Using Proactive Evaluation to Develop Evidence Based Policy

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Introduction

Literature about the use of evidence to plan interventions reveals an emphasis on practice. In evidence based practice, the use of systematic scientific knowledge is intended to impact directly on the work of practitioners in the way they deliver a service. An example is the way a nurse delivers a specific treatment to a hospital patient. By its nature this influence is at the micro level of intervention. Medical and para-medical disciplines and fields have been at the forefront of research and application of this approach to evidence based practice.

This paper focuses on the use of evidence to develop policies and programs, rather than directly on practice. It outlines a framework for the application of systematic evidence in the helping professions, such as education and welfare. The paper also suggests that there are strong links between evidence based practice and evaluative enquiry. Making this explicit should assist users of new knowledge to understand the links between two fields of research which seem to have developed independently.

Evidence Based Practice and Program Development: the Role of Proactive Evaluation

It has become quite clear that, in both the public and private sector there is an emerging interest in the application of appropriate and relevant evidence in the development of policies and programs. The attached advertisements are indications of the need for individuals and groups to undertake studies of this nature. We have recognised the need to equip people to undertake studies of this kind by providing offerings in our post graduate evaluation course at The University of Melbourne. Because in these evaluations provide information in order to assist decisions about a future or projected program, studies of this nature are described as Proactive Evaluations (see Table 1).

Proactive Evaluation is concerned with

- the extent of the need among a defined population for a program in a given area of provision
- synthesising what is known in the existing research and related literature about an identified issue or problem
- critically reviewing ways in which an identified issue or problem has been solved through interventions mounted in other locations.

The Table shows that the Orientation or purpose of evaluative enquiry of a Proactive Form is to provide evidence to aid the synthesis of programs. Given that the State of these programs is that either no program exists or that radical changes are needed to an existing one, the timing of the evaluation can be conceived of as occurring 'before development'. The Focus from which evidence is drawn is the context or milieus within which the program will or may be developed, or like contexts in other locations.

Employing Approaches which belong within this Form is predicated on the assumption that policy and program development needs to be informed by the best and most appropriate evidence about the problem which the intended policy or program will address. For example, an analysis of needs, combined with information on available resources, is fundamental to making decisions about the provision of services.

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1 To simplify discussion, I will use the term program to describe policies, programs and projects or other planned interventions, see Owen, 1999, ch2 for an analysis of levels of program provision.

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Such knowledge enables planners at the policy, Program and program levels to:

- determine priorities in geographic areas, among client groups and across areas of support
- train and allocate staff appropriately
- locate services and facilities to achieve maximum effect
- substantiate the allocation of resources

The evaluator’s task is to harness and provide knowledge for those who will be involved in program planning. The logic for Proactive Evaluation seems to be beyond challenge. However, in practice, extensive examples of the application of real life examples are hard to locate. This suggests that decisions about providing available resources have traditionally been based on the intuition of program planners, long used practices, or personal preferences, or have been unduly influenced by political pressures. The use of evaluative enquiry to aid decision making before programs are developed is a call for a more analytical and rationale approach to the allocation of precious resources such as those applied to social and educational interventions.

**Key Approaches to Proactive Evaluation**

Three major Approaches to Proactive Evaluation are:

- Needs Assessment
- Research Synthesis, and
- Review of Exemplary Practice [and the development of Benchmarks].

I argue that all three of a combination of any of the three will provide relevant evidence to assist with the development of a soundly based program in a given context. I briefly review each of these in turn.

**Needs Assessment.**

In a recent and extensive text on the subject, a Needs Assessment is defined as:

A systematic set of procedures undertaken for the purpose of setting priorities and making decisions about program or organisational improvements and allocation of resources. The priorities are based on identified needs (Witkin & Altschuld, 1995)

To undertake a needs assessment, one must come to grips with the notion of a need. Using ‘need’ as a noun provides a basis for making a needs assessment operational. Need as a noun describes a gap between the present and a desired situation. The need is the difference between the desired and the present situation or condition. Need is thus a discrepancy. This contrasts to the use of the term ‘need’ in everyday parlance as a verb. Using ‘need’ as a verb focuses on solutions, for example a community might say; ‘we need a new health centre in the neighbourhood’ We are now talking about the program to fix the need, rather than the investigation which should precede it. According to Witkin and Altschuld (1995), these two meanings are often confounded, and that it is essential that the notion of ‘need as a noun’ remain uppermost in the minds of those commissioning or undertaking needs assessments.

The nature of a need is determined by the context within which the evaluation is conducted. Determination of what ought to be is the basis for each discrepancy. What ought to be depends on the frame of reference for the evaluation. Needs assessments, like other evaluations, are political activities. Needs or wants are conditional.

Needs Assessment in practice has three major stages; planning, data management, and utilization. The planning stage culminates in a management plan, which includes the purposes of the study, an outline of the methods to be adopted, and the potential uses of the findings. Data management includes locating existing sources of information, often an important source of data for needs assessments, and the collection of new evidence. This must include evidence about both the actual and desired conditions. In the utilization stage, needs are prioritized if competing needs have been found, and in some cases, action plans to ameliorate the needs are developed. In these cases, there is a strong link between the evaluative and development aspects of program provision.

It is essential that all three stages are included for a study to be classed as a
needs assessment. Reviews of the field have shown that studies often fall short of one or more of these criteria. A review of hundreds of these studies showed that their major shortcomings included:

- confusing solutions with needs
- not attending to the establishment of the desired state or condition
- relying on one method of data collection, usually a questionnaire
- equating the administration of a questionnaire with the needs assessment
- failing to attend to the establishments of need(s)
- neglecting to assist clients with setting priorities for action (Witkin and Altschuld, 1995).

Research Synthesis

A second Approach to Proactive Evaluation is to synthesise research relevant to a particular issue or problem which is the target of future policy or program development. This Approach is predicated on the assumption that 'funded knowledge', the results of relevant priorpure and applied research, should be taken into account when planning programs. There has been a tendency for those working at the coal-face of program provision in the helping professions to ignore findings of research. I believe that the findings of rigorous social enquiry can inform practice, and that efforts should be made to harness relevant scientific knowledge and apply it to policy and program provision where such knowledge exists.

The most obvious method of analysing information within this Approach is to undertake a literature review. There are established procedures which are available in well equipped libraries for carrying out such a search. This involves the essential step of defining the boundaries of the search, perhaps with the aid of the relevant thesaurus. The use of computer based storage facilities, such as CD Rom, and on-line facilities enable large scale data bases to be scanned quickly and effectively, and allows evaluators to conduct research reviews without necessarily undertaking the evaluation in the library itself.

The synthesis of Research Synthesis Approach typically includes the following steps:

1. formulating the area of enquiry
2. collecting data
3. evaluating the data
4. analysis, interpretation and integration
5. presenting the findings.

Several writers have provided advice on carrying out literature reviews for the purpose of undertaking further research and writing research theses, for example Cooper (1984) and Neuman (1997). This advice has been adapted for use when undertaking Research Synthesis as an Approach to Proactive Evaluation (Smallwood and Hurworth (1998).

Principles of Research Synthesis include the following:

- the area of enquiry must be related to the proposed area of intervention or policy development
- the search should be focused from the outset
- the reviewer must be flexible as to the relevance of individual contributions to the topic
- existing meta reviews and annotated bibliographies can short cut the review process
- the reviewer must be systematic in documenting the progress of the search
- in addition to the literature in journals, other sources may be consulted, for example census records, parliamentary debates, unpublished reports etc
- the use of computer based search engines are essential
- there will be wide variation in the quality of the research reported and the reviewer must adopt criteria for evaluating each report

The result of a literature synthesis is a 'reasoned description or interpretation of a body of literature'. Therefore, the report should firstly address the specific area of enquiry by providing a contextual background for the work and provide a progressive understanding of developments in the area. For evaluative purposes, the review must address the concerns of the audience and purpose for which it was developed, taking into account the nature of the primary users.
The format of reporting is critical. The review must engage the client through the inclusion of:

- an introductory paragraph that introduces the evaluation issues
- an overview of the organisation of the review
- a descriptive discussion about the existing state of the research knowledge on the issues
- conclusions about the major findings and their implications for future practice
- an indication of those areas (if they exist) where the literature has little or nothing to say about the issues.

Review of Best Practice (Establishment of Benchmarks)

In this Approach, cases of ‘best practice’ are located, identified and the principles documented as an input to developing policies or programs based on the findings. The documentation is the basis for assisting the provider to create, implement and monitor programs based on the principles identified in the best practice cases.

A key is to locate practitioners who have shown that their practice has a superior edge in the provision of services or products in a given area. If possible a range of case examples are used from which to assemble evidence. Inductive methods of analysis are used to draw out the underlying assumptions and principles of action across the cases.

This Approach is based on an assumption that best or innovatory practice in the workplace should be disseminated and used more widely. Procedures must be employed to capture and transfer this knowledge to other users. The evaluator’s role can be thought of as synthesising evidence from cases located at the hub of a wheel. Assembling the findings is akin to the evidence travelling inwards on spokes to the hub. Policies and programs are synthesised at the hub and are disseminated to other practitioners via other spokes of the wheel.

A prominent manifestation of the use of this Approach is the benchmarking movement, popular in business, and more latterly, in the provision of government services. The practice of benchmarking came into prominence as a tool for continuous improvement when it was adopted by high profile companies in the late 1970s but may have been used informally well before this era.

While there are a range of interpretations benchmarking by an organisation generally includes the following stages:

1. the identification of the area of operation to be benchmarked
2. identification of ‘best practice’ in selected organisations or sections of organisations
3. collection and analysis to determine the common characteristics of this practice
4. development of best practice indicators and levels to be achieved on these indicators
5. communication of best practice indicators internally and gain acceptance
6. development and implementation of plans to achieve these levels
7. progress monitoring
8. full integration of practice into the functioning of the organisation

The organisation could move through these stages again at a later time, with a focus on a different area of operation.

For the purposes of this discussion, I divide the benchmarking process into two phases. The first relates to stages 1 to 4, the second to stages 4 to 8. I regard stages 1 to 4 as the establishment of benchmarks, while stages 5 to 8 as the application of benchmarks to the operations of the organisation.

Establishment of benchmarks is consistent with the idea of

a continuous systematic process of evaluating companies recognised as industry leaders, to determine business and work processes that represent best practices and establish rational performance goals (Cross & Iqbal, 1994).

Simply described, the establishment of benchmarks attempts to answer the following questions:
• who is doing best?
• how do they do it?
• how well are we doing relative to the best
• how good do we want to be, relative to the best?

In more formal terms, benchmarking establishment involves an organisation in

• the targeted identification of best practice, and a consideration of whether this practice applies to the organisation
• a thorough, sustained program of external analysis and investigation
• the ability to reduce the findings of best practice to indicators which are meaningful as a management tool within the organisation.

Use of Proactive Evaluation: Case Studies

One or a combination of the Approaches can be used to assemble relevant evidence to guide the development of a new program. The employment of Proactive Evaluation principles is an acknowledgement that providers should not reinvent the wheel when planning an intervention, and could be thought of as a commitment to ‘rational decision making’. Two examples of the application of Proactive Evaluation in the Australian context can be used to clarify the application of these principles.

Case 1. Student Enterprise Program.

The Country Education Project was a national project designed to improve the quality of education for rural areas of Australia. CEP was seen to be innovative and keen to provide educational experiences for school students and the communities from which they were drawn. A notable strategy of the CEP was to provide ‘seeding funds’ for innovatory schools to try new methods. This was followed by a review of what worked in these schools as a way of developing policy guidelines for all schools under their influence. In this way the innovatory schools helped produce knowledge for policy development.

The Centre for Program Evaluation was involved in the review of the work of these schools. By analysing the practices employed and their impact on the schools and communities, a set of principles regarding the effective implementation of the Student Enterprise program was developed. In addition the literature was scanned to look for research finding which supported the information collected from the trial schools. This resulted in a set of guidelines for the policy development.

This study relied on a combination of good practice and research findings to develop the evidence base for the Student Enterprises program (see attachment). It should be noted that not all trial schools reported that their trial had gone smoothly, that is not all the schools could be regarded as best practice schools. Instead the aggregation of data relied on the professional opinions of teachers and school principals about what aspects of their trial had been successful. The evaluation team then sifted through individual school reviews to identify common patterns of successful practice.

It should be noted that, in this case, the dissemination of ‘sound practice’ principles was in the form of an easy to read policy statement sent to all schools which were linked to the Country Education Project. This strategy was preferred to more traditional styles of dissemination, such as a journal article, because the Project was keen to see Student Enterprise adopted quickly in rural areas.

Case 2. Integrating Students with Chronic Health Conditions into Schools

The CPE was involved in a similar study was conducted late in 2000, in conjunction with the Royal Children’s Hospital Education Institute (RCHEI). For some time the state government and hospital authorities have encouraged a move to integrate students with chronic health conditions into schools, whereas formerly they had received their schooling out of school, predominately in hospital settings. The role of staff of the RCHEI has changed from teaching in hospital schools to providing support for teachers and schools for integration.

By using their knowledge of these developments, RCHEI staff identified a small group of schools who could be regarded as innovators in the integration process. A structured interview schedule
was used to investigate what integration meant in the day-to-day live of the schools and factors affecting integration. In a second round of consultations, the findings were reviewed by school principals and teachers who were prospective users of the knowledge synthesised from the innovatory schools. This was seen as a validating mechanism to ensure transferability of the knowledge to the population of schools. In a similar fashion to the Student Enterprise case, the findings will be published in kit form in the near future and disseminated to all schools across the state system.

References


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### Table 1. Summary of Proactive Evaluation

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<th>Element</th>
<th>Proactive</th>
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<tbody>
<tr>
<td><strong>Orientation</strong></td>
<td>Synthesis</td>
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<td><strong>Typical Issues</strong></td>
<td>• Is there a need for the program?</td>
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<td></td>
<td>• What do we know about this problem</td>
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<td>• What is recognised as best practice in this area?</td>
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<td>• Has there been other attempts to find solutions to</td>
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<td></td>
<td>• What does the relevant research or conventional</td>
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<td>• What do we know about the problem that the program</td>
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<td>• What could we find out from external sources to</td>
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<td>• existing policy or program?</td>
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<tr>
<td><strong>State of Program</strong></td>
<td>None</td>
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<td><strong>Timing</strong></td>
<td>Before</td>
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<td>[vis a vis Program Delivery]</td>
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<td><strong>Key Approaches</strong></td>
<td>• Needs Assessment</td>
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<td>• Research Review</td>
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<td>• Review of Best Practice (Establishment of Benchmarks)</td>
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<td><strong>Assembly of Evidence</strong></td>
<td>review of research through document</td>
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<td>analysis and data bases, site visits</td>
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<td>and other interactive methods,</td>
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<td>application of techniques such as</td>
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<td>focus groups, nominal</td>
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<td>groups and delphi technique.</td>
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