their review (2002/3) of evidence around what influences policy identified ten major issues.

1. Research is only one source of evidence for public policy and practice.
2. Agreement as to what counts as evidence should emphasise a 'horses for courses' approach. 'Ways and means' matrices – ways of understanding related to the most appropriate means for achieving each kind of understanding – are likely to be more beneficial in the long run than simple hierarchies of evidence.
3. Stakeholder involvement in the creation of wide-ranging R&D strategies is crucial.
4. Such strategies need to address capacity building as well as priority areas for future research.
5. Systematic reviews have the potential to increase access to robust bodies of knowledge but the cost of such reviews and the need for further methodological development in this area are barriers to progress.
6. We know much about the features of effective dissemination but even good dissemination has its limits – 'pushing' evidence out is not enough, there is also a need to develop the 'pull' for evidence from potential end users.
7. Uptake needs to be defined broadly – there are many ways in which evidence might be utilised appropriately.
8. There are a myriad of initiatives aimed at increasing the use of evidence in policy and practice but there is little systematic evidence on the effectiveness of these.
9. Tentative evidence suggests that multi-faceted strategies that explicitly target barriers to change work best.
10. Partnerships models, which encourage ongoing interaction between evidence providers and evidence users, may be the way

What activities are involved in evidence based policy and practice?

Drawing on the research and policy literature on evidence-based policy and practice (see detailed references at the end of the paper), it is useful to consider six different activities involved in evidence-based policy and practice.

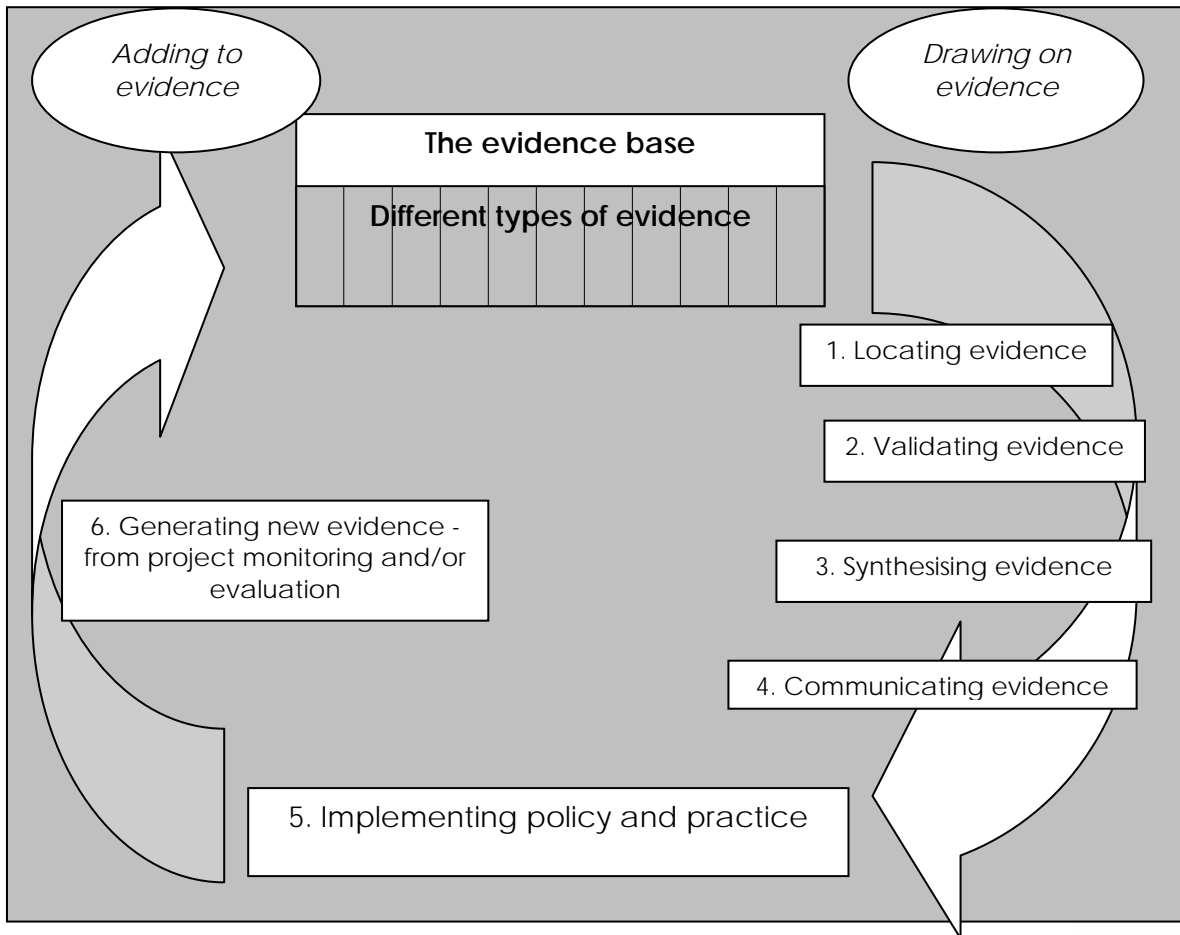
Table 2: Six activities in evidence-based policy and practice

Activity	Which involves
1.Retrieving and generating evidence	Locating existing evidence, undertaking or commissioning activities to generate new evidence
2.Validating evidence	Assessing the veracity, validity, reliability and appropriateness of the evidence, and developing agreed methods for doing this
3.Synthesising evidence	Combining different evidence from different sources and drawing overall conclusions
4.Communicating evidence	Making summaries of the evidence available to intended users (including sometimes links to original sources)
5.Applying evidence	Using evidence to guide policy and or practice
6.Contributing to the evidence base	Generating further evidence from the application and adding this to evidence base.



These six activities can be thought of as a sequence, as shown below.

Figure 1: The cyclic nature of evidence-based policy and practice



Successful evidence-based policy and practice requires attention to all of these different activities, including making the link back to further contributions to the evidence-base. The evidence base that informs practice and policy is continually developing as experience and research generates new information.



2 Activities involved in evidence-based policy and practice

Locating and/or generating evidence

What is the evidence-base?

Talking about the evidence base is perhaps misleading as it implies that there is a single body of knowledge that is both accessible and seen by everyone to be credible and relevant. Instead, different approaches to evidence-based policy and practice are based on different views of what constitutes the evidence base.

Some approaches to evidence-based policy and practice only include formal research and evaluation studies. This can be helpful in terms of setting some minimum quality standard for the studies (although it is not perfect, as discussed in the next section on validating evidence) but it can also be problematic in terms of the types of evidence it excludes. Publication bias (where studies with statistically significant results are more likely to be accepted for publication) means that relying on published studies may overstate the effectiveness of interventions. Unpublished studies, which might present a different view, or be based on more local examples, can be difficult to discover and access. Database searches often focus predominantly on studies from the U.S.A. which may not always be culturally or practically relevant in an Australian context.

Some approaches to evidence-based policy and practice take the opposite approach and, on the basis of relevance and credibility, only include locally generated evidence about what is needed and possible and what has been found to work.

Ideally the search for evidence includes formal and informal, local and international evidence and then assesses them in terms of their credibility and relevance.

Who retrieves this evidence and how?

Given the different understandings of what constitutes the evidence base, there are different approaches to who retrieves the evidence and how. Evidence may be located or generated by expert researchers or through the use of inclusive participatory processes.

A systematic approach to searching for evidence can address the tendency to search for, and remember, evidence that supports one's views. It is important that evidence about what doesn't work – as well as what does work is actively sought.

Published reports and articles are becoming increasingly accessible, particularly with the advent of web-based publication of reports and the development of clearinghouses.

An organisation's corporate memory of what has worked in the past may be held in printed reports and people's heads – and may or may not be readily retrieved.



Table 3: Some Australian clearinghouses in the area of families and children

National Child Protection Clearing House, Australian Institute of Family Studies	http://www.aifs.gov.au/nch/
Proposed Australian Research Alliance for Children and Youth Clearing House	http://www.aracy.org.au/clearing_house.htm
Australian Domestic and Family Violence Clearinghouse	http://www.austdvclearinghouse.unsw.edu.au/Default.htm
Australian Family Relationships Clearinghouse	http://www.aifs.gov.au/afrc/

Validating evidence

Who validates this evidence and according to what criteria?

The evidence that has been gathered needs to be assessed in terms of its credibility and relevance, with only validated evidence being used.

One approach to validating evidence is to use a hierarchy of evidence, where only certain research designs and data types are deemed to be sufficiently credible to be used to guide policy and practice. This approach usually only includes, or significantly emphasises, evidence that has come from particular types of research – such as randomised control trials or quasi-experimental designs with comparison groups. Other types of evidence, such as descriptive studies and case studies, are seen as only useful in terms of describing implementation or the implementation context. Validation of this type is done by researchers, as a level of expertise in research methodology and statistical analysis is required to assess the quality of evidence generated by experimental research.

Some approaches to evidence-based policy and practice only include, or significantly emphasise, evidence that has come from particular types of research – such as randomised control trials or quasi-experimental designs with comparison groups. This approach has the advantage of having clear guidelines for validation. Its disadvantage is that it excludes much evidence that may be highly relevant and depends on a narrow range of evidence. There are many gaps where research of this type is difficult or impossible to do. Experimental and quasi-experimental designs are not easy or feasible to do for large-scale systemic changes, such as are often undertaken in implementing government policy, or for local interventions where the number of people involved are small.

Another approach to validating evidence is to consider whether it is “fit-for-purpose”, and to consider a range of research designs as capable of producing credible impact evaluations. This has the advantage of increasing the range of evidence that is available, but the methods for validation are less clear.



End-users, who develop and implement policies and practice, may have quite different criteria for validating evidence (such as valuing personal experience from respected practitioners, for example) or may need higher levels of credibility for evidence that conflicts with their personal experience. For example, if a practitioner has had prior experience of a severe negative outcome from a particular intervention, they may require very strong evidence that the same intervention won't have a negative outcome in a different context.

Synthesising evidence

How is evidence synthesised and by whom?

While some approaches to evidence-based policy and practice do not undertake synthesis at all, relying only on one study to make recommendations, most approaches draw on several studies and need a method for synthesis. Depending on the approach evidence may be synthesised by an 'expert' researcher with skills in statistical analysis, by an expert in the particular field of study, by practitioners to inform their own practice and/or by communities to inform planning and action.

A common form synthesis of multiple studies is a **literature review**, which describes the different findings of different studies, but does not systematically synthesise them. The advantages of this method are that it provides readers with an overview of the different studies and findings, and requires only skills that are covered in most undergraduate courses. Its disadvantage is a lack of a systematic method to synthesise studies, including prioritising the studies and dealing with conflicting findings.

'**Meta-analysis**' is a term that is sometimes used generally to refer to the process of synthesis. It is more precisely used to refer only to a particular method of synthesis that involves statistical summary of the effect sizes of studies that have used experimental or quasi-experimental designs to compare alternative interventions or to compare an intervention to a control or comparison group. Since meta-analysis depends on a narrow range of previous research, it is difficult to include consideration of the impact of context on 'what works'. It is therefore most likely to be appropriate when an intervention is both necessary and sufficient to produce an outcome – it will be less useful, and potentially quite misleading when an intervention contributes to an outcome in combination with other factors, or when there are alternative ways of achieving the outcome, or where performance is highly dependent on context (such as when an intervention works for some groups or situations and not for others).

Realist best-evidence synthesis method brings together a wider range of evidence by developing a causal model of the intervention and its reported outcomes, and systematically searching for not only confirming evidence, but also disconfirming evidence. It explores not only what works, but also what works, when and for whom.

In our description of the six activities involved in evidence based policy and practice, synthesis was shown as occurring after validation and prior to the processes of communicating the evidence. However, there may be several syntheses – one done centrally by researchers, and one done locally by practitioners, which draws on the researchers' synthesis and other sources of evidence.



Communicating the evidence

What is communicated?

In some situations the implications for policy and practice, as well as the conclusions from the synthesis, are communicated. In other cases new evidence is communicated without prescriptions for changes to policy and practice.

How is the evidence communicated and to whom?

A challenge in an information rich environment is to effectively communicate evidence to those who need, or may want to know about it. Communicating evidence involves 'pushing' - getting information to those who need to know - and 'pulling' - making information accessible to those who are looking for it.

Communication processes may be targeted or universal, individual or group. Different methods for communicating evidence may be required for different audiences such as managers, professionals, clients and citizens.

Evidence may be communicated via mainstream media or in specialist publications and journals. Conferences, seminars and at a local level staff meetings or public meetings may be effective ways of communicating new evidence. Web based applications can get evidence to those who need to know, via bulletins, electronic mailing lists (a 'push' strategy) or searchable web-sites (a 'pull' strategy).

Using evidence in policy and practice

Who uses evidence?

Evidence can be used by policymakers, managers, practitioners, and by clients and citizens participating in the development of policy and practice as advocates or advisors. These different groups are likely to have different needs in terms of how evidence is made available.

How is evidence used?

Evidence can be used in tightly specified ways or flexibly to address local needs and opportunities.

A centralised model, where specific recommendations are developed centrally and then implemented, encourages fidelity and consistency in the application of policy and practice based on the publicly available evidence base. An example of a central model is the Australian Pharmaceutical Benefits Scheme which uses a central body of experts to set rules that define the criteria for access to subsidised pharmaceuticals. This process ensures equity of access for people in similar medical circumstances and also encourages doctors to apply what is considered 'best practice'.

This approach is appropriate where there is agreement about the outcomes sought, and where there is good evidence that best practice is the same across different implementation environments.



Unless such guidelines are monitored and regularly revised, centrally generated guidelines can have the disadvantage of limiting innovation and impeding the timely development of new practices based on emerging evidence. The need for innovation is particularly relevant in complex systems, such as communities and families, which change over time.

For this reason, many researchers and policy analysts (for example Nutley, 2002) are proposing that 'evidence-informed' might be a more appropriate term than 'evidence-based', as it suggests a use of evidence that is locally adaptive, and takes into account other relevant factors, rather than rigid rule-based processes that may not be universally appropriate.

A study of evidence-based practice in education (Simons and others, 2003) found that

"... in each stage of the process of generating and using evidence, practices came to be refined or adopted--whether for the individual teacher, peers or schools--only if they connected closely with the situation in which the evidence for improving practice arose. The paper suggests that the concept 'situated generalisation' contributes to our understanding of how teachers generate, validate and use research knowledge to improve professional practice."

Further contributing to the evidence-base

What information needs to be collected, documented and communicated in order to contribute to the evidence base from policy and practice?

New evidence may confirm existing knowledge, challenge existing knowledge or generate new understandings of what works, for whom and in what circumstances. New evidence may be in the form of research or evaluation reports and/or local project information.

In order to add to the evidence base the outcomes of new policies and practices need to be monitored and recorded in a format that allows the evidence to be communicated. It is also important to provide information about the context and how new policies and practices were implemented. This requires the establishment of feedback and performance monitoring processes from an early stage in the implementation of changes to policy and practice.

Participatory processes for identifying both intended and unintended consequences as well as contextual factors that hinder or help the achievement of outcomes are valuable when introducing changes in complex, adaptive systems. Reflective processes and action research may be useful approaches.

Different formats for recording evidence may be useful in different circumstances. At a local community level creative ways of documenting the context, implementation processes and outcomes may be effective, for example, using video, photography or stories.



3 Approaches to evidence-based policy and practice

It can be helpful to distinguish between the four different approaches to evidence-based policy and practice, as set out in Table 4 below. These differ in terms of the activities involved:

- How and by whom evidence is located or generated
- How and by whom evidence is validated
- How and by whom diverse evidence is synthesised
- How and to whom evidence is communicated
- How it is expected to have an impact on policy and practice
- How further evidence is generated

These different kinds of approaches are not necessarily mutually exclusive. In fact, an integrated approach to evidence-based policy and practice, which incorporates aspects of each of them, is likely to be most effective. An adaptive practitioner with an awareness of the strengths and weakness of different approaches can draw appropriately on all available sources of information.

Table 4: Four different approaches to evidence-based policy and practice

Approach	Key features
1. 'What works?' Meta-analysis of experimental and quasi-experimental studies	Statistically summaries results from studies that have produced effect sizes (mostly from studies with control or comparison groups) to answer the question "What works?"
2. 'What works for whom in what circumstances?' Realist Best Evidence synthesis	Summarises results from a range of credible evidence. Addresses the question of "What works for whom, in what circumstances, and how?"
3. Proven practice	Identifies a successful project or projects and documents it sufficiently so it can be replicated
4. Corporate or community memory	Draws on previous experience (successful and unsuccessful) in the organisation or community, together with local information about project performance and local needs.



What works? Statistical meta-analysis of experimental and quasi-experimental studies

Overview

This approach uses statistical methods to combine results from several studies. This can overcome the limitations of studies that have had small sample sizes and improve confidence in the findings. A meta-analysis usually (but not always) focuses on answering the question of ‘what works?’, rather than ‘What works for whom, under what circumstances, and why?’ as realist synthesis does.

Table 5: Overview of statistical meta-analysis

Component	Approach
Generating/locating evidence	Emphasis on published research Unpublished research also searched.
Validating evidence	Hierarchy of evidence used, with experimental designs being seen as “the gold standard”. Only research that produces effect sizes used (experimental or quasi-experimental designs).
Synthesising evidence	Meta-analysis Algorithmic – following a formula.
Communicating evidence	Publishing results of systematic reviews ‘What works’ – e.g. Campbell Collaboration Publishing policy briefs e.g. evidence nuggets.
Using evidence in policy and practice	Apply findings about what works and what does not.
Further contributing to evidence-base	Identify gaps in current knowledge and commission research using experimental or quasi-experimental designs.

Advantages of meta-analysis

- Simple, clear messages that can be readily communicated
- Transparent method for validation and synthesis
- Generates a level of evidence not available from a single source

Disadvantages of meta-analysis

- Validation method excludes much evidence that might be relevant and may privilege evidence that is trivial in the wide picture, as it is easier to achieve random assignment to brief interventions that to long-term or systemic change
- Although in theory it can consider the impact of context, in practice this is unlikely given its dependence on the variables reported by existing research
- May be misleading when average effects (or lack of effect) mask significant differences between sub-groups
- May be unsuitable for small populations, uncommon phenomenon or situations undergoing rapid change due to lack of available studies



Examples

Example 1: A conclusion about “What doesn’t work’ from a meta-analysis

“The Policy Question

A recent Illinois law mandates the Chicago Public Schools to identify children at-risk for future criminal behavior and take them on tours of adult prison facilities. The law revisits the long history of using programs like 'Scared Straight,' which involve organized visits to prison facilities by juvenile delinquents or children at risk for becoming delinquent. The programs are designed to deter participants from future offending by providing first-hand observations of prison life and interaction with adult inmates. Do they work to reduce crime and delinquency by participants?

Results of the Campbell Collaboration Review Results of this review indicate that not only does it fail to deter crime but it actually leads to more offending behavior. Government officials permitting this program need to adopt rigorous evaluation to ensure that they are not causing more harm to the very citizens they pledge to protect”. (Petrosino et al, 2003)

Smith and Pell (2003) have highlighted the limitations of this approach because of its reliance on evidence from experimental and quasi-experimental research.

Example 2: The limitations of relying only on evidence from experimental research

“OBJECTIVES: To determine whether parachutes are effective in preventing major trauma related to gravitational challenge.

DESIGN: Systematic review of randomised controlled trials.

RESULTS: We were unable to identify any randomised controlled trials of parachute intervention.

CONCLUSIONS: As with many interventions intended to prevent ill health, the effectiveness of parachutes has not been subjected to rigorous evaluation by using randomised controlled trials. Advocates of evidence based medicine have criticised the adoption of interventions evaluated by using only observational data.

We think that everyone might benefit if the most radical protagonists of evidence based medicine organised and participated in a double blind, randomised, placebo controlled, crossover trial of the parachute.”

Source: Smith, G. and J. Pell (2003). "Parachute use to prevent death and major trauma related to gravitational challenge: systematic review of randomised controlled trials." *British Medical Journal* 327(7429): 1459-61



‘What works for whom in what circumstances?’ Realist best-evidence synthesis

Overview

Realist best-evidence syntheses draw on a wider range of evidence and therefore the synthesis is not based on statistical methods. The procedures for each of the processes of evidence-based policy and practice need to be developed – ideally through an iterative and transparent process.

A realist best evidence synthesis focuses on answering the question ‘What works for whom, in which circumstances?’

Table 6: Summary of realist best-evidence synthesis

Component	Approach
Generating/locating evidence	Published and presented research Range of impact studies and research designs (eg theory testing, case studies)
Validating evidence	Evidence which is judged to be credible, well-justified and transparent. Broader range of evidence and designs seen as legitimate Analytical processes, not algorithmic processes
Synthesising evidence	No established methods, but needs to be systematic, grounded in evidence, attentive to theory, and transparent. Can include secondary analysis of research Building and revising conceptual models of impact in different contexts Generalising about program mechanisms rather than generalising about programs. Explores exceptions and inconsistencies
Communicating evidence	Participation in the process of synthesis, including feedback on early versions. Written and verbal presentations
Using evidence in policy and practice	Externally influenced (ie researchers to practitioners) Identify underlying generative mechanisms Practitioners are encouraged to consider its relevance for their particular context, and to follow-up detailed case studies for guidance on implementation. Apply findings about what works, or what works for whom, how and in what contexts
Further contributing to evidence-base	Publishing results of syntheses – e.g. UK Centre for Evidence Based Policy and Practice Practitioners and researchers encouraged to see the process as ongoing and iterative, and to further add to the evidence base.



Advantages of realist best-evidence synthesis

- Includes a wide range of evidence.
- Produces recommendations for policy and practice that take into account context.

Disadvantages of realist best-evidence synthesis

- Methods for validation and synthesis are still being developed, and are not always transparent or well-executed.
- Complicated recommendations can be practically or politically difficult to use in policy or practice.

Examples

Example 3: Realist best evidence synthesis

Alton-Lee, A. (2003) Quality Teaching for Diverse Students in Schooling: Best Evidence Synthesis.

“The ten research-based characteristics of quality teaching derived from the research are generic in that they reflect principles derived from research across the curriculum and for students across the range of schooling years in New Zealand (from age five to eighteen). How the principles apply in practice is, however, dependent on the curriculum area, and the experience, prior knowledge and needs of the learners in any particular context. The body of this synthesis provides examples from the research on learning and teaching to illustrate the principles for different curricular areas across schooling from junior primary to senior secondary classes.”

http://www.minedu.govt.nz/web/downloadable/dl8646_v1/quality-teaching-for-diverse-students-in-schooling.doc

A number of best evidence syntheses have been developed by the New Zealand Ministry of Education, drawing on a range of evidence, both international and New Zealand, in various areas of educational improvement. The web site also includes detailed guidelines for the best evidence synthesis.

http://www.minedu.govt.nz/web/downloadable/dl8646_v1/bes-development-guidelines-11-11-04.doc



Proven practices

Overview

The proven practice approach identifies policies and practices that have been demonstrated to work based on research, evaluation reports or the views of trusted experts. Practitioners are then expected to implement these proven practices. In some cases funding is tied to the implementation of one of the approaches that have been listed as 'proven practices'.

Table 7: Proven practices approach to the processes of evidence-based policy and practice

Component	Approach
Generating/locating evidence	Can be evaluation reports, media, trusted experts
Validating evidence	A credible evaluation of an earlier example – but what is considered credible can vary Validity may be assumed from publication or validated externally (by a trusted organization) or be seen as plausible based on fit with existing knowledge
Synthesising evidence	None – or based on pattern-matching
Communicating evidence	Can be in the form of lists of 'proven practices'
Using evidence in policy and practice	Adopt these packages of practice (may involve formal adoption procedures including, training and accreditation)
Further contributing to evidence-base	Practitioners may work with developers to revise program or adapt it for particular populations.

Advantages of proven practices

- Reduces risk of 're-inventing the wheel' in terms of both practice development and evaluation effort
- Clear guidance for implementation.

Disadvantages of proven practices

- Identification of 'best practice' or 'proven practice' can inhibit innovation and improvement.
- One size may not fit all – may not be able to adapt as needed to local conditions.
- Published reports of the effectiveness of an approach are often produced by the developer and sometimes overstate the evidence of its effectiveness.



Examples

The 'proven practice' approach can produce a list of recommended principles – or a list of packaged interventions that are recommended.

Example 4: Example of proven practice approach focusing on principles

Caspe, M. and Lopez, M. (2006) Lessons From Family Strengthening Interventions: Learning From Evidence-Based Practice. Cambridge, MA: Harvard Family Research Project. Available at <http://www.gse.harvard.edu/hfrp/content/projects/fine/resources/research/lessons.pdf>

This report examines a sample of family-strengthening intervention programs that provide support to parents and seek to change family behaviours and environments to encourage healthy child development. It aims to highlight the best program and evaluation practices of family-strengthening intervention programs by examining those with extensive evidence of positive outcomes – in this case, multiple evaluations using experimental designs.

It reported in part:

“Overall, three effective program practices emerged from the review, including the need for programs to provide opportunities for parent–child bonding, focus on recruitment and retention, and prepare staff to work with families and implement the program effectively.”

Example 5: Example of proven practice approach focusing on packaged interventions

Promising Practices Network on families, children and communities

http://www.promisingpractices.net/programs_outcome.asp

“The Promising Practices Network (PPN) is dedicated to providing quality evidence-based information about what works to improve the lives of children, youth, and families. The PPN site features summaries of programs and practices that are proven to improve outcomes for children. All of the information on the site has been carefully screened for scientific rigor, relevance, and clarity.”

Proven Programs

Carolina Abecedarian Project, Child-Parent Centers, Class Wide Peer Tutoring Program, Cognitive Behavioral Intervention for Trauma in Schools (CBITS), Coping with Stress Course, DARE to be You
[list continues]

Promising Programs

Adolescent Coping with Depression Course, Athletes Training and Learning to Avoid Steroids, Be Proud! Be Responsible!, Child Development
[list continues]



Corporate and community memory

Overview

Corporate memory refers to the range of knowledge held in an organisation formally in its information systems and informally in people's tacit knowledge, previous experience, and shared stories. Community memory refers to both formal knowledge systems (such as records and minutes from community groups) and informal systems (such as community members' shared knowledge of previous projects).

Component	Approach
Generating/locating evidence	Final reports from previous projects, file notes, newspaper reports, oral history Wide range of evidence including performance indicators, final reports, memos, meetings, gossip, "war stories".
Validating evidence	Variable – often assessed in terms of its compatibility with cultural norms and organisational norms Implicit - may not be formally or consciously done.
Synthesising evidence	May be systematic or tacit pattern matching, or not done at all.
Communicating evidence	Verbal and written reports, mentors, meetings, Management Information Systems. Internal data bases.
Using evidence in policy and practice	Avoiding repeating previous mistakes; copying previous successes. May be ad hoc or built into action research or quality improvement cycles.
Further contributing to evidence-base	Recording what has been learned from the latest implementation.

Advantages of corporate and community memory

- Locally relevant and credible evidence
- Can create value from previous efforts, even if unsuccessful
- Allows participatory processes for retrieving and designing research to generate evidence and for synthesising and making meaning of new evidence
- Makes best use of limited evaluation resources – avoids reinvention of the wheel.

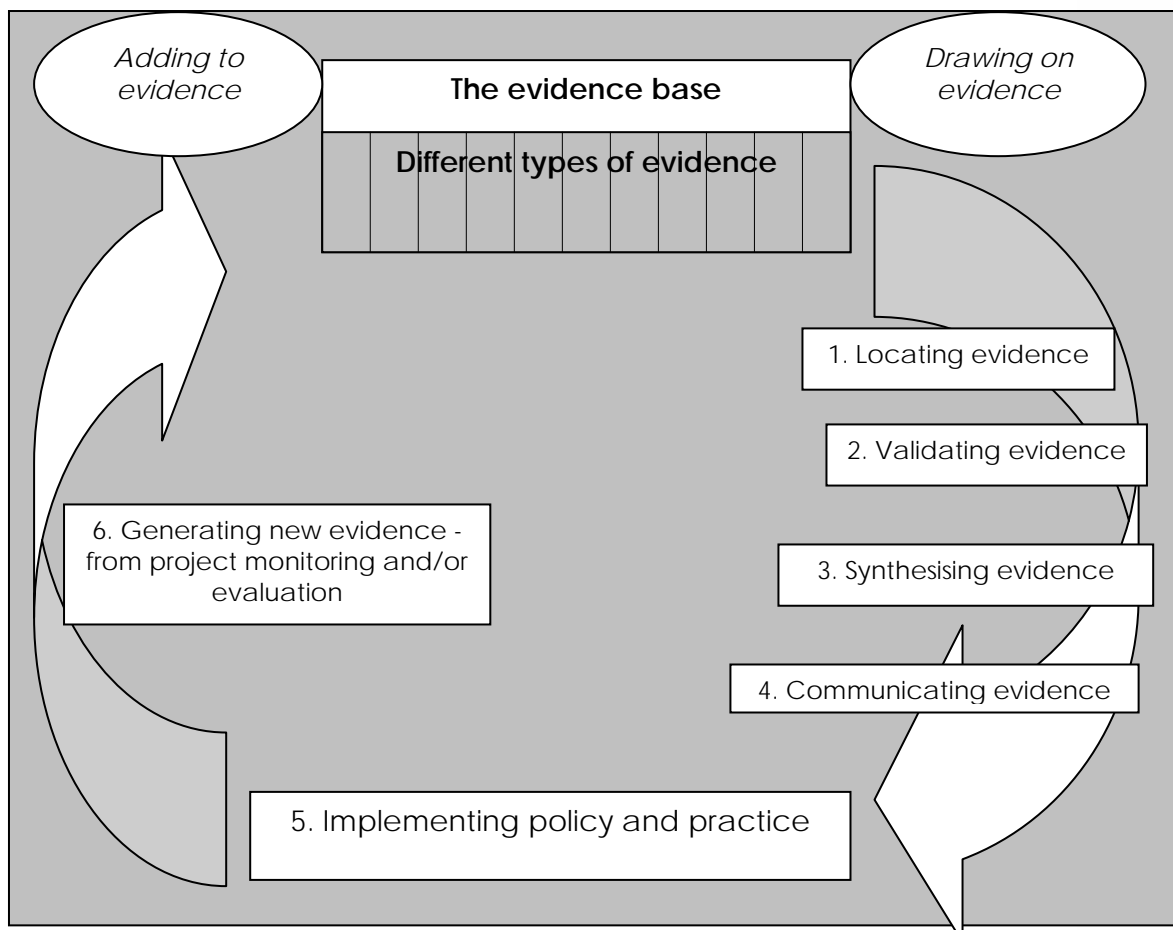
Disadvantages of corporate and community memory

- Changes in context (and hence generalisability) may not be acknowledged
- Highly variable quality of evidence
- Challenges to the norm are often ignored, or undiscussible
- Often lacks a link to contribute to the more widely available evidence base.



4 Conclusion

This paper has set out a description of evidence-based policy and practice as a cycle involving six activities.



It is recommended that evidence-based policy and practice involve consideration of alternative approaches to each of and identification of capacity-building requirements.

The following checklist is provided to structure this planning process.



Table 8: A check list for evidence-based policy and practice

Activity	Questions about process	Questions about capacity
1. Retrieving and generating evidence	<ul style="list-style-type: none"> <input type="checkbox"/> What evidence is currently available from research and evaluation studies? <input type="checkbox"/> What evidence is currently available from organisational records and community and corporate records? <input type="checkbox"/> Who should review the available evidence to identify any relevant evidence that has been missed? 	<ul style="list-style-type: none"> <input type="checkbox"/> Are there sufficient skills, time and other resources to identify and access relevant databases and information networks? <input type="checkbox"/> Are there existing clearinghouses or reviews that will facilitate this stage? <input type="checkbox"/> Are there gaps in the evidence base that need to be filled before proceeding?
2. Validating evidence	<ul style="list-style-type: none"> <input type="checkbox"/> What constitutes credible and relevant evidence in this instance? <input type="checkbox"/> Who should be involved in validating the evidence? 	<ul style="list-style-type: none"> <input type="checkbox"/> Are there agreed guidelines for validating evidence that are relevant for this work?
3. Synthesising evidence	<ul style="list-style-type: none"> <input type="checkbox"/> Does evidence need to be synthesised at this point, or made available as separate discrete reports? <input type="checkbox"/> How should the evidence be synthesised? Is meta-analysis, realist best evidence synthesis or a literature review most appropriate? 	<ul style="list-style-type: none"> <input type="checkbox"/> Are the necessary skills for synthesis available?
4. Communicating evidence	<ul style="list-style-type: none"> <input type="checkbox"/> To whom should the evidence be communicated? <input type="checkbox"/> Is a 'push' or 'pull' strategy needed – or some combination of both? <input type="checkbox"/> Does the communication need to provide links to the details of the evidence? 	<ul style="list-style-type: none"> <input type="checkbox"/> What existing networks and information portals can be used for communication?
5. Applying evidence	<ul style="list-style-type: none"> <input type="checkbox"/> Who will be applying the evidence? <input type="checkbox"/> How prescriptive should guidance for policy or practice be? 	<ul style="list-style-type: none"> <input type="checkbox"/> What additional infrastructure is needed for policymakers or practitioners to apply the evidence?
6. Contributing to the evidence base	<ul style="list-style-type: none"> <input type="checkbox"/> How will further contributions be made to the evidence base? 	<ul style="list-style-type: none"> <input type="checkbox"/> Are there sufficient resources to document innovation or learnings?



5 References and further reading

Overview of issues in evidence-based policy and practice

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Weiss, C. H. (2001). What kind of evidence in Evidence-Based Policy? Third International, Inter-disciplinary Evidence-Based Policies and Indicator Systems Conference.

How to synthesise evidence

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Pawson, R. (2001). Evidence based policy: II. The promise of 'realist synthesis'. London E1 4NS, ESRC Centre for Evidence Based Policy and Practice, Department of Politics, Queen Mary, University of London, Mile End Road, London E1 4NS (Working Paper 4): 20.

How to use evidence to guide policy and practice

Fraser, M. W. (2004). "Intervention Research in Social Work: Recent Advances and Continuing Challenges." Research on Social Work Practice 14(3): 210-222.

Glouberman, S. and Zimmerman B., (2002). Complicated and Complex systems: What would successful reform of Medicare look like? Commission of the future of health care in Canada, Discussion paper No. 8 Available at: http://epe.lac-bac.gc.ca/100/200/301/pco-bcp/commissions-ef/future_health_care-ef/discussion_paper-e/no08/8_e.pdf

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Rosen, A. (2003). "Evidence-based social work: Challenges and promise." Social Work Research 27(4): 197-208.

Simons, H. Kushner, S. Jones, K. and James, D. (2003) From evidence-based practice to practice-based evidence: the idea of situated generalization. Research Papers in Education, 18 (4): 347-364.

Critiques of evidence-based policy and practice

Marston, G. and R. Watts (2003). "Tampering With the Evidence: A Critical Appraisal of Evidence-Based Policy-." The Drawing Board: An Australian Review of Public Affairs 3(3): 143–163.

Relevant websites

<http://www.campbellcollaboration.org> The Campbell Collaboration

<http://www.evidencenetwork.org> The Evidence Network UK

<http://www.nicsl.com.au> National Institute of Clinical Studies, AUS

www.evidencenetwork.org The Evidence Network UK

www.minedu.govt.nz/web/downloadable/dl8646_v1/bes-development-guidelines-11-11-04.doc Guidelines for a Best Evidence Synthesis. Ministry of Education, New Zealand.



Examples of reports intended to guide evidence-based policy and practice that illustrate different approaches

'What works' statistical meta-analysis

Petrosino Anthony, Carolyn Turpin-Petrosino, and John Buehler. "‘Scared Straight’ and other juvenile awareness programs for preventing juvenile delinquency" (Updated C2 Review). In: *The Campbell Collaboration Reviews of Intervention and Policy Evaluations (C2-RIPE)*, November, 2003. Philadelphia, Pennsylvania: Campbell Collaboration. Available at <http://www.campbellcollaboration.org/doc-pdf/ssrupdt.pdf>

'Realist best-evidence synthesis

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