Indicators to Help with
CAPACITY BUILDING
in Health Promotion

Better Health Good Health Care

Australian Centre for Health Promotion

NSW HEALTH

This document was written by
Penelope Hawe[1], Lesley King[2],
Michelle Noort[3],
Christopher Jordens[1], Beverley Lloyd1

1 Department of Public Health and
   Community Medicine, University of
   Sydney
2 Formerly Health Promotion Unit,
   Central Sydney Area Health
   Services, now NSW Cancer Council
3 Service Development Unit, Nepean
   Hospital, Wentworth Area Health
   Services

NSW HEALTH DEPARTMENT

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Dear reader,

We are intending to set up a capacity building *list serve* and *data base*. The purpose of this is to follow up on the results of using the indicator checklists and to share information. For example, practitioners might like to know about which of the checklists are working well, any issues that may be emerging in using the checklists, or who can they talk to who has already used the checklists?

If you would like to be included on the list serve or the data base please:

Step 1: 📑 **photocopy this page**
Step 2: ✎ **complete the form**
Step 3: ☎ **fax to:**
Manager
Health Promotion Strategies and Settings Unit
NSW Health
Fax No (02) 9391 9579

1   Are you intending to use any of the checklists?   Yes   No   Not sure

2   If you are thinking about using some of the checklists, please tell us what your main purpose is most likely to be:

To monitor and review the capacity building practice of yourself or others
To inform program planning at the local level
To inform program planning at the state or national level
To evaluate a program at the local level
To evaluate a program at the state or national level
To assist in planning for capacity building for health promotion within a system (eg. organisation or community)
To assist in evaluating capacity building for health promotion within a system
Other (please describe)………………………………………………………………
………………………………………………………………………………………
………………………………………………………………………………………

3.   Have you already used any of the checklists?   Yes   No

4.   If so, which ones?   (please circle)

1   2   3   4   5   6   7   8   9

Now for the details……
Name
Address

E-mail
FAX ( )………………   **Phone ( )…………………**

Thank you for your interest and support.

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PART 1	PROJECT OVERVIEW

1.1 SUMMARY

Since our project started 'capacity-building' has become something of a buzz-word in health promotion practice and in wider arenas. This project set out to clarify capacity-building as a concept and to develop indicators that could determine whether or not capacity-building by health promotion workers was being done well. This report contains nine checklists for capacity-building which are based on specific situations and settings that were common among the health promotion practitioners we worked with.

We have combined literature review with focus group research and broader consultations, state wide, national and international. Capacity building has been defined as being (at least) three activities: (1) building infrastructure to deliver health promotion programs, (2) building partnerships and organisational environments so that programs are sustained – and health gains are sustained; and (3) building problem-solving capability. The last element is crucial. There is little value in building a system that cements in today's solution to today's problems. We need to create a more innovative capability so that in the future the system or community we are working with can respond appropriately to new problems in unfamiliar contexts.

The health promotion workers we consulted with on this project create capacity across five levels – one to one, in groups, organisations, across organisations and across communities. Many of these workers at present go unrecognised and under valued because the current accountability and funding systems are tied to national health priority areas. Workers cannot be explicit about capacity-building objectives with communities and organisations because this would be seen to be diverting the purpose/funds of the program (to work directly with the population or target group on, say, heart health or cancer control). We found this an irony as capacity-building appears to be a far sighted strategy; one which, done right, will multiply the health gains of any particular heart health or cancer control investment.

Because the research evidence in this field is still accumulating, for the most part capacity building indicators cannot be entirely evidence-based. We therefore suggest that indicators be theory-informed. A large part of the report is devoted to outlining why this is a mark of good quality. As a consequence, we have not drawn upon indicators which other investigators have developed using consensus methods alone. That said however, the reader should not underestimate the extent of research evidence in capacity-building. The strongest prospective evidence comes from research in program uptake and sustainability and we have drawn extensively on this.

One issue that was very clear from the evidence review is that particular concepts in health promotion are highly specific and so our checklists are quite literal to what we describe. When we refer to *program* sustainability for example, the checklist cannot be used to assess *policy* sustainability, as the items are not appropriate. When we refer to a *coalition* of agencies, we do not mean a simple *committee*. *Healthy community* indicators and indicators of *community capacity* are related but not the same. We also stress that the indicators are designed for use by experienced health promotion practitioners, that is, health workers who can appreciate these differences and are familiar with basic health promotion planning frameworks. We also emphasise that our indicators tend to favour the assessment of situations and environments that foster problem-solving capacity. However, the report includes references to the work of others who have been more concerned with developing indicators for measuring basic core functions or infrastructure for public health.

Our indicators have been subject to field-testing, face validity testing, inter-rater reliability testing and internal consistency testing. They performed satisfactorily when applied to a total of 130 health promotion projects across NSW. But there is much work still to be done – how people use these indicators in the field may vary. Multiple informants on the same program could give different scores for example. Of all, the community capacity checklist is the least tested, as it became clear to us that this would involve an extensive community study, which was outside the scope of this project.

Many groups throughout the world are now working in this field and capacity-building indicators in many shapes and sizes will follow. As with all indicators work, practitioners are reminded that measuring instruments are just tools for practice and in no way are they a substitute for the decision-making skills that are the hallmark of professional competence and experience.

1.2 ACKNOWLEDGEMENTS

1.3 INTRODUCTION

This report describes a project commencing in 1995 which set out to capture an invisible side of health promotion, that is, the effort that health promotion workers put into capacity-building or making their colleagues and partner organisations more interested in and more capable of engaging in effective health promotion practice. The rationale for capacity-building is simple. By building sustainable skills, resources and commitments to health promotion in health care settings, community settings and in other sectors, health promotion workers prolong and multiply health gains many times over.

However, while capacity-building seems almost a natural part of health promotion practice, its precise nature has been elusive. Workers are well accustomed in health promotion planning to writing detailed goals and objectives about desirable changes in health knowledge, attitude or behaviours among a target population or sub group, but are generally less able to articulate that part of the effort spent in engaging the interest of other colleagues or organisations or community residents. In 1993, "capacity-building" was put forward and discussed in NSW as a unifying concept in health promotion practice,[1] bringing together "top down" and "bottom up" approaches to program development and helping to articulate

outcomes of "empowerment" approaches in health promotion[2]. Some area health promotion units in NSW had begun to depict their work primarily as organisational change (one aspect of capacity-building),[3] but others lacked a framework for conceptualising, planning and measuring those activities not immediately directed at the target group of interest. The establishment of the NSW Health Outcomes Program provided the impetus to better articulate capacity-building in health promotion so that the practice would be better refined, understood, made more visible and accountable. This was closely followed by a Commonwealth initiative on intersectoral health action, which also helped to focus attention on partnership models of health promotion practice.[4]

Funding for the project was obtained from a NSW Health Outcomes Grant with seeding support from the Centre for Disease Prevention and Health Promotion, NSW Health and also Wentworth Area Health Services and Central Sydney Area Health Services.

1.4   PROJECT OBJECTIVES

The main objectives of the project were to:

> Develop a set of indicators which would map the principal domains of capacity-building in organisations, groups and communities

> Develop a set of indicators that could be used to define high quality practice

> Trial and develop indicators with field workers so as to be able to make recommendations about their implementation and diffusion throughout the NSW health promotion system

1.5   PROJECT METHODS

The main methods of the project were

> Literature review on the nature and meaning of capacity-building in health promotion

> Focus groups with health promotion workers to understand more about how capacity-building is understood and operationalised in practice

> Consultations and workshops with other health workers, planners, policy makers and managers

> Document analysis, that is, review of planning and policy materials

> Field testing of indicators and reliability testing

In addition to the six area health services involved with the focus groups (3 urban, 3 rural), formal meetings, training workshops and consultations have been held with workers in Western Sydney (twice), South Western Sydney (twice), Central Sydney (twice), South Eastern Sydney, the Capacity-Building Health Promotion Network, the Health Promoting Hospitals project, the Health Promoting Schools project, meetings of senior policy advisors at the Commonwealth Department of Health and Family Services, Area Coordinators of health promotion in NSW and the annual National Health Promotion conference in Darwin in 1997. Project materials have also been mailed to several area health services in response to requests. The project group was invited to make a presentation in October in 1997 to the National Health Outcomes Conference, sponsored by the Australian Institute of Health and Welfare. This coincided with an invited editorial by our group on the changing face of health

outcomes in health promotion in the Australian Institute of Health and Welfare Health Outcomes Bulletin. The project team was also invited to present their material to the 1st UK Conference on Health Promotion Research in Edinburgh in 1998. The writings of the project have also influenced policy frameworks within the National Public Health Partnerships Project with interstate interest also high.

1.6   RESULTS

1.6.1   Format of the Results

Part 2 presents the indicators or checklists devised by the project. These represent a "smorgasbord" of indicators presented according to particular practice situations or scenarios.

Part 3 presents the two abstracts of papers arising from the research. The first is for the main literature review entitled *Multiplying health gains: the critical role of capacity-building in health promotion.* The paper appeared in the international journal, *Health Policy* in a special issue on health outcomes. The paper reviews the current literature in capacity-building, the main points of which are summarised in a separate section below. Our intention in publishing this paper was to familiarise health policy makers with the nature of health promotion practice and to advocate for it, catering to what we perceived to be a conservative economic climate and a cautious attitude to the role of health promotion. The second is for the results of the focus groups with health workers and is entitled: *Working invisibly: health workers talk about capacity-building in health promotion.* The main points of the paper, published in *Health Promotion International* are summarised in a separate section below.

Part 4 contains the results of the formal psychometric testing of the indicators, which was conducted with generous assistance from the NSW Health Promoting Hospitals Project, who helped us gain access to a wide variety of program types across the health services (not just within hospitals).

1.6.2   Dimensions of Capacity-Building: Lessons from the Literature

The main lesson from reviewing the work of other researchers and practitioners is that capacity-building is defined and conceptualised in at least three different ways. This is depicted in Figure 1.

Figure 1   **Different uses of the term of capacity-building appearing in the health promotion literature** **1   Health infrastructure or service development** *Capacity to deliver particular program responses to particular health problems. Usually refers to the establishment of minimum requirements in structures, organisation, skills and resources in the health sector.* **2   Program maintenance and sustainability** *Capacity to continue to deliver a particular program through a network of agencies, in addition to or instead of, the agency which initiated the program.* **3   Problem-solving capability of organisations and communities** *Capacity of a more generic kind to identify health issues and develop appropriate mechanisms to address them, either building on the experience of a particular program, or as an activity in its own right.*

The different definitions have arisen from the different approaches to facilitating health promotion at a community or population level. While these terms continue to be used quite differently by different groups, in one sense they could operate as levels of particular phenomenon. The first level, infrastructure building, was originally identified and driven by advocates for national health priorities in the USA.[5-7] Advocates for cancer control and cardiovascular disease prevention found that local health authorities did not naturally or spontaneously develop programs in these fields once national priorities had been set. Instead a particular effort had to be made to create local capacity to develop these programs. These writings have inspired others to articulate what constitutes basic public health capacity and this has also led to indicators development work.[8] The key elements that were identified by these programs form the basis of the indicators presented in Part 2.

Capacity-building at the second level, sustainability, represents the contribution of the major university-led, community-wide cardiovascular disease prevention trials such as the Stanford Heart Disease Prevention Program and the Minnesota Heart Health Program.[9-11] These were large scale long term programs which were initiated to test specific hypothesis about the ways in which risk factor behaviours in populations could be changed. Towards the mid term or end of their funding periods, investigators sought ways to transfer responsibility for programs over to the array of local agencies and organisations which took partnership roles in program development, with some investigators having more success in doing this [9,10] than others.[11] Those parts of the indicators in Part 2 which attempt to encapsulate program sustainability have drawn from some of this research. More in depth analyses of the ways in which programs become embedded or 'institutionalised' in organisational structures has come from other groups of investigators.[12,13] and our indicators have also attempted to capture these critical dimensions.

Although investigators working with a level 2 perspective, that is working from the perspective of how to build upon or extend the life of a current program, have moved into examining the broader effects of interventions (level 3),[14] the main work on capacity-building with a problem-solving perspective (level 3 in Figure 1) originates from elsewhere. It comes from investigators with a different theoretical approach to health promotion. It is something that many practitioners undertake directly and purposively. These investigators have adopted an empowerment perspective [2,15,16] and see "grass-roots" capacity-building with people, organisations, neighbourhoods and communities as the primary way in which people can gain control of the determinants of their health.

Their approach is characterised by a concern for *risk conditions,* issues relating to shared contexts and structures which affect health status (eg, housing, unemployment etc.) as opposed to *risk factors*, which are typically defined as health risk behaviours. (The distinction between programs addressing risk factors and risk conditions has been usefully spelled out in the American Public Health Association criteria for the development of health promotion programs[17] and an argument in favour of tackling risk conditions has been made by social epidemiologists with particular reference to widening inequalities in health.[18]) The indicators in Part 2 have drawn on an extensive case literature in problem-solving by groups and across organisations and communities[19-21] and more recent work in the development of quantitative measures of empowerment or competence at the community level.[22] This section of the indicators also draws on organisational learning theory.[23-25]

Given our discovery of the different ways in which capacity-building is used, we recommend that as much as possible, policy makers and practitioners use a more specific term depending on the activity in question. That is, that people refer to infrastructure building, creating sustainability or creating problem-solving capacity. It is clear that many practitioners engage in all three types of activity with different emphases depending on their role in their own organisation, the stage of development of a particular program and as different opportunities arise. Like the term "community organisation" which is used in various ways in

health promotion, without a clear understanding of what is intended by the term "capacity-building" the field of health promotion risks being divided by a common language.[2]

1.6.3   What Practitioners Say About Capacity-Building

Our paper referenced in Part 3 presents in detail the results of open-ended focus group discussions about the nature and meaning of capacity-building, its process and outcomes, and issues related to practice.

In general, workers had little difficulty in identifying what outcome indicators in capacity-building would look like. This covered changes in attitudes, skills, structures, organisational processes, resources allocation, policies, actions, and responsibility for health promotion. These dimensions were also covered in the diverse literature, which covers the levels of capacity-building and in this sense worker experience and research evidence was cross validating. Workers spoke about capacity-building with different "target groups" or with different levels of focus. These were individual-level, within health care teams or groups, within organisations, across organisations (coalitions or partnerships) and within communities. Again, the notion that health promotion operates at different 'ecological levels' is substantiated in the health promotion literature.[26]

A number of dilemmas or issues were associated with capacity-building and some of these are expanded upon in the next section. Most apparent was the concern that capacity-building in health promotion is being undermined; firstly by a lack of visibility/scrutiny and, secondly, because health promotion funding is tied mostly to direct activities with population groups in relation to specific disease entities or national targets. This leads to the paradoxical situation where perhaps the most valuable endeavours, that is those seeking to sustain successful programs and multiply health gains as a result are disguised within health promotion budgets at the area level. The first issue, lack of visibility/scrutiny is directly addressed by this project. The second issue, funding mechanisms, requires some critical reconsideration by policy makers at state and national levels.

The final aspect of the focus group work was our attempt to capture the meaning of quality when it comes to capacity-building. That is, how could one recognise "good quality" work in capacity-building versus "bad quality" work. This proved to be an elusive concept and, other than making sure that one's work was open to review by peers or supervisors, workers could not identify what would be the hallmark of good quality capacity-building. This is where the project was required to take a lead.

In discussing the broader concept of health promotion quality in general, we found it useful to make a distinction between (1) evidence or performance-based quality guidelines in health promotion and (2) theory or consensus-informed guidelines. An example of the former would be the quality criteria for patient education programs which have been derived from meta analysis of over 500 successful and unsuccessful programs.[27] This means that one can now look at any new activity in patient education and score it in relation to evidence-based quality criteria,[27] and if a program does not show sufficient evidence of meeting requirements in specific categories, then a program can be deemed poor quality and unlikely to be effective. Because work in capacity-building in health promotion is so new, there has been no opportunity to accumulate sufficient evidence to derive evidence-based or performance-based quality criteria. Therefore the field must resort to theory-informed and/or consensus-based practice. Part of the discovery work of this project has been to identify those theories in health promotion which best inform capacity-building. This has meant a departure from theories about health behaviour (social learning theory, stages of change, health belief model etc.) to theories about organisational collaboration, networks, community and organisational development, empowerment, problem-solving and adult learning. Unfortunately and perhaps

significantly, these theories are generally not adequately addressed by standard health promotion texts, which still tend to favour the individual as the unit of analysis and change. The significance of theory-informed practice is returned to below.

1.7   ISSUES RAISED AND THE CONSEQUENCES FOR INDICATOR DEVELOPMENT

1.7.1   What is the Ultimate Goal of Capacity-Building?

A question raised by one of the earliest focus groups was "capacity-building for what?" or what is the overall purpose of capacity-building? The literature review helps us to answer that question. The answer appears to be that people work with partner organisations and communities to build capacity to (1) run particular programs or capabilities to respond to particular types of issues, eg building capacity for disease surveillance or heart disease prevention; or (2) to develop an independent capability among partner agencies or groups that is, to make programmatic responses sustainable and (3) to build a generalised capability among the partner organisations or community to tackle any issue in a manner that brings mutually beneficial outcomes to the people involved or to those whom they seek to represent.

Health workers in clinical settings raised some more complex questions. Is capacity-building with hospitals about getting hospitals to do health promotion and/or creating more health promoting environments? Or is capacity-building in a clinical settings about facilitating *anything* that might improve the health of the population, such as quality improvement in hospitals or efficiency improvements in hospitals? Where does one start with reorientation of health services? Does one have to start with making treatment services more effective in order to gain the credibility, access and trust to challenge and reorient the way that the system operates? If so, how long does one have to wait before that happens and how much resources are spent meantime?

There appears to be an array of differing views on this. Some workers expressed the view that one has "to start where people are at" and by becoming involved in health care management practices, service reorganisations, total quality management processes and so on, health promotion workers perceived themselves to be slowly seeding a health promotion ethic into a clinical setting. Others we spoke to were concerned that such an approach could be futile and instead of reorienting health services, health promotion itself risks being hijacked and lost. With 99% of the health budget already devoted to treatment expenditure, they argued that reorientation of hospitals could be a particularly risky way to spend our meagre health promotion resources, unless highly structured and carefully monitored processes were followed.

The incremental change processes of organisational development in hospitals are similar to the style of practice adopted in community settings. If you start "where the people are at" rather than with a specific program of work, it may take several cycles of problem-solving and program development until the community "comes round" to working on the issue the worker has in mind. However, at least at the community level, this cycle of cooperation is well documented and better accepted as sometimes the only method of engaging cooperation in the longer term, particularly among high-risk communities.[28] In the hospital health promotion literature at present there are few well documented case studies of organisational reorientation in the true sense. For the number of articles describing "new" health promotion programs within hospitals, there are as many describing ways in which hospitals can subvert health promotion resources for political and strategic marketing purposes.[29,30] A strength of the Health Promoting Hospitals project in NSW is its recognition of the essential difference between developing programs within hospitals and reorienting the way in which the organisation itself develops a strategic approach to population health issues. The

organisational development approach taken by Wentworth Area Health Services appears to be the first of its kind to take a whole-of-organisation approach.[3]

Thus, it is clear that the further one moves away from the concept that capacity-building which is simply infrastructure development, towards capacity-building as creating problem-solving capability, control over the nature of the health issue addressed is relinquished. This is a familiar concept for community development workers, but it is an unsettling one for workers venturing into clinical settings. It is leading to mixed feelings about the purpose of health promotion, particularly for those workers acting alone or in teams unconnected with a strong overall health promotion strategic plan. Reorienting whole health systems will undoubtedly bring wide gains. The benefits however are long term and the practice is risky and in need of a high level of support for it to continue.

Finally, it is clear that in the first instance indicators of capacity-building must be generic to be of most use. That is, it is of little value if people create very specific capacities across the system. Unless the skills acquired by a health service in say, diabetes program development, or cancer control are generalisable to other health issues, capacity in its fullest sense has not been created, but rather dependency on the health promotion practitioners to take the lead on each new problem whenever it arises. The emphasis of our work here is on general skills and capabilities that can be fostered across the spectrum of a health promotion worker's practice. However, we accept that some expertise or skill necessarily always will be specialised.

1.7.2   Theory-Informed Practice as a Mark of Quality

We have suggested in a previous section that, in the absence of evidence-based guidelines on capacity-building in all its meanings, the next best guide to good practice, and a mark of quality, would be that a particular activity is theory-informed. Evidence of the use of theory would be seen in the strategy objectives associated with a particular activity and in the types of outcomes expected as a result.

Theory in capacity-building can be used in the following ways:

> To identify particular types of strategies that might be used to achieve a particular outcome
>
> To identify critical sequences among strategies
>
> To set limits on what can be achieved within particular contexts
>
> To identify the essential components or ingredients of key phenomena in capacity-building, such as problem-solving capability

Brief examples of each of these are now given. Further examples and analysis will appear in later papers to be published by the project team.

1.7.2.1 Using Theory to Identify Appropriate Strategies in Capacity-Building

In the focus groups, health promotion workers told us how they built the capacity of other health workers by working with them on particular tasks. So, rather than sit down and write a strategic plan on adolescent health for a region in 1–2 days on her own, one worker reported that she would prefer to take 3-4 weeks to write the plan jointly with a community nurse so that the community nurse would learn how to write strategic plans herself. The outcome of this interaction and its associated performance indicator is fairly obvious. It is the nurse's acquisition of a particular skill. Competence in the execution of this skill is one dimension that

could be assessed, willingness to initiate formal planning on another occasion in relation to another topic might be another aspect that could be assessed. These would form the basis of the capacity-building outcomes.

So far we are demonstrating practice wisdom. But if we relate this experience to the literature on adult learning, and more particularly informal learning,[31] the interaction described above can be seen in a theory context. This leads us to more precise objectives about how to foster skill development.

Learning theory tells us that the situation being described is non formal workplace learning. It is called *incidental learning* (think of it as learning 'by accident') and the learner is not consciously aware that learning is taking place. [31] By contrast if the learner is aware of their engagement in the learning process, it is called *informal learning.* [31] Incidental learning may lead to informal learning but there are advantages in their separation.

For example, an advantage of incidental learning about health promotion is that people do not know they are learning about health promotion. So any negative stereotyping about health promotion or territorial barriers (eg "hey this is not my job, it's your job") are side stepped, and hence ownership of the new skills by the learners may be increased. Incidental learning is a particularly useful strategy for those people who do not perceive themselves to have the time to learn new things. It is useful for those people who do not perceive themselves to have the confidence to try new things. Incidental learning is enhanced by increasing the number of 'incidents' a worker is exposed to. So a plan to foster incidental learning about health promotion skills in the workplace would include objectives related to the size and nature of workplace networks, frequency of contact, job assignments, role assignments and role modelling.

On the other hand, it may be advantageous for the worker to be aware that learning is occurring so that he/she might develop more advanced skills. That is, it might be advantageous to develop local capacity by drawing on models of informal learning. Informal learning is about engagement in the learning task, and so learning is enhanced by increasing the methods and opportunities for engagement.[31] This happens by fostering three activities. These are (1) proactivity, such as encouraging people to volunteer to take on new responsibilities; (2) creativity, using specific techniques to encourage people to break out of old patterns of thinking and (3) reflectivity, which, is learning from reframing a problem or issue and looking at new lines of solutions which may have been superior to the ones initially tried by the learner. After various failures for example, it may be crucial to introduce an element of critical reflectivity into a situation in order to prevent disenchantment and abandonment of the task. However, as many of us know, confronting failure is hard and is only productive when there is a degree of pre existing maturity and insight. So, the acceptance of the health promoter as a facilitator of informal learning among other colleagues requires a high degree of trust. It also assumes an implicit contract about learning processes and power relationships. We found that in many of the practice stories workers told us that informal learning rose out of incidental learning – a transition. The relationship between health promotion worker and colleague during the process is a highly delicate one:

> there's a fragility there, it can go either way" (focus group 6, line 741-743)

Thus it can be seen how theory opens up a range of choices about strategies and objectives of one-to-one capacity-building. These are reflected in the indicators in Part 2, and summarised below.

Table 1 USING ADULT LEARNING THEORY IN CAPACITY-BUILDING

To identify specific strategies in fostering workplace acquisition of health promotion skills.

EXAMPLE FROM WORKPLACE LEARNING

Incidental learning about health promotion

goal is to increase the number of appropriate learning incidents

objectives are about size, density, frequency and composition of workplace networks; job assignments; role modelling

Informal learning about health promotion

goal is to increase the learner's engagement in the learning process

objectives are about fostering proactivity, creativity and critical reflectivity

1.7.2.2 *Using Theory to Identify Critical Sequences Among Capacity-Building Strategies*

Theory also helps us identify critical sequences and stages in capacity-building. One example of this comes from the field of collaborative problem solving and coalition development. McCann[32] has suggested that organisations working together progress through critical phases as depicted in Table 2. Awareness of these phases has been shown to be helpful in restructuring coalitions that are having difficulties.[33]

In our pilot testing of the indicators, workers told us that it was particularly useful to learn about the phases of coalition development because it alerted workers to particular things they must do to facilitate coalitions at different stages of development. We also became much more aware of the need to think more carefully about the structures involved in capacity-building. Early in the formation of a coalition, while rules of engagement among partners are being formulated and the benefits of working together are being clarified, broad inclusive and undifferentiated structures are needed to maximise input of information and identify common values among diverse parties.[32] After the mission has been identified and the tasks have been set, different structures are needed to allow for swift decision making (eg smaller 'executive' groups) and for coordinated activity across work on several possible fronts (eg, working parties). Hawe and Stickney provide an account of how coalitions mature and develop alternative structures to cope with that maturity, based on an evaluation of an intersectoral food policy project in western Sydney.[33]

Research into the theory and evidence on interorganisational collaboration[34,35] also led us to place greater emphasis on development of appropriate structures, than had been suggested by previous reviews. For example, the Commonwealth-initiated report on intersectoral health action in 1995 defined organisational capacity to carry out some action as having two components: organisational support and resources.[4] The critical aspect of structuring is buried within these domains. We found that there was sufficient evidence of the importance of diverse structures for managing internal and external relations, allocating tasks,

networking, decision-making, managing the public profile, resolving conflict, reviewing and redirecting activity and so for structuring to require a special emphasis.[32,34-36]

Therefore, we define organisational capacity as having (at least) three components:

ORGANISATIONAL COMMITMENT	as evidenced in available resources, job descriptions, mission statements, policies, number of part of the organisation involved, number of levels of the organisation in which support for the program is evidenced, recurrent funding
SKILLS	competence in handling specified program implementation and delivery functions, problem solving capability
STRUCTURES	networks within and across organisations, decision-making forums, communication, ways of acquiring new information (environmental scanning), ways of accessing additional skills, ways to construct new work processes evolving as a result of program (planning and review structures)

Note that other practice-based groups with whom we have been consulting have emphasised the importance of even more dimensions.[37]

Table 2 summarises how theory can assist with tailoring goals for coalition development to different stages of a collaboration.

> **Table 2   USING THEORY IN CAPACITY-BUILDING**
>
> **To identify critical sequences among strategies**
>
> **EXAMPLES FROM COALITION-BUILDING**
>
> **Goal is to set up a strong coalition or partnership among organisations**
>
> <u>**Early**</u> **in the collaboration's development**
>
> **Consideration of coalition composition and convenor characteristics, getting the right parties to the table in order to gain a comprehensive view of the problem**
>
> <u>**Later**</u> **in collaboration's development:**
>
> **Tailoring structures to the other phases of problem solving, that is, the phases of direction setting and then, structuring**
>
> **Structures must allow for multiple roles and role complexity eg working parties and executive groups working alongside under the scrutiny of a broader, looser network or less task-based forum**

1.7.2.3 Using Theory to Set Limits on What can be Achieved in Particular Contexts

Theory is also used in capacity-building to set limits on what can be achieved in particular contexts. For example, our reviews of the literature in organisational development, led us to be cautious about the enthusiastic adoption of models of organisational change and development which were derived outside hospitals and health care settings.[38]

The following quotation captures this well:

> *The public sector has a reputation for the retarded and undiscriminating embrace of management practices developed in and for the private sector.*
>
> <u>Australian Journal of Public Administration</u>, 1991[39]

While some useful approaches to organisational development based primarily on stage models[40] have been used and built upon by practitioners in NSW, many practitioners may have an unsophisticated and undifferentiated analysis of the complexity of hospital settings and this may limit their success to modest changes made by health care teams.

Domain theory is one theory which has been proposed to provide an alternative model for public or human service organisations, which argues that human service organisations (such as hospitals) are essentially different from the private sector, and are dominated by three domains.[41] Each domain is dominated by different interests and ethics, which are in conflict with one another. These are the policy domain (hospital board and representatives from constituency groups, with an emphasis on representation); the management domain (with an emphasis on efficiency and hierarchy, and the service domain (characterised by a multitude of groups whose primary allegiance is professional)[41] In practice, adoption of a domain theory perspective alerts the practitioner to conflict. The practitioner is made aware of power and value differentials across the domains that might render inert organisational development strategies that are based on consensus decision-making, shared vision and

trust.[42] In these circumstances, practitioners are more likely to be successful using what is called 'contest' and 'campaign' tactics drawn from conflict models of change (such as lobbying, negotiating, pressure tactics, and utilising the opportunities provided by external events and agencies).[34] Popular consensus-based approaches, like team building and vision workshops should be reserved for within-domain activities or among parties who have already shown a capacity to innovate. Unfortunately, this important distinction is rarely recognised in the health promotion literature, with some texts based on an organisational settings approach to health promotion presenting conflict simply as a communication problem.[43]

Table 3   USING DOMAIN THEORY IN CAPACITY-BUILDING

To set limits on what can be achieved in particular contexts

EXAMPLES FROM ORGANISATIONAL DEVELOPMENT

Three domains of a health care organisation

> **Policy**
> **Management**
> **Service**

An indicator of good quality process in capacity-building would be the demonstration of special care taken in the selection of change-oriented strategies, eg, the selection of consensus strategies for within-domain change processes and the selection of more conflict and collaborative based strategies for across-domain change processes. Theory would suggest that agreement across domains rarely comes 'naturally' because values and allegiances across the groups differ highly.

1.7.2.4 Using Theory to Identify Key Phenomena in Capacity-Building

A community-level example of key phenomena in capacity-building

Theory in capacity-building can identify the critical components or constituents of phenomena of interest. For example at a community level Eng and Parker[44] have built upon the work of Iscoe[45] and Cottrell[46] to design a way of measuring the extent to which a community can work collectively in problem-solving, using both qualitative and quantitative methods. The work is derived from earlier theory about community competency plus participatory research attempting to derive the distinguishing features of communities with a history or reputation for acting constructively on its own behalf from communities which do not. The principal domains are listed in Table 4 (based on Eng and Parker [44]).

Table 4   USING THEORY IN CAPACITY-BUILDING

To identify key phenomena in capacity-building

A COMMUNITY LEVEL EXAMPLE

Essential features of problem-solving at a community level as evidence in actions of social units, networks and individuals

> **participation in community affairs**
>
> **commitment to the community**
>
> **awareness of constituent groups and agencies and their contribution to community identity**
>
> **ability to express collective views and exchange information**
>
> **mechanisms for conflict containment and accommodation**
>
> **ability to use resources and manage relations with the wider society**
>
> **ability to establish formal means for representative input to decision-making**
>
> **social support**

Instruments to measure some aspects of these domains have already been used in Australia in the evaluation of the Victorian Healthy Localities Project. For example, at an individual level, measures of community attachment, sense of community, confidence in problem-solving and participation in problem-solving have been used in pre and post population surveys[47] and cover the first two domains. Community development indicators proposed by Dixon[48] overlap with the categories in Table 4 and Dixon suggests that evidence of these factors be drawn from observations about networks and organisations, that is, distinguishing community-level evidence from individual-level evidence. A simple indicator of this would be the extent to which agencies in a community are aware of each other's activities (eg Does the Greek Women's Association know about the League for Greek Women?) so that they can choose to act in collaboration over some issues and hence increase their power.[14] The degree of inter-organisational networking hence becomes an indication of increased capacity to problem-solve.[14] One of us is presently involved in a cluster randomised controlled trial in maternal health promotion in Victoria involving 16 communities where increased capacity across inter-organisational networks is being monitored over time using these network analytic techniques.

With other domains, such as social support, the key indicators one would examine would need to be more situationally defined before one could start to think about indicators. That is, there is no single meaningful measure of social support. Social support has particular functions (such as informational support, instrumental support and emotional support) and there are also particular structural properties (such as network size and density)[49] Interventions may be designed to impact on some aspects and not others. No universal "gold standard" in social support for a community is likely to exist because of different needs, preferences, cultures and values. Indeed the same comment could be made for various aspects of community capacity. This makes it imperative that any empirical work is grounded within the community with whom a health worker is engaged. This principle has been followed by Eng and Parker in developing indicators of community competence with a rural

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African American community in the USA[44] and Jackson and her colleagues in developing indicators of community capacity in Canada.[50]

It is also important to note that problem-solving machinery or capacity at a community level is a more narrow construct than some community-level indicators with which readers may be acquainted such as "healthy community" indicators or "community development" indicators. The latter include environmental, cultural and economic indicators.[48] More recently there have been proposals about measuring social capital at a community level. This extends to other areas such as recreational pursuits and the extent to which people are engaged in following political issues.[51]

The Centre for Disease Control in the USA has commissioned a group of respected community researchers to build a consensus view on the components of community capacity. This is depicted in Figure 2.[52] Like Jackson et al, [50] the general model that we provide in Part 3 to assess community capacity to tackle community issues attempts to reflect a dynamic, that is a recognition that capacity is constantly created and challenged. We have drawn on Green and Kreuter's concept of predisposing, enabling, and reinforcing factors in order to do this. [53]

Finally, in the debate on community-level indicators it is also important to note that there has some been some confusion over the meaning of data drawn from individuals. There has been a tendency to assume that all data drawn from individuals is meaningless for gaining insights into more complex phenomena – like communities. We caution against this conclusion. Whether or not the aggregated data from individuals are meaningful at a community-level depends entirely on the nature of the variable or domain being investigated.[54] The level of unemployment, for example, is aggregated data from individuals and has meaning at both individual and community levels, although the variable of locus of control (personal-level variable) may not. Investigators have been urged to choose their conceptual framework carefully as methodological individualism is rife in the health sciences.[54,55] We have not had the opportunity in this project to conduct a field assessment of community-level capacity, but our suggestion would be that the research would be extensive. The project should be participatory, driven by community values and data would be drawn from multiple sources: organisational surveys, key informant interviews, random household surveys, observational work, individual and group interviews, document analyses and media analyses. Because we have not yet conducted this work and had our ideas challenged by that process, the model for community capacity assessment we present in Part 2 must be recognised as a draft only.

FIGURE 2   COMPONENTS OF COMMUNITY CAPACITY

1 Social networks & inter organisational relationships	6 Community leadership
2 Community resources	7 Skills
3 Sense of community	11 **COMMUNITY CAPACITY**	8 Community values
4 Understanding of community history	9 Critical reflexivity
5 Citizen participation	10 Community power
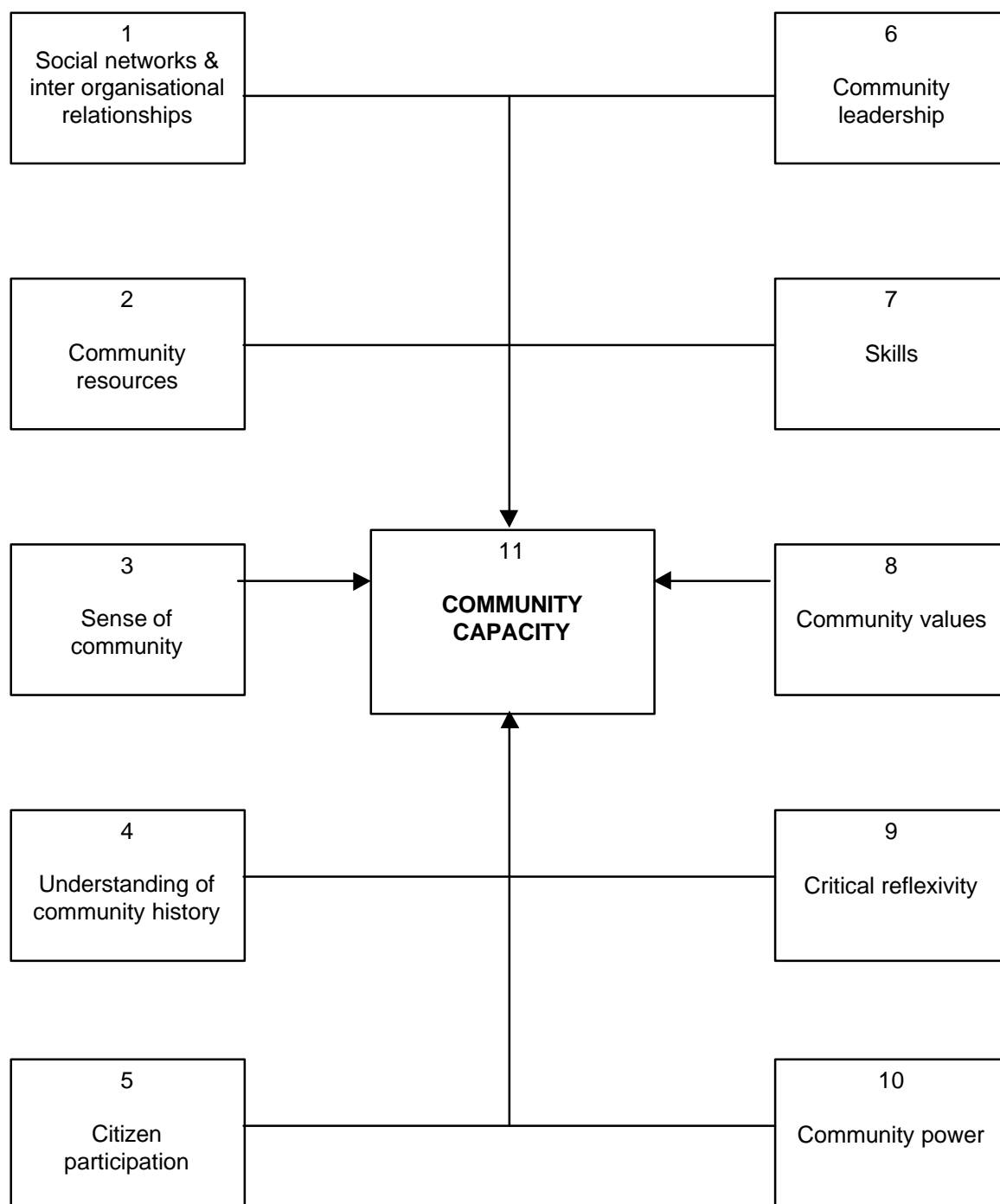
Source: Goodman RM et al. (1998) An initial attempt at identifying and defining the dimensions of community capacity to provide a basis for measurement

An Adult Learning Example of Key Phenomena in Capacity-Building

Another example of how theory has assisted the project to identify key phenomena in problem-solving has come from the adult learning literature. Figure 3 depicts the relationship between two concepts: "dependent capability" which refers to being able to deal with familiar problems in familiar contexts and "independent capability" which is the ability to deal with unfamiliar problems in unfamiliar contexts.[56] This depiction has allowed us to capture the difference between the first dimension in capacity-building (infrastructure building or specific program delivery capacity) and the third dimension, problem-solving capability. While we have ruled out formal examination or testing people in problem-tasks as a way of measuring problem-solving capability (independent capability), the depiction does help clarify the objectives a worker may have in seeking to shift a person or team from quadrant Y to quadrant Z. Formal identification and assessment of competencies in health promotion (quadrant Y) has already been very well established by foregoing projects in health promotion by other groups of investigators[57,58] and is represented in our indicators as mostly as infrastructure capacity. This has allowed the additional contribution of this project to be represented mostly as problem-solving capability, which we have operationalised mostly as the climate for creativity and innovation present in teams, organisations or situations (quadrant Z).

FIGURE 3   THE RELATIONSHIP BETWEEN COMPETENCE AND CAPABILITY*
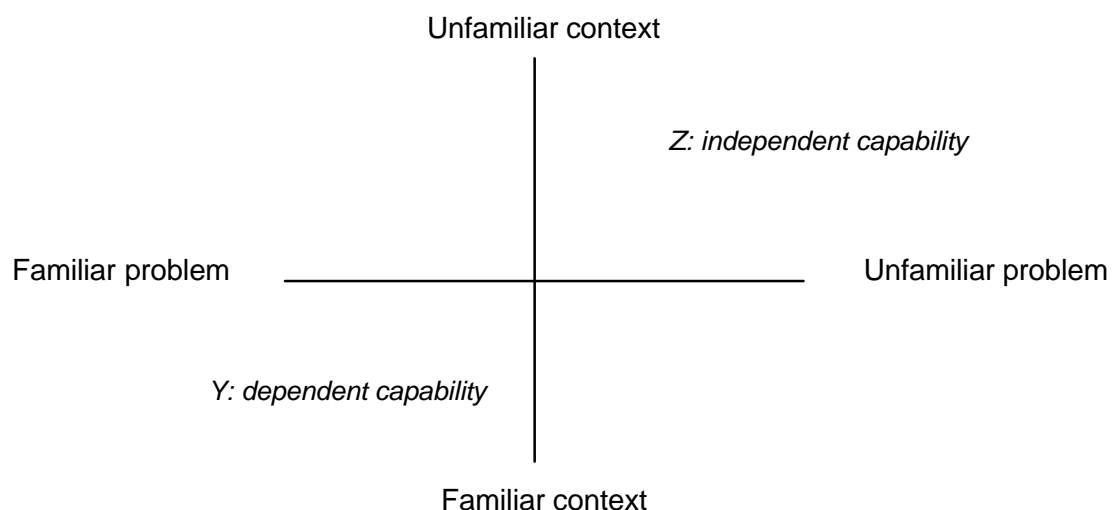
Characteristics of Z= uncertainty and change, exploring new problems, testing new solutions, quality enhancements, establishing new standards, autonomous teams and individuals, responsibility, networks and peer support, imagination, creativity, intuition, risk, innovation

*From Stephenson 1992

1.7.3   ETHICS AND VISIBILITY

Finally, conducting the project has made us aware of the acute need for this "invisible" side of health promotion to be made more visible. The focus group results, which are outlined in Part 3 of the report capture the anguish of workers whose contribution to the broader system is at present unrecognised. This is aggravated by a funding system based on the national health priority goals and targets. This requires workers to "dress up" projects according to narrowly-defined funding requirements, when in fact capacity-building activities by workers cross all boundaries and are likely to have an impact way beyond the immediate national priorities.

The invisibility of the work also raises questions about practice ethics, worker morale and quality control. We were made aware of the paternalism in capacity-building ("I am going to develop you") and, particularly in relation to work at the community level, the phrase "community competence" implies the possibility of "community incompetence" a notion which makes most people feel uncomfortable. We suggest in Paper 2, "*Working invisibly…*", that such value judgements and power differentials in health promotion work are unavoidable, even if the language is altered to make practice *appear* less paternalistic. The only 'insurance policy' we offer against this is that these issues are discussed more openly so that workers can adopt the perspective that suits their personal and professional values. We argue that workers should make their actions more visible and open to scrutiny and that success criteria for interventions are set in dialogue with the people for whom a project is intended, thereby facilitating the articulation of values other than our own.[2]

1.8   CONCLUDING REMARKS AND CAVEATS

In all the face-to-face encounters project staff have had with practitioners the desirability of developing indicators has not been questioned. Indeed, enthusiasm for the project has been overwhelming. We are concerned however if the production of indicators seduces workers into thinking that capacity-building is *defined* by these indicators or that the complexity of decision-making in practice is fully reflected in our items. Our sense is that our indicators capture the essence of some common situations in capacity-building, but that in no way are all the various domains and dynamics of capacity-building contained herein.

Measures or checklists are not a substitute for professional competence. Further, it is our feeling that only experienced practitioners will benefit from using the indicators because of the level of assumed knowledge and professional language. We make no apology for that. Our work also 'started where people are at,' recognising that practice is now highly sophisticated. Checklists are not the place to introduce totally unfamiliar concepts. We assume, for example, that concepts like "predisposing, enabling and reinforcing factors" are familiar.[53] We assume that the term "intersectoral collaboration" is familiar. We set out to develop checklists to capture the outcomes of efforts of workers who identify themselves as being engaged in health promotion, not write a book on how to do capacity-building for those with no prior experience. However, in doing this project we met a lot of people who could write such a book, pretty much blindfolded.

Capacity-building is an exciting and 'cutting edge' field, although it should be noted that a lot of what we have been documenting here are new words for older, familiar concepts from community and organisational development. We predict that there will be numerous authors with checklists and indicators in capacity-building emerging over the next few years, some from people working in isolation, others from people building on the work of others. This means that concepts will inevitably become more refined over time, and words and dimensions we are using today will be redefined, reclassified or subsumed into broader constructs tomorrow. This increasing sophistication and maturity should be welcomed and the readers are in effect, warned that the last word on capacity-building indicators is a long way off. We were reminded during this project that by setting out to capture a concept as woolly as 'capacity building,' our situation was similar to those investigators who set out more than a decade ago to capture the concept of 'quality of life' in a set of indicators. Critics felt it was too messy and most likely, impossible. Yet researchers' persevered and acceptable measures were developed. In fact, these days it would most unacceptable not to factor quality of life into decisions about the effectiveness of health care interventions. Similarly, we anticipate that in the future, decision-makers will require information about the extent of the capacity-building occurring across the system in order to make decisions about the best investments in health promotion.[59] To not do so will be viewed as most imprudent.

PART 2	INDICATORS OF CAPACITY BUILDING FOR USE IN PLANNING AND EVALUATION

This section brings together the literature and argument presented in Part 1 and distils from it sets of markers or indicators in capacity-building. These markers operate across five levels:

- one-to-one
- group
- organisation
- inter-organisation/coalition
- community

and encompass the three dimensions of capacity building as indicated in Part 1

- infrastructure or program delivery capacity
- indicators of likely program sustainability
- problem-solving capability

The reader's attention must be drawn to a number of important points at this stage. Firstly, in capturing the breadth of this field we have not been able to match the intensity of work that has been done by specialists working entirely within a single domain such as in Gray's work in inter-organisational collaboration[60] or the decades of work by Moos in measuring properties of social environments.[61] With respect to the latter, we are aware that checklist 5 (group learning) captures only a fraction of Moos's dimensions in say, the Group Environment Scale. Readers are referred to Moos's work to gain an impression of the multi dimensional assessment tools used which capture properties beyond our purpose here. It should be noted that use of these tools has been recommended practice in health promotion evaluation for some time. [62]

Secondly, we are also aware of projects elsewhere in the world which are addressing issues of quality assurance in health promotion and aspects of capacity building.[63-66] Our preference in synthesising the work of others has been to incorporate into our checklists only those dimensions of interest for which authors have produced evidence and/or theory to support its inclusion. For example, the work of Goodman and his colleagues on likely indicators of program institutionalisation[12,13] is derived from observing program cohorts or 'life histories' of programs funded in previous decades. While there is clear value in developing standards or indicators using consensus-style strategies, we have been disinclined to use indicators arising from these methods alone unless there has been no other choice available. If we have misinterpreted the efforts of other investigators in this regard we would be pleased to acknowledge this and be corrected.

The checklists which follow have been 'road tested' for face validity or acceptability with practitioners. This means that practitioners have taken the checklists, applied them to real programs and made comments that have allowed us to improve the checklists. On these occasions practitioners have also taken the opportunity to review and discuss their program's performance with colleagues and project staff, that is, how well the programs have fared in relation to the checklist and according to our feedback for the most part this has been appreciated. However, not everyone found the checklists useful and user satisfaction 'ratings' are given in Part 4. Part 4 also contains the results of the inter-rater reliability testing of the indicators and the internal consistency scores, which on the whole are highly satisfactory. A further stage of the research remains and that is to test the criterion and discriminant validity of the indicators as a part of a formal research project. For example, after 5 years would a program that scored high on the program sustainability checklist be more likely to be still in operation than one that scored low? This illustrates that the indicators are not yet complete and there is much work ahead.

Finally, although it is apparent that capacity-building occurs across five levels and with at least three separate dimensions as presented above, it does not follow that we can logically separate out fifteen separate sets of specific indicators, cleanly in a matrix. This is because a single item may serve a function at multiple levels. Instead, to facilitate ease of use, we have chosen to present the indicators in relation to *specific scenarios or situations practitioners face in capacity-building.* This very much reflects where our research originated (from practitioners' stories and needs) and our indicators are thus tailored to these origins. This means that someone with a different starting point, say brainstorming all the different ways in which an organisation has 'capacity' for health promotion, would develop indicators that would look quite different. Bush and Mutch, for example, provide an excellent example of how a 'capacity-audit' can be designed for use across an area's services, groups and agencies in Queensland.[67] Our conjecture however, is that the essential domains should mostly overlap, regardless of the starting point in indicators development. *Different indicators will be used by practitioners for different purposes*. Our indicators tend to favour the problem-solving capability dimension of capacity building, as this is where a lot of capacity-building (in the name of health promotion) is occurring. For more basic infrastructure-level indicators, that may for example be used to assess core functions in public health like basic infrastructure for cancer control or disease surveillance, also see the work of Miller and Richards and their colleagues in the USA.[68-70]

INDICATORS TO HELP WITH CAPACITY BUILDING IN HEALTH PROMOTION: THE CHECKLISTS AT A GLANCE

SCENARIO	PAGE	DIRECTIONS AND COMMENTS	REFERENCES	DIMENSIONS COVERED*
1 Assessing the strength of a coalition	24	Use this to assess how well an inter organisational coalition is functioning or to set objectives/tasks in relation to coalition planning. Expect a mature coalition to score more highly than one early in its stage of development	20,32,33,34,35, 71	mostly c, some a
2 Assessing opportunities to promote incidental learning among other health workers	27	Use this for situations where the aim is to promote invisible skills transfer, that is, NOT pertaining to formal training programs. The checklist designed to help construct a plan for creating incidental learning opportunities for others – that is, for gaining health promotion skills unknowingly or 'by accident'.	31	mostly c
3 Assessing opportunities to promote informal learning among other health workers	28	Use this for situations where the aim is to promote invisible skills transfer that is, NOT pertaining to formal training programs. The checklist designed to help construct a plan for creating informal learning. opportunities for others – that is to encourage others to be more engaged in 'on the job' health promotion skills development.	31	mostly c

* a= infrastructure or program delivery capacity
 b= program sustainability
 c= problem-solving capacity

SCENARIO	PAGE	DIRECTIONS AND COMMENTS	REFERENCES	DIMENSIONS COVERED*
4 Assessing if a program is likely to be sustained	29	To use at the conclusion of a program to assess the presence of program, organisational and community-level factors known to be associated with program uptake and maintenance. A high score indicates likely sustainability. We have drawn heavily on reference 72.	72, 11,12	mostly b
5 Assessing the learning environment of a team or project group	31	Use this to assess whether or not the structure and functioning of a group is optimal for innovation or learning. The checklist is based on the assumption that a dysfunctional unit is unlikely to take on new roles effectively (that is, capacity-building will be unsuccessful). Can be used for pre intervention Assessment or for evaluation. A high score indicates a well developed team.	23, 24 ,25, 61	mostly c
6 Assessing capacity for organisational learning	33	Same as above but for organisations. Does not capture yet in our view the complexity of different domains within organisations, conflict across domains and the need to adopt different change strategies accordingly		mostly c

* a= infrastructure or program delivery capacity
 b= program sustainability
 c= problem-solving capacity

SCENARIO	PAGE	DIRECTIONS AND COMMENTS	REFERENCES	DIMENSIONS COVERED*
7 Assessing the capacity of a particular organisation to tackle a health issue	35	Arranges critical factors into predisposing, enabling and reinforcing factors. These may be assessed separately or in combination depending on the situation at hand. Includes an assessment of partnership capacity (as part of a coalition) and program delivery capacity (that is, whether infrastructure is sufficiently well developed so that the organisation could act independently). A high score equates with high level of capacity. Can be used as an assessment tool prior to, or after, intervention.	5,6,7,11,12, 68,69,70,72	mostly a, some b
8 Assessing the quality of program planning	37	Assesses one component of checklist 7 in more detail. Modified version of an instrument described in reference 63.	63	a
9 Assessing community capacity to address community issues	39	Sorted into predisposing, enabling and reinforcing factors. This checklist is untested at present.	15,16,44,45, 46,47,49, 52	mostly c

CHECKLIST 1:	ASSESSING THE STRENGTH OF A COALITION

This checklist is about the processes of coalition, which refers to the group formed when agencies and organisations join forces and work together on a common problem or issue.

The person completing this checklist should be very familiar with the coalition and able to comment on its processes (eg. a project officer or executive officer). In addition, the checklist could be completed by all members of a coalition, in order to compare answers and make revisions to processes if this is seen to be necessary.

This checklist is not suitable for evaluating one-off committee meeting. It should be selected to assess the processes of a group of agencies and organisations that have some formality to their processes. The checklist is best suited to coalitions set up across different types of agencies than to, say, different units within a single type of organisation. Should you choose to apply the checklist to the latter situation, you can, though you may find more items are not really applicable (eg. Item 20), in which case you should code the items as 'not applicable'.

Answer the following statements using the following format. Note that you should give a score for each item on the checklist:

> 2 = yes, fully
> 1 = yes, in part
> 0 = no
> DK/NA = don't know, not applicable *Note: "Member" = member organisation*

Remember that these are general statements, in which case you should be giving the response which best fits overall.

These items are based on research on making coalitions work well, that is, things about good process that are linked to good outcomes. Items relate to process issues, not your achievements or purpose.

The first set of statements are about the composition of the group and the convenor, or the organisation or person representing an organisation, that takes responsibility for making things happen.

(Circle one only for each statement)

1.	There is enough variety among members of the group to gain an appropriate view of the problem or issue the group is tackling.	2	1	0	DK/NA
2.	There is enough variety among members of the group to access a variety of resources eg. people, places to meet, administrative support etc.	2	1	0	DK/NA
3.	Members feel that the benefit of being involved in the collaboration outweighs any associated costs, eg. Time involved, travel.	2	1	0	DK/NA
4.	Members work together, but at the same time, the circumstances under which a member could act autonomously is clear.	2	1	0	DK/NA
5.	Members have confidence in the organisation which takes the lead in convening meetings.	2	1	0	DK/NA
6.	Members have enough experience and skill in meeting procedures and processes for things to run smoothly.	2	1	0	DK/NA

The next set of statements is about coalition process or how things get done

2 = yes, fully
1 = yes, in part
0 = no
DK/NA = don't know
or not applicable

(Circle one only for each statement)

Problem Setting

7.	All the potential groups or organisations who may have a stake in the problem have been identified (even those who are not coalition members)	2	1	0	DK/NA
8.	Members of the coalition have acknowledged the issue which joins them together	2	1	0	DK/NA

Direction Setting

9.	A common purpose and mission has been identified	2	1	0	DK/NA
10.	Most members have a good feel for the values which motivate each to be involved (what they represent, why they are there, why they think it is important)	2	1	0	DK/NA
11.	Success indicators or performance targets have been set ie, members know what is to be achieved by when	2	1	0	DK/NA

Structuring

A mutually acceptable way of managing the following processes and procedures has been identified

12.	Decision making (eg by consensus or by voting or by someone taking authority over others)	2	1	0	DK/NA
13.	Communicating with group members	2	1	0	DK/NA
14.	Gathering information to help with group tasks	2	1	0	DK/NA
15.	Working on specific tasks, eg working groups, allocation of tasks at meetings	2	1	0	DK/NA

2 = yes, fully
1 = yes, in part
0 = no
DK/NA = don't know
or not applicable

(Circle one only for each statement)

(CONTINUED)

A mutually acceptable way of managing the following processes and procedures has been identified

16.	Reviewing progress and structures	2	1	0	DK/NA
17.	Reviewing member satisfaction	2	1	0	DK/NA
18.	Resolving internal conflict or disagreement	2	1	0	DK/NA
19.	Resolving conflict with external agencies	2	1	0	DK/NA
20.	Managing the media or public relations profile	2	1	0	DK/NA
21.	Monitoring how resources are used and gathering further resources	2	1	0	DK/NA
22.	Documenting process and outcomes of activity	2	1	0	DK/NA
23.	Setting and reviewing timeframes for coalition activities	2	1	0	DK/NA

The final statement is about the coalition's expectations about success

(Circle one only for each statement)

24.	There is a general feeling of confidence in the group's capacity to achieve its goals	2	1	0	DK/NA

TOTAL SCORE ………… (maximum possible is 48) % …………

CHECKLIST 2:	ASSESSING THE OPPORTUNITIES TO PROMOTE INCIDENTAL LEARNING AMONG OTHER HEALTH WORKERS

This checklist is for health promotion staff who are seeking to develop the capacity of other colleagues in the health service to do health promotion.

Select a situation you are working in currently where you feel that you have an objective to promote health promotion skills among particular people, i.e., capacity-building on the one to one or among a group. This may be in the context of a particular program where you are trying to build particular skills. Or you may choose a situation where you are just seeking to arouse your colleagues' interest in health promotion or the health promotion way of thinking about things. DO NOT select a formal training activity (ie not a workshop or training course). This is because this checklist is about building capacity *indirectly.* The items in this checklist are drawn from research in the areas of what is called incidental and informal learning. Thinking back to the situation you have in mind, would you describe the learning that is going on as largely:

a   incidental/preconscious/subtle, in that the people you are trying to influence don't really know that they are learning about health promotion?
(if so then stay with this checklist)

OR

b   informal, in that the people you are trying to influence are conscious that they are learning about health promotion in this situation you have chosen?
(if so then use checklist 3 instead))

If you think you can say 'yes' to both of these questions, then the situation you have chosen is too big or diffuse. You should narrow it down to a particular person and instance and complete the checklist. If you like, you may complete the checklist several times if you think you have different types of objectives for different members of a group you may be working with. A high score indicates there is lots of opportunity for incidental learning in the situation you have chosen to rate.

Now, consider each item in the checklist using the rating scale: 2 = yes, fully
1 = yes, in part
0 = no
DK = don't know/not applicable

(Circle one only for each statement)

1	There are opportunities in the workplace for the person you wish to influence to come across health promotion staff informally, and have interpersonal contact eg. In the tea room, library, car park	2	1	0	DK
2	There are opportunities in the workplace for the person you wish to influence to meet health promotion staff formally (eg. meetings, clinics, seminars)	2	1	0	DK
3.	The work role of the person you wish to influence is sufficiently broad for them to be often thrown into new situations, or be asked to carry out different tasks from normal	2	1	0	DK
4.	The person you wish to influence is often placed in a situation where they can directly observe the skills and behaviours that you wish them to acquire	2	1	0	DK
5.	There is a sufficient diversity of contact between health promotion staff and the person you wish to influence for the full range of health promotion skills to be shown to advantage	2	1	0	DK

TOTAL SCORE ……………(maximum possible is 10) % ………………

CHECKLIST 3:	ASSESSING OPPORTUNITIES FOR INFORMAL LEARNING AMONG OTHER HEALTH WORKERS

This checklist is for health promotion staff who are seeking to develop the capacity of other colleagues in the health service to do health promotion.

Select a situation you are working in currently where you feel that you have an objective to promote health promotion skills among particular people, i.e., capacity-building on the one to one or among a group. This may be in the context of a particular program where you are trying to build particular skills. Or you may choose a situation where you are just seeking to arouse your colleagues' interest in health promotion or the health promotion way of thinking about things. DO NOT select a formal training activity (ie not a workshop or training course). This is because this checklist is about building capacity *indirectly.* The items in this checklist are drawn from research in the areas of what is called incidental and informal learning. Thinking back to the situation you have in mind, would you describe the learning that is going on as largely:

a   incidental/preconscious/subtle, in that the people you are trying to influence don't really know that they are learning about health promotion?
(if so then use checklist 2)

OR

b   informal, in that the people you are trying to influence are conscious that they are learning about health promotion in this situation you have chosen?
(if so then stay with this checklist)

If you think you can say 'yes' to both of these questions, then the situation you have chosen is too big or diffuse. You should narrow it down to a particular person and instance and complete the checklist. If you like, you may complete the checklist several times if you think you have different types of objectives for different members of a group you may be working with. A high score indicates there is lots of opportunity for informal learning in the situation you have chosen to rate.

Now, consider each item in the checklist using the rating scale: 2 = yes, fully
1 = yes, in part
0 = no
DK = don't know/not applicable
(Circle one only for each statement)

1.	The person you wish to influence is frequently called upon to form a view about health promotion and its value	2	1	0	DK
2.	The person you wish to influence is proactive and often volunteers to undertake new tasks such as chairing a meeting, planning a project or writing a plan	2	1	0	DK
3.	Creative thinking strategies and problem solving strategies such as brainstorming, drawings/models or thinking in metaphors are welcomed in your interactions with this person	2	1	0	DK
4.	The opportunity to rethink the way a problem or situation has been approached is welcomed by this person.	2	1	0	DK
5.	When activities or projects fail or don't go as well as planned, this is seen by this person as an opportunity to analyse and reflect on the value of past efforts	2	1	0	DK
6.	Learning about health promotion has assisted the person you wish to influence to reframe their role in the organisation	2	1	0	DK
7.	Learning about health promotion has assisted the person you wish to influence to see a greater importance for health promotion in the organisation	2	1	0	DK

TOTAL SCORE …… (maximum possible is 14) % ……………..

CHECKLIST 4:	ASSESSING IF A PROGRAM IS LIKELY TO BE SUSTAINED

You will need to choose a program that is established/complete. The following factors are known to predict uptake and continuation of the program. Give your answers for each item according to the rating scale. Note that the term "host organisation" refers to the organisation that you see as the one most appropriate to house or support the program.

> 2 = yes, fully
> 1 = yes, in part
> 0 = no
> DK = don't know

The first set of items is about program design and implementation factors.

(Circle one only for each statement)

1	People with a stake in the program - funders, administrators, consumers/beneficiaries, other agencies - have been aware of the program and/or involved in its development	2	1	0	DK
2	The program has shown itself to be effective. Effects are visible and acknowledged	2	1	0	DK
3.	The organisation which you intend to host the program in the future has been making some real or in kind support to the program in the past.	2	1	0	DK
4.	Prospects for the program to acquire or generate some additional funds or resources for the future are good	2	1	0	DK
5.	The program has involved formal and/or informal training of people whose skills and interests are retained in the program or its immediate environment.	2	1	0	DK

The next set of items is about factors within the organisational setting which are known to relate to the survival of a program

6.	The organisation that you intend to host the program in future is mature (developed, stable, resourceful). It is likely to provide a strong organisational base for the program.	2	1	0	DK
7.	The mission of the program is compatible with the mission and activities of the intended host organisation	2	1	0	DK
8.	Part of the program's essential 'business' is integrated into other aspects of the host organisation eg. in policies, practices, responsibilities etc. That is, the program does not simply exist as an entirely separate entity.	2	1	0	DK
9.	There is someone in authority or seniority, other than the director of the program itself, who is an advocate for the program at high levels in the organisation	2	1	0	DK
10.	The program is well supported in the organisation. That is it is not under threat and there are few rivals in the organisation who could benefit from the closure of the program	2	1	0	DK
11.	The intended host organisation has a history of innovation or developing new responses to situations in its environment	2	1	0	DK

The next set of items is about factors in the broader community environment which affect how long programs last.

12.	There is a favourable external environment for the program, that is, the values and mission fit well with community opinion, and the policy environment	2	1	0	DK
13.	People in the community, or other agencies and organisations, will advocate for and maintain a demand for the existence of the program should it be threatened	2	1	0	DK
14.	Organisations that are similar to the intended host organisation have taken the step of supporting programs somewhat like your program	2	1	0	DK

TOTAL SCORE: ……………..(maximum possible is 28) % …………………

CHECKLIST 5: ASSESSING THE LEARNING ENVIRONMENT OF A TEAM OR PROJECT GROUP

Select a group that you are working within, or seeking to develop from the outside, into one that can innovate and learn more effectively. Rate how well the group performs on the following indicators. These include an assessment of basic functioning as well as opportunities within the group to extend the group into new areas. The items are drawn from research on what is known to be associated with innovation among work groups

Please use the following ratings for each item: 2 = yes, fully
1 = yes, in part
0 = no
DK = don't know

The first set of items is about group goals.

(Circle one only for each statement)

1	Team goals are well defined and aligned to the goals of the organisation.	2	1	0	DK
2	Everyone knows how their own job relates to the overall work of the team and the organisation.	2	1	0	DK
3.	The standards expected of people in the conduct of their work are clear.	2	1	0	DK

The next set of items is about feedback about performance.

4.	Team members get timely, well defined feedback from others about how well they are doing.	2	1	0	DK
5.	Giving and receiving criticism is a well-developed personal skill of group members.	2	1	0	DK

The next set of items is about the guidance that people are given with their work.

6.	People get help from each other about how to do things, if required.	2	1	0	DK
7.	When any new technology or procedure is introduced into the group, people get guidance on how to manage it.	2	1	0	DK

The next set of items is about the amount of critical questioning that goes on in the group.

8.	There are regular opportunities to reflect on how things are done and how they could be improved.	2	1	0	DK
9.	Everyone is expected to take responsibility for questioning and to look for new ways to achieve group goals.	2	1	0	DK
10.	Ideas for new approaches to things are welcomed and given serious consideration.	2	1	0	DK
11.	The team mission and values can be challenged by group members without penalty (i.e. this is not seen as disloyal or out of place)	2	1	0	DK

13.	Experimentation is encouraged, that is, people are encouraged to try new things.	2	1	0	DK
14.	If a project fails, or things go less well than planned, people learn from it and their readiness to continue to try new things is not diminished.	2	1	0	DK

The last set of items is about structures.

15.	Team members are connected to diverse networks from which they can obtain ideas, support or information.	2	1	0	DK
16.	People in the team participate in other parts of the organisation enough to be able to detect trends and appreciate the role of the team in that wider environment.	2	1	0	DK
17.	The group uses clear structure and procedure for decision-making within the team.	2	1	0	DK
18.	The group uses a clear structure and procedure for communication within the team.	2	1	0	DK
19.	The group uses a clear structure and procedure for conflict resolution within the team (eg. talking it over in meetings, talking it over with a supervisor/leader, having a third party arbitrate)	2	1	0	DK
20.	Team members are aware of when they can act independently and when they should bring particular business to the group.	2	1	0	DK

TOTAL SCORE: ………………….(maximum possible is 40) % ………………………

CHECKLIST 6: CAPACITY FOR ORGANISATIONAL LEARNING

Organisational change theory suggests that organisations can be made more innovative or capable of responding positively to new events and pressures in their external environment (like taking on population health and health promotion issues). While Part 1 of this document illustrates that we have some doubts about this in pertaining to complex systems like hospitals, there may be some value in thinking about how aspects of some systems, or more discrete units within organisations, function. The following are the 11 characteristics of a "learning organisation". These may be important for those practitioners seeking to reorient organisations. Rate the organisation you are working with on each item. It requires you to consider and report on the practices of the organisation overall. A high score would indicate that the organisation is well placed to take on new activities that are seen as beneficial to the organisation.

> 2 = yes, fully
> 1 = yes, in part
> 0 = no
> DK = don't know

(Circle one only for each statement)

1	To what extent does the organisation you are working with have a learning approach to strategy or policy development? eg. New ways of working are seen as opportunities to develop the organisation and there is preference for experimentation and evaluation.	2	1	0	DK
2	To what extent does the organisation you are working with have participative policy-making? eg. People working at various levels in the organisation have an opportunity to take part in the decisions that affect them and the organisation.	2	1	0	DK
3.	To what extent does the organisation you are working with have open information systems? eg. People have easy access to the chief developments across the organisation and the purpose of any changes or decisions are made clear.	2	1	0	DK
4.	To what extent does the organisation you are working with have accountability systems that help improve operations as they go along? eg. There is rapid feedback of performance and thus higher chances of aborting or altering unsatisfactory practices.	2	1	0	DK
5.	To what extent does the organisation you are working with have mutual adjustments between departments? eg. Different parts of the organisation expand, adjust and accommodate to fit the circumstances of another, such as temporary arrangements to share scarce administrative support.	2	1	0	DK

6.	To what extent does the organisation you are working with reward people for a variety of different and broad activities?	2	1	0	DK
	eg. People are rewarded for investing effort in new things, not just 'business as usual'.				
7.	To what extent does the organisation you are working with have adaptable structures?	2	1	0	DK
	eg. New procedures and processes are adopted and accommodated.				
8	To what extent does the organisation you are working with have people scanning the horizon for new information and developments?	2	1	0	DK
	eg. People use formal and informal time out of the organisation (such as at conferences) to acquire new information and ideas that may be of value to the organisation. There may be people with designated responsibility to seek out information about funding sources, external opportunities and developments.				
9	To what extent does the organisation you are working with engage in inter-organisational learning.	2	1	0	DK
	eg. The organisation participates in a broader network of similar organisations and acts in concert with these to mutual advantage.				
10.	To what extent does the organisation you are working with have a learning culture and climate?	2	1	0	DK
	eg. Innovation and experimentation are encouraged.				
11.	To what extent does the organisation you are working with encourage self-development opportunities for its staff?	2	1	0	DK
	eg. Individuals and their personal contributions are valued, development and growth of careers/roles are encouraged.				

TOTAL SCORE:…………(maximum possible is 22) %…….

CHECKLIST 7:	ASSESSING THE CAPACITY OF A PARTICULAR ORGANISATION TO TACKLE A HEALTH ISSUE

This checklist requires you to consider the factors that tell you whether or not an organisation (not your own) has a capacity to work with you on a particular health issue. It should be applied as a pre-intervention assessment tool, or early in the stages of negotiation of a new project with an organisation, guiding you to think about factors that might be critical preconditions to a successful partnership with you and your agency in developing a project.

 2 = yes, fully
 1 = yes, in part
 0 = no
 DK = don't know

The first set of items relates to predisposing factors. These pertain to consciousness of the problem or issue and readiness to respond.

(Circle one only for each statement)

1	The organisation has some clearly identifiable and accessible people who can be seen as *doers* or *make-or-breakers* whose views and opinions would be crucial to getting any activity to occur.	2	1	0	DK
2.	The organisation has a history of innovation or getting involved in new projects, outcomes in the past have been generally seen to be beneficial.	2	1	0	DK
3	There is evidence of favourable attitudes and knowledge about the problem or issue that you wish to address within the organisation. eg. Press releases, views expressed at meetings, responses to evidence regarding the issue such as requests from other agencies, community petitions, attendance of staff at relevant conferences.	2	1	0	DK

The next set of items refers to enabling factors. These are about assessing and creating structures and skills that make things happen.

4.	There is a mechanism in the organisation to receive and act upon your request for joint project participation	2	1	0	DK
5.	There is a decision-maker who can respond to your requests within a reasonably short time frame (say three weeks)	2	1	0	DK
6.	There are people with designated responsibility for aspects related to the issue which interests you who are available to attend project meetings (say a 2 hour meeting once per month)	2	1	0	DK
7.	There are facilities within the organisation that could be devoted to a new project (meeting venues, communications systems, administrative support, people's time).	2	1	0	DK
8	There is a major decision-making forum in the organisation meeting frequently enough to allow a project to proceed at reasonable pace (say once every 2-3 months)	2	1	0	DK

9.	The people who are likely to work with you on the project possess sufficient appropriate skills (communication, lobbying, managing meetings, conflict resolution, project management, advocacy, report writing, media relations).	2	1	0	DK
10.	You can arrange for some particular events or opportunities that will allow this organisation and your own to appreciate what each other has to provide.	2	1	0	DK

The final items relate to reinforcing factors. These are things in the broader environment which are likely to maintain support for the program.

11	The organisation is likely to lend its credibility to the project for example, in its communications with the media and with the public more generally (press releases, presence of key staff at events of strategic importance).	2	1	0	DK
12.	The issue and project you are proposing will lead to activities within the organisation which are either in keeping with, or do not radically depart from, the organisation's mission.	2	1	0	DK
13.	Working on this problem will enhance the credibility, status or respect with which the organisation's constituents view the organisation.	2	1	0	DK

TOTAL SCORE …………..(maximum possible score 26) % …………………….

CHECKLIST 8:	ASSESSING THE QUALITY OF PROGRAM PLANNING

The following checklist is scored slightly differently as noted below. This list is modified from that provided by Van den Broucke and Lenders, who have used the instrument to illustrate before and after differences among projects after a training program in program planning.[63] You can use this checklist to assesses dimensions from checklist 7 in more detail (that is, staff skills in program planning). The source of evidence for this checklist is in the formal written program plan or other supporting documents is these are required to answer each question.

3= completely fulfilled
2=largely fulfilled
1=partly fulfilled
0=not fulfilled

Empirical basis

Does the plan contain.......

1   Empirical data with regard to the health problem

2   Empirical data with regard to the problem determinants

3   Empirical data with regard to the expected outcomes

Target group specification and involvement

4   Specification of the target group characteristics

5   Specification of the target group size

6   Specification of the channel or way of reaching these people

7   Evidence that the target group has been consulted and/or involved in the planning

Objectives and strategies

7   Specification of strategies and strategy objectives

8   Concreteness of objectives

9   A distinction between goals and objectives, that is, between
        intended main effects and intermediate effects

Method or strategy specification

11   Clearness of the strategies or methods

12   Sound justification or goodness of fit between strategies and objectives and goals

Planning and resourcing

13   Clearness of the planning, accuracy and detail in documentation

14   Realism of the planning, that is, is what is being proposed feasible?

15   Evidence that the program is appropriately resourced

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16   Evidence that there are appropriately skills staff to deliver the program

17   Evidence that the program is not overlapping with existing programs

Process evaluation

18   Inclusion of process evaluation in the planning

19   Specification of the procedures of the process evaluation

20   Possibility to adjust the program on the basis of feedback from the process evaluation

Evaluation of program effects

21   Provision for baseline measurement using data sources with accepted validity

22   Provision for effect measurement using data sources with accepted validity

23   Provision for follow up measurement using data sources with accepted validity

24   A design component that will allow the possibility to sort out rival interpretations as to why effects might have occurred (eg a comparison group or other methods if comparison groups are deemed not appropriate).
NOTE this item is for programs with no prior evidence for effectiveness

TOTAL SCORE …………. (maximum possible is 72) % …………………………..

CHECKLIST 9:	ASSESSING COMMUNITY CAPACITY TO ADDRESS COMMUNITY ISSUES

The indicators depict a competent community that may be defined geographically or by affiliation or shared characteristic. Again a rating for each item is required

> 2= yes, fully
> 1= yes, in part
> 0= no
> DK= don't know

Predisposing factors

1   Commitment to the community eg,

    1.1   Strong sense of community or community attachment

    1.2   Large proportion of long term residents or members

    Evidence: surveys, interviews

2   Awareness of each part of the community's identity and contribution eg,

    2.1   Agencies know about each other and their respective roles

    2.2   Residents or members have a sense of community history and make up

    Evidence: surveys, documents, interviews, oral histories

3   Caring

    3.1   Residents or members express interest in the situation or issues related to people unlike themselves in the community

    3.2   Money or donations in kind can be raised in times of emergency or special need

    3.3   Residents or members express concern over issues which affect the community

    Evidence source: surveys, interviews, local media

4   Collective efficacy

    4.1   Residents or members express confidence in their capacity to work together to address issues which affect the community

    4.2   Agencies express confidence in their capacity to work together to address issues which affect the community

    Evidence source: surveys, interviews

Enabling factors

5   Participation in community affairs eg,

      5.1   High levels of club membership or membership of local groups

      5.2   People are not reluctant to sign petitions about community affairs

      Evidence: surveys, observations, document analysis

6   Ability to express collective views and exchange information eg,

      4.1   Agencies come together to express joint views, eg submissions to external authorities

      4.2   Interagency meetings and public meetings are common

      4.3   Community values have been articulated through actions taken in various previous events

      4.4   Agencies and organisations coordinate and act in concert with each other as required

      Evidence: observation, document analysis, interorganisational linkage surveys, oral histories

7   Conflict containment and accommodation eg,

      7.1   There is evidence that in the past agencies and groups have managed to work together in spite of differences that may arise between them

      7.2   Agencies and residents/groups are prepared to accept the ruling of independent arbiters or mediators in the event of conflict

      Evidence: observation, document analysis, interviews

8   Ability to use resources and manage external relations eg,

      8.1   Evidence of pooling and sharing of resources (skills, facilities, staff)

      8.2   Use of funds, resources or relations external to the community in order to promote community goals

      Evidence: observation, document analysis, interviews

9   Networks across individuals, groups and organisations

      9.1   Social isolation is not a problem for any particular population group

      9.2   Agencies and groups have networks among like minded or similar groups

      9.3   Agencies and groups have diverse networks among dissimilar groups

      9.4   There is reciprocity across organisational networks (support operates in both directions)

      Evidence: surveys, network analyses, observations, document analysis

Reinforcing factors

10   Ability to retain formal means of representative input in decision making

      10.1   Positions for community agencies and members are retained in the decision-making structures and policies of those authorities whose affairs impact on the community

11   External resource access

      11.1   External resources are available for local issues

12   Community/external relations

      12.1   What the community learns and achieves is disseminated and built upon by other communities and vice versa

      Evidence: observations, document analysis

PART 3	ABTRACTS FROM PUBLISHED ARTICLES OF THE PROJECT

Hawe P, Noort M, King L, Jordens C. Multiplying health gains: the critical role of capacity-building within health promotion programs. Health Policy 1997;39:29-42

Health outcomes in populations are the product of three factors: (1) the size of effect of the intervention; (2) the reach or penetration of an intervention into a population and (3) the sustainability of the effect. The last factor is crucial. In recent years, many health promotion workers have moved the focus of their efforts away from the immediate population group or environment of interest towards making other health workers and other organisations responsible for and more capable of conducting health promotion programs, maintaining those programs and initiating others. 'Capacity-building' by health promotion workers, to enhance the capacity of the system to prolong and multiply health effects thus represents a 'value added' dimension to the health outcomes offered by any particular program.

The value of this activity will become apparent in the longer term, with methods to detect multiple types of health outcomes. But in the short term its value will be difficult to appreciate unless we devise specific measures to detect it. At present the term 'capacity-building' is conceptualised and assessed in different ways in the health promotion literature. Development of reliable indicators of capacity-building which can be used both in program planning and program evaluation will need to take this into account. Such work will provide health decision makers with information about program potential at the conclusion of the funding period, which could be factored into resource allocation decisions, in addition to the usual information about a program's impact in health outcomes. By program potential, we mean ability to reap greater and wider health gains

Hawe P, King, L, Noort M, Gifford SM, Lloyd B. Working invisibly: health workers talk about capacity building in health promotion. Health Promotion International 1998;13(4):285-296

A series of six focus groups was held with health promotion workers to explore the meaning and experience of 'capacity-building', a term that is used variously in the literature. The research is part of a participatory, practice-based project to develop outcome indicators in capacity building. Capacity building was defined as seeking to develop health promotion skills and resources, and also problem-solving capability, at five levels: the individual; within health care teams; within health organisations; across organisations and within the community. While workers had little difficulty identifying outcome of capacity building, indicators of quality or good process were more difficult to articulate. This is partly because capacity building was described as an invisible, even secret process. Capacity building is hidden from funders and administrators because it is not generally regarded as a legitimate project activity; that is, it is not directly linked to risk factor behaviours in priority areas such as cancer, heart disease and injury control. Capacity building is also hidden from other workers in order to make it more effective. This is particularly the case with health promotion workers working within what they perceive to be hostile climates, such as health care settings experiencing cutbacks. This invisibility of practitioners' capacity-building work has implications for quality control, guiding theory, practice ethics, peer support, worker morale and funding mechanisms in health promotion.

PART 4	RESULTS OF THE RELIABILITY TESTING OF THE INDICATORS

One step on the way to improving the strength of the indicators is to test face validity – do the indicators make sense to people, and reliability – do people using the checklist get the same answers as each other? In this section we report the formal testing for inter-rater reliability and for internal consistency. For those participants who took part in the inter-rater reliability interviews, we also asked for a comment about the usefulness of the checklist to their own work.

In early revisions of the checklists, as practitioners applied the checklists and gave as comments about their usefulness one of the first issues that became clear was that the indicators are quite literal. A checklist referring to sustainability of a *program* cannot be used to assess sustainability of a *policy*. An intersectoral *coalition* is not the same as a *committee*. Checklists to assess committee functioning may have some value with a coalition in so far as they are usually focused on process issues[73] but a checklist for a coalition examines broader, more structural issues.[71] So one source of measurement error with a checklist will be if it is applied to the wrong situation. For this reason we have suggested that the indicators only be used by experienced health promotion practitioners who already are familiar with the subtleties of these distinctions.

The second source of error in an instrument will be unclear wording and ambiguities in the items. We believe that most of these have been removed but further feedback is most welcome.

The purpose of the reliability testing was to test to see if two people would rate the same report that a practitioner gave about a project or capacity-building 'situation' in the same way. Two experienced interviewers were recruited and trained in the use of the checklists.

All practitioners in the study were volunteers who were aware that we were testing the checklists (not the practitioner!). Practitioners were recruited via networks of practitioners already connected with the project and included practitioners in various parts of the health system, both within hospitals and in community health services and projects. Each checklist was administered as an interview schedule except that the participant has received a copy of the checklist prior to interview. One interviewer conducted the interview and led the participants through all the questions scoring the items as they went. The second interviewer acted as an observer and also scored the checklist, but was blind to the scores of the first interviewer. During a single interview more than one checklist could be applied, depending on the preferences and work situation of the participant (that is, the extent of the 'material' they had to draw upon). The checklists were applied to a range of programs from cardiac rehabilitation programs through to GP based alcohol risk reduction programs, farm safety, school programs and physical activity partnership projects with local government. In all, the checklists were applied to 130 health promotion projects across rural and metropolitan NSW.

Completed schedules were then placed in an envelope or folder package and sent for analysis. At the end of each interview, participants were given the opportunity to write comments on the usefulness of the checklist. Interviewers rotated the role of interviewer and observer. In the analyses they are referred to as rater A and rater B. During the study interviewers were not permitted to pool experiences or collude in any way. Team meetings, for quality control purposes, were held each week throughout the study. The analysis was conducted by an independent statistician thus far unconnected with the project and not personally known to the interviewers.

Checklist 8 (program quality) was not administered by interview but by having interviewers rate documents and plans supplied by participating projects. As explained previously, Checklist 9 (community capacity) was not tested
Satisfaction with the checklists.

The following table presents the satisfaction ratings given to each checklist by practitioners who chose to make a comment on this.

	Very helpful (%)	Helpful(%)	Not at all Helpful(%)
1 Assessing the strength of a coalition (n=42)	50	48	2
2 Assessing opportunities for incidental learning among other health workers (n=23)	39	57	4
3 Assessing opportunities for informal learning among other health workers (n=23)	39	57	4
4 Assessing if a program is likely to be sustained (n=34)	44	44	2
5 Assessing the learning environment of a team or group (n=31)	48	48	3
6 Assessing capacity for organisational learning (n=33)	48	45	6
7 Assessing capacity of a particular organisation to tackle a particular health issue (n=33)	50	38	12

Psychometric analyses of checklists

These analyses examined test reliability using Cronbach's Alpha statistic, which is based on inter item correlations and is a measure of internal consistency. This was done separately for each checklist. The checklists included sub sections and when these were disparate in item content (which happened by design) the value of the Alpha was necessarily reduced. Split half reliability results are also given. These have been computed using Guttmans or Spearman Brown methods depending on test assumptions. Split half reliability tests the correlation between two halves of the checklist and thus measures overall consistency rather than individual item consistency. Note that as a result of the analysis and field testing, checklist 2 was spilt subsequently into two separate instruments (checklists 2 and 3), but appear here as analysed as one instrument with two (small) separate halves, 2A and 2B.

Reliability scores

CHECKLIST	SCORE	RANGE IF ALPHA VALUES DELETED ONE BY ONE
1 Assessing the strength of a coalition	Cronbach's alpha = 0.80 Split-half = 0.59	0.79-0.81
2A Assessing opportunities for incidental learning among other health workers	Cronbach's alpha=0.87 Split-half=0.68	0.79-0.90
2B Assessing opportunities for informal learning among other health workers	Cronbach's alpha=0.90 Split-half=0.68	0.89-0.92
4 Assessing if a program is likely to be sustained	Cronbach's alpha=0.59 Spilt-half =0.68	0.52-0.59
5 Assessing the learning environment of a team or group	Cronbach's alpha=0.87 Split-half=0.84	0.85-0.88
6 Assessing capacity for organisational learning	Cronbach's alpha=0.82 Split-half=0.78	0.79-0.83
7 Assessing capacity of a particular organisation to tackle a particular health issue	Cronbach's alpha=0.78 Split-half=0.70	0.75-0.78
8 Assessing the quality of program planning	Cronbach's alpha=0.69 Split-half =0.40	0.49-0.58

Note checklist 2 and 3 analysed as two parts of a single instrument.

It can be seen that all checklists perform at a satisfactory standard. Checklist 4, assessing if a program is likely to be sustained, had the lowest scores. Checklist 8 also performed modestly, the only checklist we tested that was almost entirely the instrument of other investigators.[59]

Inter-rater agreement

Agreement between rater A and rater B was measured in three ways. Firstly, analysis of variance was made in which the dependent variable for the total score on each scale for each rater. This analysis had two fixed effects factors: rater (A or B) and checklist (1 to 8). A high level of agreement between the raters was established as shown in the tables that follow. Secondly, the data for each checklist were aggregated to give for each item in each list the proportion of respondents on agreement with that item (fully or in part agreement, that is in most cases a score of 2 or 1). Inter rater correlation coefficients were then computed separately for each test using the product moment method and were tested for significance. Although inspection of the size of the correlation was of prime interest, it was necessary to first establish that the relationship was greater than would be expected by chance – which was very much so in every case. The results established a very high level of inter-rater agreement.

Thirdly, paired t tests were made between mean values for the same aggregated proportions for each checklist. These tested whether there was a difference in the level of agreement for the items attributable to the difference between rater A and rater B. This method found no significant difference between rater A and rater B except for checklist 8 (quality of program planning) where, in practical terms the difference was small although statistically significant. It should be noted that identical results would have been obtained if the proportions had been analysed for non-agreement.

The high degree of inter-rater reliability found in our study must be interpreted with reference to what was being assessed. We compared the blind scoring of an interviewer and an observer listening to the same interview. It may be that in a repeat interview, that is with each interviewer conducting a separate interview with the same participant and project, the level of agreement of the score between interviewers would be lower. This is a further step to be taken in our continued development and refining of these checklists.

Analysis of variance results

Descriptive statistics

CHECKLIST	RATER	MEAN OF TOTAL SCORES	STANDARD DEVIATION	N
1 Assessing the strength of a coalition	Rater A Rater B Total	73.80 74.56 74.18	15.34 14.56 14.84	33 33 66
2A Assessing opportunities for incidental learning among other health workers AND 2B Assessing opportunities for informal learning among other health workers	Rater A Rater B Total	26.96 26.82 26.89	14.84 14.86 14.79	66 64 130
4 Assessing if a program is likely to be sustained	Rater A Rater B Total	74.23 75.13 74.68	15.50 15.17 15.20	28 28 56
5 Assessing the learning environment of a team or group	Rater A Rater B Total	66.79 68.36 67.59	20.27 20.20 20.07	28 29 57
6 Assessing the capacity for organisational learning	Rater A Rater B Total	59.53 60.91 60.21	21.56 22.41 21.81	31 30 61
7 Assessing the capacity of a particular organisation to tackle a particular health issue	Rater A Rater B Total	76.46 77.04 76.75	19.68 19.76 19.57	33 34 67
8 Assessing the quality of program planning	Rater A Rater B Total	26.76 28.17 27.45	11.31 10.62 10.94	51 50 101
TOTAL	Rater A Rater B Total	51.47 52.68 52.07	27.48 27.60 27.52	270 268 538

Note checklist 2 and 3 analysed as two parts of a single instrument.

ANOVA of rater (A or B) by Checklist (1,2a +b,4,5,6,7,8)

Source	Sum of squares	df	Mean square	F	p
Corrected model	263228.176[b]	13	20248.321	73.949	0.000
Intercept	1671301.506	1	1671301.506	6103.756	0.000
Rater	104.886	1	104.886	0.383	0.536
Checklist	262991.402	6	43831.900	160.078	0.000
Rater x Checklist	52.379	6	8.730	0.032	1.000
Error	143479.202	524	273.815		
Total	1865441.262	538			
Corrected total	406707.378	537			

a. Note in this analysis, 2A and 2B analysed as separate parts of a single instrument
b. R squared =0.647 (Adjusted R squared =0.638)

These results establish that there is no difference in the overall score on each checklist attributable to differences between rater A or rater B. This is shown by the non significant result for the main rater effect p=0.536 and the non significant rater x checklist interaction, p=1.

Correlation analyses of inter rater reliability

Descriptive statistics for the proportion of responses in the agreement categories for each checklist.

Checklist	Rater	Mean of total scores	No. items in checklist	SD	SE
1 coalition	Rater A	0.8347	24	0.1321	0.027
	Rater B	0.8292	24	0.1439	0.029
2A*incidental learning and 2B informal learning	Rater A	0.3283	12	0.1131	0.031
	Rater B	0.3320	12	0.1168	0.037
4 program sustainability	Rater A	0.8418	14	0.1064	0.028
	Rater B	0.8393	14	9.781E-02	0.026
5 group learning	Rater A	0.8018	20	0.1084	0.024
	Rater B	0.8138	20	0.1087	0.024
6 organisation learning	Rater A	0.8152	11	0.1041	0.031
	Rater B	0.8121	11	0.1186	0.058
7 organisational capacity to tackle a health issue	Rater A	0.8531	13	6.981E-02	0.019
	Rater B	0.8462	13	7.703E-02	0.021
8 program quality	Rater A	0.3632	23	0.1801	0.038
	Rater B	0.3896	23	0.1958	0.041

Note checklist 2 and 3 analysed as two parts of a single instrument.

Correlation between rater A and rater B for each checklist

CHECKLIST	No. items in checklist	CORRELATION	P
1 coalition	24	0.97	0.001
2* informal and incidental learning	12	0.99	0.001
4 sustainability	14	0.91	0.001
5 group learning	20	0.94	0.001
6 organisational learning	11	0.92	0.001
7 organisational capacity to tackle a health issue	13	0.95	0.001
8 program quality	23	0.98	0.001

Note checklist 2 and 3 analysed as two parts of a single instrument.

PART 5   REFERENCES

1   Hawe P. Key note address. *Western Sydney Health Promotion Conference: Top Down or Bottom Up. Is There a Synthesis?* Penrith. November. 1993

2   Hawe P. Capturing the meaning of 'community' in community intervention evaluation: some contributions from community psychology. *Health Promotion International* 1994;9(3):199-210

3   Noort M. Health for All in Wentworth Area Health Service: the development of health promotion. Master of Primary Health Care thesis. University of Western Sydney. Hawkesbury 1993

4   Harris E, Wise M, Hawe P, Finlay P, Nutbeam D. *Working Together: Intersectoral Action for Health.* Australian Government Publishing Service Canberra 1995

5   Roper WL, Baker EL, Dyal WW, Nicola RM. Strengthening the public health system. *Public Health Reports* 1992;107:609-615

6   Meissner HI, Bergner L, Marconi KM. Developing cancer control capacity in state and local public health agencies. *Public Health Reports* 1992;107:15-23

7   Schwartz R, Smith C, Speers MA, et al Capacity-building resource needs of state health agencies to implement community-based cardiovascular disease prevention programs. *Journal of Public Health Policy* 1993;14:480-494

8   Handler A, Turnock BJ, Hall W et al. A strategy for measuring local public health practice. Research and measurement in public health. *American Journal of Preventive Medicine* 1995;11(Supplement 2):29-35

9   Bracht N, Finnegan JR, Rissel C et al. Community ownership and program continuation following a health demonstration project. *Health Education Research* 1994;9:243-255

10   Rissel C, Finnegan J, Bracht N. Evaluating quality and sustainability issues: issues and insights from the Minnesota Heart Health program. *Health Promotion International* 1995;10:199-207

11   Jackson C, Fortmann SP, Flora JA, Melton RJ, Snider JP, Littlefiled D. The capacity-building approach to intervention maintenance implemented by the Stanford Heart Disease prevention program. *Health Education Research* 1994;9:385-396

12   Goodman RM, Steckler AB. A model for institutionalisation of health promotion programs. *Family and Community Health* 1987;11:63-78

13   Goodman RM, McLeroy KR, Steckler AB, Hoyle RH. Development of Level of Institutionalisation scales for health promotion programs. *Health Education Quarterly* 1993;20:161-178

14   Wickizer TM, Von Korff M, Cheadle A et al. Activating communities for health promotion: a process evaluation method. *American Journal of Public Health* 1993;83:561-567

15 Rappaport J, Swift C, Hess R. (Eds) *Studies in Empowerment. Steps Towards Understanding and Action.* Haworth Press New York 1984

16 Wallerstein N. Powerlessness, empowerment and health: implications for health promotion programs. *American Journal of Health Promotion* 1992;6:197-205

17 Wharf-Higgins J, Green LW. The APHA criteria for the development of health promotion programs applied to four healthy community projects in British Columbia *Health Promotion International* 1994;9(4):311-320

18 Syme SL. Strategies for health promotion. *Preventive Medicine* 1986;15:492-507

19 Biegel DE. Help seeking and receiving in urban ethnic neighbourhoods. In Rappaport J, Swift C, Hess R. (Eds) *Studies in Empowerment. Steps Towards Understanding and Action.* Haworth Press New York 1984

20 Clark NM, Baker EA, Chawla A, Maru M. Sustaining collaborative problem-solving: strategies from a study of six Asian countries. *Health Education Research* 1993;8:385-402

21 Thomas R, Israel B, Steuart G. Cooperative problem-solving: the neighbourhood self help project. In Cleary H, Kichen J, Crisno P (Eds) *Case Studies in the Practice of Health Education.* Mayfiled Palo Alto 1984

22 Schulz AJ, Israel BA, Zimmerman MA, Checkoway BN. Empowerment as a multi-level construct: perceived control at the individual, organisational and community levels. *Health Education Research* 1995;10:309-327

23 Argyris C. *On Organisational Learning.* Blackwell Oxford 1992

24 Tobin DR. *Re-educating the Corporation: Foundations of Organisational Learning* Oliver Wright Vermont 1993

25 Burgoyne J. Creating a learning organisation. *Royal Society of Arts Journal* 1992;April:321-332

26 McLeroy KR, Bibeau D, Steckler A, Glanz K. An ecological perspective on health promotion programs *Health Education Quarterly* 1988;15(4):351-377

27 Mullens PD, Green LW, Persinger GS. Clinical trials of patient education for chronic conditions: a comparative meta analysis of intervention types. *Preventive Medicine* 1985;14:735-781

28 Minkler M. Improving health through community organisation. In Glanz K. Lewis FM, Rimer BK (ed.s) *Health Behaviour and Health education. Theory, Research and Practice* Jossey Bass San Francisco 1990

29 Behrens R. Climate ripe for marketing strategies. *Hospitals* 1979;53:99-104

30 Longe M, Ardell D. Wellness programs attract new markets for hospitals. *Hospitals* 1981;55(22):1215-116

31 Watkins KE, Marsick V. Towards a theory of informal and incidental learning in organisations. *International Journal of Lifelong Education* 1992;11(4):287-300

32   McCann JE. Design guidelines for social problem solving interventions. *Journal of Applied Behavioural Science* 1983;19(2):177-192

33   Hawe P, Stickney EK. Developing the effectiveness of an intersectoral food policy coalition through formative evaluation. *Health Education Research* 1997;12(2):213-226

34   Gray B. Conditions facilitating interorganisational collaboration. *Human Relations* 1985;38:911-936

35   Huxham C. (Ed.) *Creating Collaborative Advantage.* Sage London 1996

36   Hannan MT, Freeman J. Structural inertia and organisational change. *American Sociological Review* 1984;49:149-164

37   NSW Health. Health Promotion Strategies Unit. *A Framework for Building the Capacity of Organisations to Improve Health.* Draft. 1999 ISBN 0 7313 06732

38   Senge P. *The Fifth Discipline: the Art and Practice of the Learning Organisation.* Random House. Sydney 1994

39   Sinclair A. After excellence: models of organisational culture for the public sector. *Australian Journal of Public Administration.* 1991;50(3):321-332

40   Goodman RM, Steckler AB. Mobilising organisations for health enhancement: theories of organisational change. In Glanz K, Lewis FM, Rimer BK. *Health Behaviour and Health Education* Jossey Bass San Francisco 1990

41   Ross HS, Mico PR. *Theory and Practice in Health Education* Mayfield Palo Alto 1980

42   Hawe P. Needs assessment must become more change-focused. *Australian Journal of Public Health* 1996;20(5):473-478

43   Simnet I. *Managing Health Promotion. Developing Healthy Organisations and Communities.* John Wiley and Sons Chichester 1995

44   Eng E, Parker E. Measuring community competence in the Mississippi Delta: the interface between program evaluation and empowerment. Health Education Quarterly 1994;21:199-220

45   Iscoe I. Community psychology and the competent community. *American Psychologist* 1974;29:607-613

46   Cottrel LS. The competent community. In Kaplan BH, Wilson RN, Leighton AH (Ed.s) *Further Explorations in Social Psychiatry.* Basic Books New York 1976

47   Hawe P, Farish S. Impact of the Benalla Healthy Localities Project on community outlook, cohesion and participation. In Garrard J, Hawe P, Graham C. *Acting Locally to Promote Health: An Evaluation of the Victorian Healthy Localities Project. Volume 2.* Municipal Association of Victoria. Melbourne 1995

48   Dixon J. Community stories and indicators for evaluating community development. *Community Development Journal* 1995;30(4):327-336

49   Israel BA. Social networks and social support: implications for natural helper and community level interventions. *Health Education Quarterly* 1985;12(1):65-80

50   Jackson SF, Cleverly S, Poland B, Robertson A, Burman D, Goodstadt M, Salsberg L. *Half Full or Half Empty? Concepts and Research Design for a Study of Indicators of Community Capacity.* North York Community Health Promotion Research Unit City of North York Public Health Department. Ontario. Canada 1997

51   Cox E. Building social capital. *Health Promotion Matters.* Vic Health Newsletter 1997;4:1-4

52   Goodman RM, Speers MA, McLeroy K, Fawcett S, Kegler M, Parker E, Smith S, Sterling T, Wallerstein N. An initial attempt to identify and define the dimensions of community capacity to provide a basis for measurement. *Health Education and Behaviour* 1998;25(3):258-278

53   Green LW, Kreuter MW. *Health Promotion Planning. An Educational and Environmental Approach.* Mayfield Palo Alto 1991

54   Diez-Roux AV. Bringing context back into epidemiology: variables and fallacies in multilevel analysis. *American Journal of Public Health* 1998;88:216-222

55   Shiell A, Hawe P. Health promotion, community development and the tyranny of individualism. *Health Economics.* 1996;5:241-247

56   Stephenson J, Weil S. *Quality in Learning: A Capability Approach in Higher Education* London Kogan Page 1992

57   NSW Health Department. Health Promotion Unit. *Competency-based Standards for Health Promotion in NSW.* 1994

58   King L, Stoker L, Noort M, Gal S, Coppel S. *Program Management Guidelines for Health Promotion.* NSW Health Department Sydney 1994

59   Hawe P, Shiell A. Preserving innovation under increasing accountability pressures: the health promotion investment portfolio approach. *Health Promotion Journal of Australia* 1995;5(2):4-9

60   Gray B. Cross sectoral partners: collaborative alliances among business, government and communities. In Huxham C. (Ed.) *Creating Collaborative Advantage.* Sage London 1996

61   Moos RH. *The Social Climate Scales: a Users Guide.* Consulting Psychologists Press 2nd edition 1994 Palo Alto

62   Hawe P, Degeling D, Hall J. *Evaluating Health Promotion. A Health Workers' Guide.* MacLennan and Petty. Sydney 1990

63   Van de Broucke S, Lenders F. Monitoring the planning quality of health promotion projects in Flanders. *Promotion and Education* 1997;2:26-28

64   Speller V, Evans D, Head MJ. Developing quality assurance standards for health promotion practice in the UK. *Health Promotion International* 1997;12(3):215-224

65   Funnell R, Oldfield K, Speller V. Towards Healthier Alliances. A Tool for Planning, Evaluating and Developing Healthy Alliances. 1995 Health Education Authority. London

66   Deccache D. Evaluating quality and effectiveness: public health and social sciences approaches and methods. *Promotion and Education* 1997;2:14-15

67   Bush R, Mutch A. *District Health Development: Capacity Audit.* Centre for Primary Health Care University of Queensland. Draft 1997

68   Miller CA, Moore KS, Richards TB, McKaig C. A screening survey to assess local public health performance. *Public Health Reports* 1994;109(5):659-664

69   Miller CA, Richards TB, Christenson GM, Koch GG. Creating and validating practical measures for assessing public health practices in local communities*. American Journal of Preventive Medicine* 1995;11:Suppl 2:24-28

70   Richards TB, Rogers JJ, Christenson GM, Miller CA, Gatewood DD, Taylor MS. Assessing public health practice: application of ten core function measures of community health in six states*. American Journal of Preventive Medicine* 199511:Suppl 2:36-40

71   Goldstein SM. Community coalitions: a self assessment tool. *American Journal of Health Promotion* 1997;11(6):430-435

72   Shediac-Rizkallah MC, Bone LR. Planning for the sustainability of community-based health programs: conceptual frameworks and future directions for research, policy and practice. *Health Education Research* 1998;13(1):87-108

73   Hahn EJ, Ray DW. Development of the Committee Effectiveness Inventory*. Annual Meeting of American Public Health Association* 1990 Department of Community Health Nursing. School of Nursing. Indiana University, USA