

# Evaluation for management and development

A case study of an aid program in Papua New Guinea

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This article examines an evaluation currently being undertaken in Papua New Guinea. The evaluation is designed to assist an organisation (comprising a donor agency, a recipient government department and a managing contractor) with the management and further development of an aid program set in the education sector.

The challenge facing the organisation has been how to devise and implement a comprehensive managerial approach that will enable improvement of the existing program, the subsequent design of a new program and, at the same time, support a third objective of creating an ongoing culture of evaluation.

In responding to that challenge the organisation has committed to the use of structured evaluation processes. Specifically, it has decided to implement a range of ‘front end’ evaluative approaches—developmental, evaluability assessment and program logic—drawn from the interactive and clarificative forms presented in Owen’s (1999) conceptual framework.

The article outlines the interventions that have been undertaken and assesses progress to date. Examples of completed activities are outlined and some innovative monitoring evaluative tools are introduced, such as the ‘capacity scale’ and the monitoring and evaluation (M&E) template. The paper concludes with some thoughts on the role of evaluation for management and development for achieving continuous improvement.

## Background

The Australian Government and the Government of Papua New Guinea (GoPNG) have agreed to provide support for the national education system through a major integrated program of development assistance called the Education Capacity Building Program (ECBP). ECBP is a 10-year program, coinciding with the National Education Plan (2005–2014). The program commenced in February 2004. The first five years of the program have been divided into two phases: Phase 1, originally scheduled to be completed by 2005, and Phase 2 by 2008.

The program *goal* is to strengthen the capacity of the national education system at the national, provincial, and district agency levels to achieve quality improvements in service delivery. The program *purpose* is to support the Education Reform Agenda through strengthening education administration operations and improving systematic integration among the various levels of administration responsible for managing and financing the education sector.

ECBP is led and implemented by the PNG Department of Education (DoE) in partnership with the Australian Agency for International Development (AusAID) using an Australian Managing Contractor (AMC). The AMC has recruited a team comprising long- and short-term advisers based in Port Moresby.

**The setting**

In July 2005, as a means of helping determine the nature and scope of Phase 2, the Australian Government commissioned an independent team to undertake a review of Phase 1 of ECBP. The Review Team report recommended that Phase 2 not commence in 2006, but rather Phase 1 be extended for 12 months with a schedule that provided for completion of some existing activities, removal of others, and the introduction of new approaches that could form the basis for planning/designing a possible future Phase 2.

The recommendations of the Review Team meant that the managers of ECBP (collectively the ‘organisation’) needed to focus attention and resources on two substantial management tasks:

- During the period October–December 2005, redesigning a revised schedule of program inputs

and activities for the 12-month Phase 1 extension (i.e. January–December 2006) consistent with the program’s initial goal and purpose.

- During 2006, designing a major new program, Phase 2, for 2007 and beyond consistent with the current goal but with expected changes in purpose, approach and activities based on the experience of Phase 1. See Figure 1.

**The challenge and opportunity**

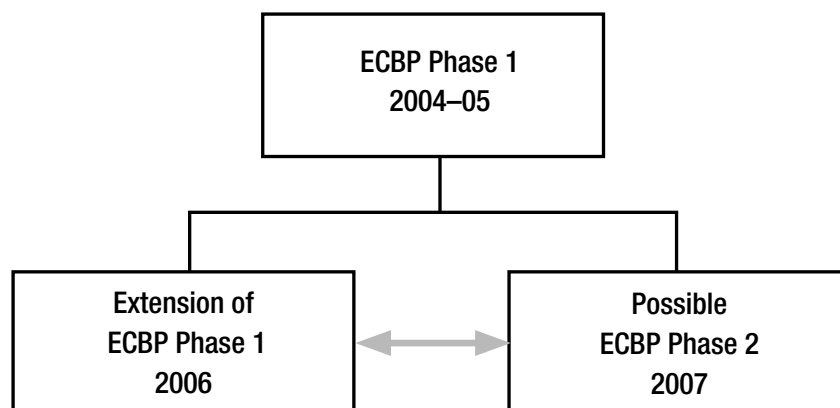
The challenge facing ECBP has been how to devise and implement a comprehensive managerial approach that would enable improvement of the existing program (Phase 1—Extension), the subsequent design of a new program (Phase 2—which ultimately might not happen), and at the same time support a third objective of creating an ongoing culture of evaluation in the DoE.

The opportunity that has arisen for ECBP’s management lies in a commitment to the use of structured evaluation processes; specifically, to consider a range of ‘front end’ evaluative approaches that enable refinement of the existing program and the subsequent planning, development and design of the potential new one. At the same time, running in parallel, linking those efforts to facilitate the longer term objective of establishing and embedding an evaluative culture.

**Choosing an evaluative form**

The approaches considered have been drawn from the conceptual framework of Owen<sup>1</sup> that provides for five evaluation forms. The ‘front end’, a relative term, refers to the first three forms in Table 1,

**FIGURE 1: PHASES OF EDUCATION CAPACITY BUILDING**



**TABLE 1: EVALUATION FORMS (MODIFIED FROM OWEN, P. 54)**

	PROACTIVE	CLARIFICATIVE	INTERACTIVE	MONITORING	IMPACT
Orientation	Synthesis	Clarification	Improvement	Fine-tuning	Justification
State of program	None	Development	Development	Settled	Settled
Major focus	Program context	All elements	Delivery	Delivery/outcomes	Delivery/outcomes
Timing	Before	During	During	During	After
Key approaches	Needs assessment	Logic/theory development	Action research	Component analysis	Objectives based
					Needs based
	Research review	Evaluability assessment	Quality review	Systems analysis	Goal free
			Responsive		Process—outcomes studies
	Review of best practice	Accreditation	Developmental	Performance assessment	Performance audit
			Empowerment		

that is, ‘proactive’, ‘clarificative’ and ‘interactive’. It was the latter two forms—interactive and clarificative—that best met the needs of ECBP and accordingly were chosen for the evaluation. From these two forms ‘developmental evaluation’, ‘logic theory development’ and ‘evaluability assessment’ approaches feature prominently.

**Interactive evaluation: taking a long-term perspective**

The choice of interactive evaluation was influenced by two time frames. One involved immediate action, while the other was longer term. The Interactive form of evaluation is focused on improvement and this was appropriate for the Phase 1 extension. Phase 1 had been underway for 18 months and it was too soon to expect significant impact. Owen’s ‘monitoring’ form of evaluation may have been possible but the program was not yet settled; there were loose ends and it required more than just fine-tuning. The program needed to be more effective in terms of both activity implementation and overall strategy. The evaluation therefore needed to focus on context and design.

Beyond the immediate priority—knocking the current Phase 1 program into shape to enable the extension to commence and facilitating Phase 2 design—a longer term perspective was required. The evaluation needed to operate within a framework that would also support mainstreamed evaluation processes within the DoE that would continue after ECBP had finished. With these two time frames in mind, each of the five key Interactive approaches

within Owen’s framework were assessed to determine which offered the best fit. Ultimately it was the developmental approach that was chosen.

The developmental approach features the use of an evaluator to assist implementers to undertake what Owen (p. 228) describes as ‘systematic enquiry’, encompassing the application of logic and evidence-based decision-making for program improvement. This was consistent with ECBP personnel structures. Moreover Patton’s (1994) definition of seeing the evaluator as being part of a collaborative team working together to ‘conceptualise, design and test new approaches in a long-term, ongoing process of continuous improvement, adaptation and intentional change’ was in harmony with the organisational dynamics of ECBP both during and beyond the initial evaluation period.

**Developmental evaluation approach: the plan for implementation**

The organisation has recognised that developmental evaluation is an approach (in this case featuring a strong focus on leadership, teamwork and joint decision-making), not an end in itself. In its application it has involved using a range of evaluative tools and techniques, and there has been and will be overlap and crossover with other evaluative interventions. For ECBP, its use has been governed by an expectation that it would assist with solving the immediate problem of program improvement, and at the same time support internal (i.e. DoE) capacity building. On that basis ECBP



*'Waiting for school assembly to begin'—Central Province, PNG. Traditionally, parents and communities have the responsibility for the maintenance and upkeep of their schools.*

prepared, and is continuing to implement, a plan that has involved the following key processes.

### Selecting the evaluator

The Phase 1 evaluation is internal and led by an AMC long-term adviser who has evaluation expertise and a brief that covers program monitoring and also institutional capacity building. This may be going further than the expectation of Owen (p. 230) who makes the point that in interactive evaluation it is likely that the evaluator would be 'especially attuned to the needs of the clients, and adopt a close psychological proximity in dealing with all aspects of the evaluation process'. In this case the attunement and proximity is very close—some may argue too close—and the degree of objectivity might be legitimately questioned. Patton (1994) presumably would not be one of those who would be overly concerned. Within his experience in conducting various development evaluations, he concedes that there was 'no pretence of external independence'. Nonetheless, there needs to be acknowledgement of the inherent checks and balances that exist through the ongoing contestability emerging from the different roles, objectives and, crucially, accountabilities of the three entities (donor agency, recipient institution, managing contractor) that form what is a temporary organisation.

### Establishing the fundamentals

Patton (1994) refers to developmental evaluation as a 'relationship founded on a shared purpose', rather than a model. For some that may appear vague. Certainly for the ECBP organisation, which is a partnership, there has been a need for explicit structure to ensure that the three entities (which together form the primary audience) have a clear and shared understanding of the evaluation's fundamentals, that is:

### 1 Purpose

This has been stated as being an evaluation in continued support of the PNG Education Reform Agenda that would:

- assess program activities of ECBP Phase 1 against the current goals, priorities and objectives of the DoE
- help design an improved and internally coherent schedule for 2006 that was consistent with those requirements
- provide a platform for a possible Phase 2, commencing in 2007
- strengthen the internal monitoring and evaluation capacity of the DoE.

### 2 The evaluand

The evaluand can be described as a program that:

- has a hierarchy of intentions (expressed through policy and program objectives, and outlined in a logical framework matrix)
- is large-scale (multi-million dollar budget)
- involves multiple sites (e.g. the DoE—national and provincial education offices, schools)
- involves a variety of implementers (e.g. donor, recipient, managing contractor)
- has a variety of inputs (e.g. technical advice, training, procurement, construction, supplies, financial support)
- has a range of activities (ongoing and new).

### 3 Time frame

Developmental evaluation assumes a long-term involvement. However, there will be times when interventions during the evaluation period are likely

to be much more intensive requiring rapid outputs. For ECBP Phase 1 extension the initial intensive period was recognised to be the 10–12 week period that commenced in October 2005 to establish an initial program modification. Thereafter, evaluative activity was planned to be conducted over a more elongated time scale targeted at strategic interventions aimed at continuous program development throughout 2006.

**Forming the team**

One of the first steps was for the lead evaluator to form the design team. This was carried out in late September 2005. Consistent with Patton’s model, the evaluator’s role was to be both facilitator of the evaluation and also a full team member. The team comprised members from each of the three organisational entities. Following detailed critical assessment of the program’s goals and objectives against current activities, the first objective of the team was to produce a coherent program design outlining the Phase 1 extension activities for 2006. The team was to then continue working with program participants in 2006 and beyond to improve the program as priorities and opportunities emerged. Figure 2 outlines that evaluative process.

**Identifying key evaluation issues**

The evaluation has been about creating new knowledge to enable improvement. The organisation has been faced with trying to ensure quality enhancements in Phase 1 activities that will justify

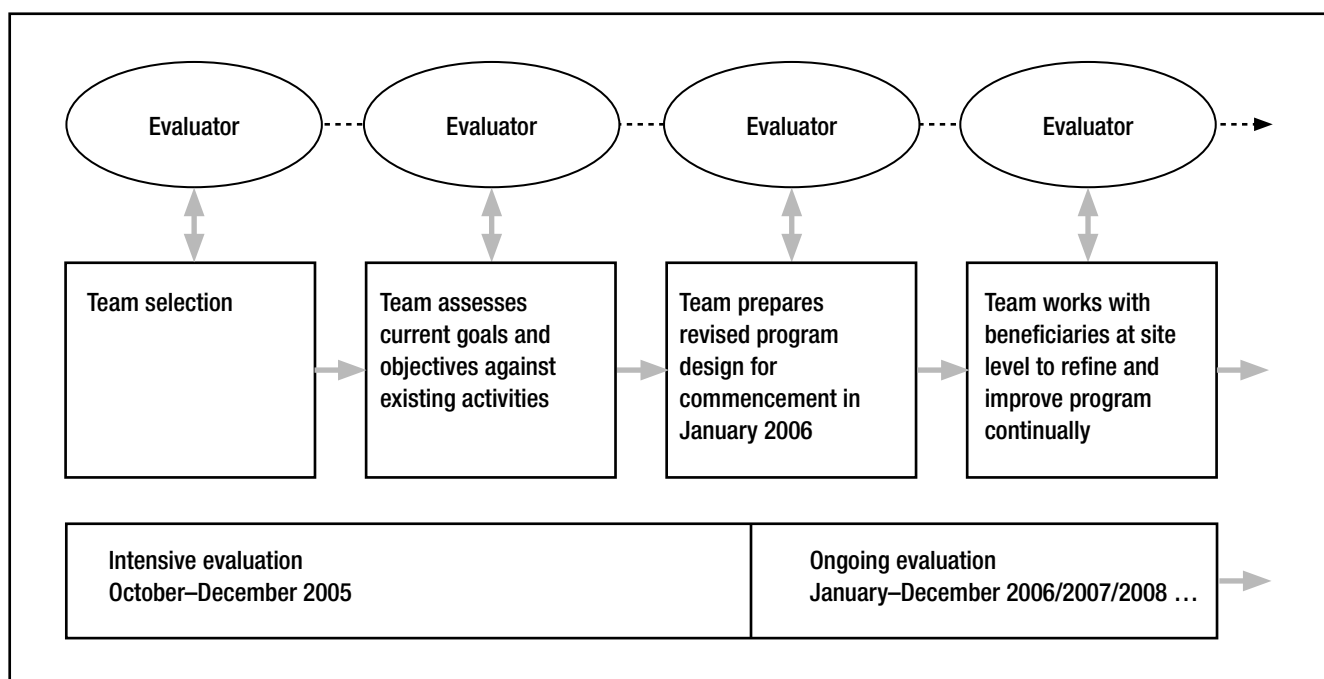
all or most of the substantial investments to date—whether or not there is a subsequent Phase 2. At the same time, the program activities that are conducted during 2006 need to be in synergy with, and support, a possible Phase 2 program that is yet to be designed. From an evaluation point of view this raised the key issue of ensuring that the evaluation approach was sufficiently robust and flexible to cater for both these scenarios.

**The key evaluation questions**

The team identified the following questions to guide the evaluation:

- Is the current program goal and purpose valid?
- Is the program design coherent?
- To what extent have the program’s main objectives been met?
- Are there any gaps?
- What have been the most successful and least successful program activities to date?
- What had contributed to this success or lack of success?
- What lessons have been learned during Phase 1 and how can these be used for improvement?
- Within set budget allocations, which activities should be continued in 2006, and which ones should be removed? Why?
- In what way can the 2006 activities link logically and support possible future program activities?

**FIGURE 2: ECBP EXTENSION: PHASING A DEVELOPMENTAL EVALUATION**





*'Having fun!'—Coastal village, Gulf Province, PNG. Retention in schools is a major concern. Only 53% of children who enrolled in Grade 1 (age 7) in 1998 completed Grade 6 in 2003. (Source: A National Plan for Education 2005–2014, PNG Department of Education)*

- What new activities/approaches could be introduced in the future?

### Data management

The team agreed on the means of data collection and analysis and, crucially, the shared skill sets required to ensure that the process had appropriate rigour. Much of the available data is in the form of formal documentation. This is to be expected in a traditional donor-funded aid program that normally features strong financial and contractual accountability concerns. Internal documents consulted have included program design reports, annual performance plans, six-monthly performance reports, adviser exit reports and activity completion reports. External documentation has included the mid-term review report and contractor performance assessments. All these documents continue to be synthesised to extract evaluative findings.

Documentation analysis, of course, is not sufficient. There has been an ongoing need for triangulation in order to cross-reference the findings with alternative sources of data collection. In this context the most appropriate methods include interview, focus group discussions and targeted small-scale survey of program implementers and key stakeholders. Logistically (time, resources, access) these forms of data collection are practical. The approaches and skills required can be taught both as a means of generating immediate results but also as an exercise in capacity building for team members and their colleagues.

However, there is a second and crucial dimension to the need for triangulation. ECBP is conducted in a Melanesian cultural context in which the written word is not the main form of communication. Instead it is primarily an oral culture that favours the spoken word for information gathering and exchange. The plethora of program documentation that exists has been generated almost entirely by the donor and contractor, and issues of accuracy and access all come into play. Crocombe (2001, p. 174) in his seminal research on the South Pacific makes the observation: 'Cultures which evolved to fit one context at one time, may be disadvantageous in others'. Although he was speaking broadly, his point can often apply to aid project activities whereby evaluation processes may be driven by the (generally Western) norms of the donor agency to the possible exclusion of indigenous approaches. In evaluation design there needs to be an equality of process among partners in the way the data is generated and managed to ensure that there is genuine joint participation, understanding and ownership of the findings. This has been an ongoing concern of the evaluation team.

### Dissemination

Following the adage 'there should be no surprises', the evaluation findings, as they arise, have been progressively shared among the key audience and stakeholders. The primary audiences are the two agencies—the DoE and AusAID—and the AMC. From within that circle the information radiates outwards progressively to a wider audience including other GoPNG departments, the non-

government organisation (NGO) network, other donor agencies and eventually, through public information campaigns, to the broader community.

### Getting activities started: two examples

In October 2005 the intensive evaluation phase commenced with a review and analysis of program documentation. Two immediate priorities were identified. The first was to cross-check selected findings from the document analysis through triangulation. Accordingly, a focus group involving DoE staff was held to generate an additional assessment of the program's individual (partner) capacity-building strategy. The second, also arising from the documentation review, was the need to conduct a workshop conference aimed at generating a shared understanding and approach among the team on the scope and use of 'lessons learned'. The results of each of these activities made important contributions to the planning, design and subsequent improvement of the Phase 1 extension. They are described below.

#### Example 1: The Partner Development Strategy—use of a focus group

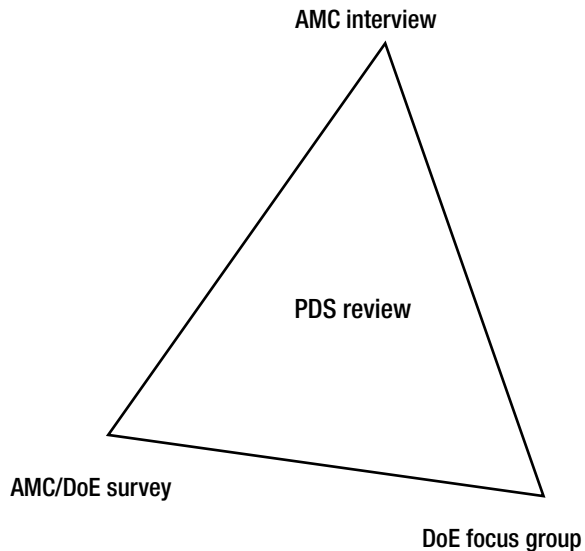
The first evaluative activity focused on the Partner Development Strategy (PDS). This has been a major ECBP intervention that cuts across all program components. Its aim is to enhance the capacity of individuals and/or groups within the DoE through formal partnering with an AMC technical adviser on a designated activity. The PDS uses a range of approaches. They include action learning, coaching, counselling, facilitating, modelling, shadowing and mentoring.

The PDS was reviewed in January 2005 and then again in July. These were internal reviews and the subsequent reports were based primarily on observation by the AMC PDS Coordinator, one-to-one interviews with the AMC advisers who had DoE partners, and a simple survey given to the advisers to complete in consultation with their DoE partners. The results of the reviews revealed some weaknesses and suggested improvements, but overall concluded that the PDS was proving to be effective and should be retained.

Despite the findings of the PDS review, the evaluation team was concerned that the methodology used may not have captured fully all perspectives, particularly those of the DoE partners. The reports, and the way they were written, were AMC centred, the interviews were not necessarily representative, and the extent to which DoE partners participated in, or understood, the survey was uncertain. The lead evaluator, together with the DoE evaluation specialist, encouraged the team

to triangulate the review findings by offering the opportunity for DoE partners (in isolation from their Australian advisers) to give their views in a culturally appropriate setting. A focus group was considered the most effective means of doing this.

**FIGURE 3: TRIANGULATION OF THE PDS REVIEW FINDINGS**



The focus group was conducted in October 2005. It comprised DoE staff who had formal partnerships with the AMC advisers, in addition to DoE officers with managerial and oversight responsibility for ECBP. The approach and format of the focus group drew from the work of Krueger and Casey (2000). Protocols were established (professional trust, respect, no personal criticisms, confidentiality, anonymity) and processes were followed (clear and logical flow of questions, checking understandings, probing, drawing out responses, facilitating full participation, summary and wrap-up).

The results of the focus group were illuminating and justified the decision to triangulate. Although the DoE partners agreed that the PDS was valuable and should remain as part of ECBP, the perceived weaknesses and means of improvement differed from those set out in the formal review reports. DoE partners felt that the strategy had been supply driven, that there was incomplete ownership of the process, the descriptive terminology (e.g. enhancement, the degrees of progression) were difficult to understand and the assessment/survey forms that needed to be completed were complex and not always understood.

During the focus group session an important outcome emerged in the way of a new tool for understanding. A visual presentation of progress was considered to be the most helpful means for



*'Lining up—classes are about to begin'—Western Province, PNG. Primary education caters for the 9–14 year age group. PNG's population is about 5.2 million and 85% of the population live in rural areas. (Source: A National Plan for Education 2005–2014, PNG Department of Education).*

the DoE partners to see themselves, that is, where they were now in terms of capacity, and where they might be in the future. The evaluation team had prepared a tool—the 'capacity scale' (Figure 4)—which received enthusiastic endorsement from the group. In essence the scale represents a conceptual way of thinking, allowing for the visual placement of existing and future systems, processes, skills, knowledge and behaviours along a theoretical continuum of baseline data and benchmarks. It shares some of the features in the goal attainment scaling of Kelly (2005)<sup>2</sup> but is a simpler and more visual model. It aims to assist advisers, partners and other stakeholders to reach consensus on individual or organisational capacity identification, assess what (if any) support or intervention is required, monitor progress and create a visual reinforcement of development. The scale can be used either formally (e.g. as part of focused assessment) or informally (e.g. reflective discussions).

In its application a DoE partner nominates a point on the scale (0–20)<sup>3</sup> where he or she thinks is their present capacity for a specific skill (e.g. 7/20 for IT skills). After working with the AMC adviser on a specific skills training, the scale is revisited and the DoE partner nominates the new point (e.g. 15/20) and sees the extent of development. It is obviously subjective but can be made less so through open and reflective discussion with the adviser and/or colleagues. The important point is that the scale is meaningful and of benefit to the target beneficiary, that is, the DoE partner and can be used as an additional method for monitoring and evaluative purposes.

**FIGURE 4: CAPACITY SCALE**

	X1	X2	X3	Xc
	1		10	20
<b>Key:</b>				
1 = Unable to do 20 = Target achieved	X1 = baseline assessment X2, 3, 4 etc.—progressive monitoring of progress		XC = completion assessment	

## Example 2: The lessons learned workshop

The imperative for considering lessons—what they are, why they need be learned—derive from the expectations and current practice within the development assistance sector. Within an aid program key drivers include:

- the need for accountability (a client focus of providing timely performance information, for example to government ministers, funding agencies and other stakeholders)
- the need for efficiency and effectiveness (using evaluation jargon, a ‘quality at entry’ issue of incorporating and using information to improve future performance during the design phase of a program, and a ‘continuous improvement’ focus throughout and beyond the program’s implementation)
- recognition that those who are most closely involved with a program (contractor and partners) have the ability and responsibility to identify a lesson.

Of course it is also a matter of commonsense to seek to learn from past experience. This is what evaluation is ultimately all about. The team’s analysis of ECBP’s program documentation revealed either explicitly (through specific listing) or implicitly (through findings and recommendations) a range of ‘lessons’. In fact nearly 150 lessons had been produced but there had been few attempts at categorisation, refinement or synthesis. Each was presented with seemingly equal weight. They ranged, for example, from petty administrative grievances (‘All papers need to be presented for copying by the due date to avoid undue pressure on clerical staff to copy’) to practical suggestions (‘People need the tools to do their jobs—office space, computer, transport, fax, operating funds. If officers are supported with resources they will do their jobs’), to broad and insightful observations (‘Developing local ownership and partnerships is a task that requires taking people through their visions of development and providing assistance when required until they are ready to carry on and take complete control’).

As part of a developmental evaluation for both the immediate purpose of using existing findings to shape the 2006 extension, and the longer term requirement for program improvements, the evaluation team felt a strong need to have a shared understanding of what constituted a lesson and the skills required to use whatever new knowledge emanated from them. To achieve this, a forum was proposed that would enable the team to work together collectively in what Patton (1994) refers to as a ‘process of conceptualisation’.

The forum for ‘unpacking’ lessons learned was a workshop held in November 2005, organised and

moderated by the lead evaluator and DoE partner. Its aim was to ‘gain a common understanding and approach to defining, capturing, documenting and using lessons learned’ and comprised the evaluation team plus key DoE and AMC program staff. The outcome of the workshop—the common understanding and approach—resulted in a sharper focus on identifying and using those findings for program design and ongoing improvements.

In some ways the workshop was a modified search conference, an activity normally found in proactive or interactive evaluation approaches. The timing, duration and scope may not have matched a classical search conference but it did encompass several of the key features described by Owen (1999) and Emery (1990), that is, an event designed to give direction to a projected program; carefully planned and custom designed; and involving program staff in a search for appropriate solutions given their knowledge of the context. Through formal presentation and roundtable discussions participants used the workshop to gain consensus and a way forward in four areas, as shown in Figure 5.

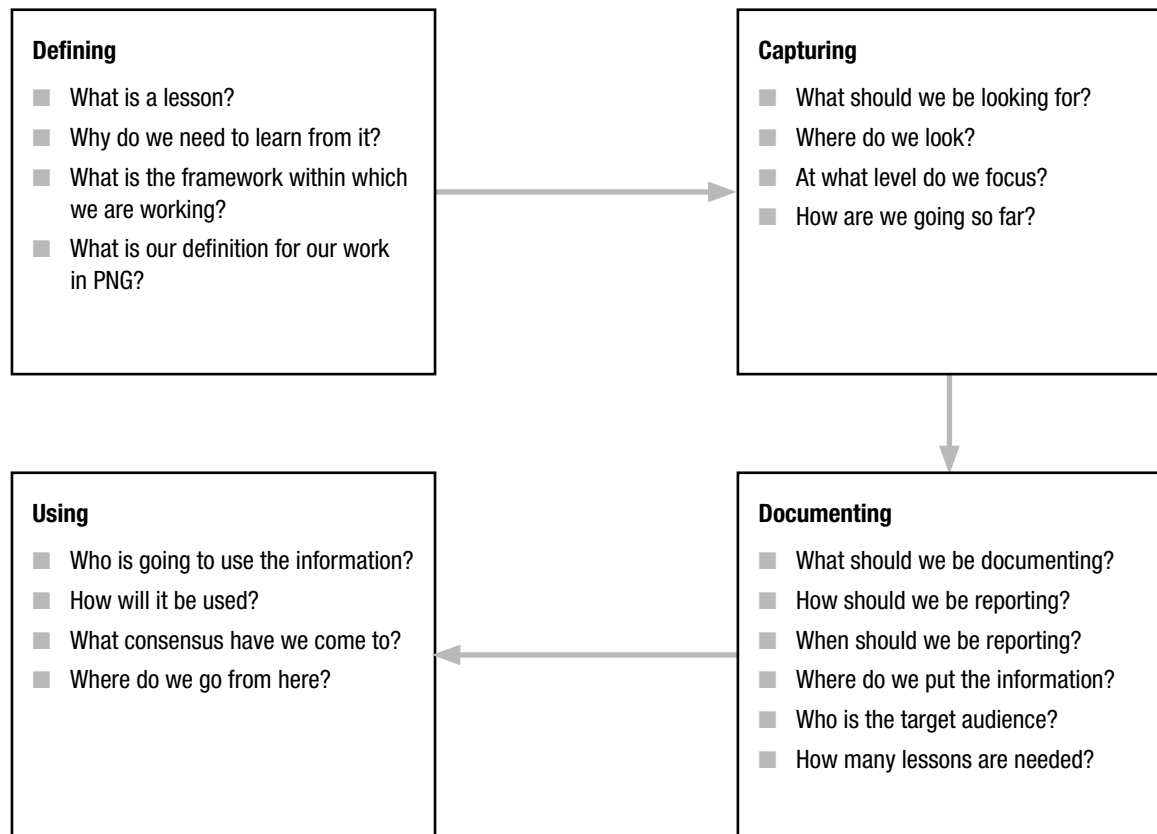
For activities in the education sector, in PNG, ECBP was able to agree on the following working definition of a lesson:

*Reflecting a commitment to continuous improvement, a lesson is a good work practice or an innovative approach that is captured and shared to promote repeat application. A lesson may also be an adverse practice that is captured and shared to avoid recurrence.*

The workshop was successful in creating a common understanding. There is now an agreed focus on what managers need to look for and how the information can be used for informed decision-making. Crucially, for the immediate needs of the evaluation team, a core set of lessons was able to be isolated and these lessons have been used to continue to help shape the nature of program activities.

Completion of the two activities—PDS focus group and lessons learned workshop—together with the detailed documentation review and reflection among the evaluation team enabled a set of recommendations to go forward to ECBP management. This resulted in a series of planning discussions within the organisation and a subsequent and substantially revised and costed program for the extension phase. The next step was to collate the new set of objectives and activities into a coherent presentational structure through which underlying logic and causal links could be made transparent. To do this required a metaphorical step back along the sequence of Owen’s evaluative framework in order to consider approaches from the clarificative form.

**FIGURE 5: AN APPROACH TO DEFINING, CAPTURING, USING AND DOCUMENTING LESSONS LEARNED**



**Clarificative evaluation: evaluability assessment and program logic**

Clarificative evaluation is very much about doing a reality check. The focus is on establishing a program’s internal coherence and what it can realistically achieve (formally taking a plausible perspective). It is a form of evaluation that is used extensively in the aid sector by most donor agencies and its products—logic charts, matrices and hierarchies—become major ongoing points of reference for program beneficiaries, implementers and reviewers.

The evaluation team, still operating within a developmental framework approach, worked with stakeholders to clarify and reach agreement on the intent of the extension phase design. The activities to be retained, dropped, changed or added to were assessed against program goals, multi-layer objectives and performance criteria. It all needed to fit and make sense. This process of stakeholder engagement drew from the evaluability assessment approach and closely followed the six key steps outlined by Wholey (1994) where it is necessary to:

- involve intended users of the evaluation program—this encompassed meetings, interviews and workshops involving the DoE, AusAID, AMC, advisers and partners

- clarify the intended program from the perspectives of policy-makers, managers, and staff and other key stakeholders—efforts here were directed at getting ECBP’s implementers, particularly advisers and partners to focus on *outcomes* (immediate, intermediate and long-term), not just activities and outputs
- explore program reality, including the plausibility and measurability of program goals and objectives—recognising staff and budgetary constraints, reaching agreement on realistic targets and setting simple but reliable performance indicators
- get agreement on any needed changes in program activities or objectives—this involved negotiations as differing expectations and priorities between donor and recipient became apparent
- explore alternative evaluation designs—this required looking not just at program-specific models but also sectoral approaches, that is, linking and contrasting outcomes with those of other education sector initiatives in PNG
- get agreement on evaluation priorities and intended uses of information on program performance—this was crucial and involved the organisation giving clear direction about

the level and scope of evaluation information required, for example policy level, program, activity, etc.

The end result of this process was the production of detailed plans and schedules that aimed to capture all the key information and present it in summary form. The intent was to demonstrate the overall program logic. For ECBP, an existing logical framework (logframe) currently existed so the task of the evaluation team was to revise and amend it based on the new realities.

One of those realities included the team operating under a potential constraint. The

organisation had stressed that the overall ECBP goal and purpose needed to remain unchanged for the extension phase. Modifications were therefore confined to activity, output and component outcome interventions. This required careful planning and selection of interventions to ensure that the overall logic of the program was not compromised. Activities must be designed to support the program goal, not the other way around. Table 2 outlines the first product produced—the draft objectives hierarchy—which subsequently formed the basis of the revised logframe.

**TABLE 2: ECBP OBJECTIVES HIERARCHY (MODIFIED DRAFT)**

HIERARCHY OF OBJECTIVES	UNDERLYING ASSUMPTIONS
<p>iii Ultimate objectives (program goal)</p> <p>7 To strengthen the capacity of the national education system at the national, provincial and district agency levels to achieve quality improvements in education service delivery</p>	<p>There is political commitment at all government levels to the direction and process of change</p>
<p>ii Intermediate objective (program purpose)</p> <p>6 To support the Education Reform Agenda through strengthening administration operations and improving systematic integration among the four levels of administration responsible for managing and financing the education sector</p>	<p>There is system-wide commitment to implementing necessary change</p> <p>The change agenda does not exceed the capacity of education agencies to absorb</p>
<p>i Immediate objectives (program components)</p> <p>5 To strengthen the organisational systems, practices and procedures of the DoE (including provincial education offices)</p> <p>4 To strengthen the capacity of the teacher training institutions to support teachers to deliver quality education at all levels of the education system</p> <p>3 To strengthen the capacity of the DoE to produce and supply curriculum reform materials to schools in a cost-effective and timely manner</p> <p>2 To strengthen the capacity of the DoE (including provincial education offices) to deliver a technical and vocational education curriculum that satisfies personal needs and community and industry demands</p> <p>1 To manage program delivery efficiently and effectively to ensure that the stated aims of the program are realised</p>	<p>Education agencies are willing and able to realign structures, systems and procedures to improve organisational performance</p> <p>Personnel are committed to necessary change and to the systematic acquisition of improved management skills</p> <p>Teacher training institutions will actively engage in the curriculum reform process</p> <p>Teachers are available, willing to be trained, and able to apply new skills and approaches</p> <p>Industry, business, education and other government agencies are committed to working together the on national coordination of technical and vocational education training</p> <p>The AMC can identify and recruit appropriately qualified and experienced technical advisers</p>

With objectives established and arranged into a consistent hierarchy the evaluation team then focused on designing a revamped logical framework matrix (logframe) that would be used as the central point of reference for the Phase 1 extension. Table 3 provides an *outcome* level example drawn from that logframe.

**Going forward: monitoring the extension and designing Phase 2**

By Christmas 2005 the Phase 1 extension design had been approved and activities commenced in January 2006. The evaluation team has continued work together within the developmental/capacity-building framework but with a focus on monitoring and

fine-tuning (the next step along Owen’s spectrum). A revised monitoring tool—the M&E template (Table 4)—based on explicit linkages to the logframe and outlining M&E methods, sources, scheduling and responsibility was developed and is now in use.

In 2007, subject to ministerial and other necessary approvals, the expectation is that Phase 2 will proceed. Accordingly, the evaluative effort will generally follow the processes used to design the extension phase, that is, using a mix of approaches from the interactive and clarificative forms. However, depending on the extent of the requested design modifications, other forms may need to be considered. For example, if a major rethink was envisaged, then the evaluation team may be looking at techniques drawn from the proactive form, such

**TABLE 3: EXTRACT FROM ECBP DRAFT LOGFRAME**

OBJECTIVES	INDICATORS	MEANS OF VERIFICATION	ASSUMPTIONS (INCL. RISKS)
<b>Component 2: teacher education</b>			
To strengthen the capacity of the teacher training institutions to support teachers to deliver quality education at all levels of the education system	Number and quality of training programs Number of teachers trained to professional standard Changes in school performance	Qualitative and perception surveys of stakeholders and target groups School performance data External performance reviews Agency reports	Teacher training institutions will actively engage in the curriculum reform process Teachers are available, willing to be trained, and able to apply new skills and approaches The AMC can identify and recruit appropriately qualified and experienced technical advisers

**TABLE 4: EXTRACT FROM ECBP M&E FRAMEWORK TEMPLATE**

LOGFRAME REFERENCE	PERFORMANCE INDICATORS	M&E METHODS	SOURCE	SCHEDULE	RESPONSIBILITY
<b>Component 2: teacher education</b>					
<b>Objective:</b> To strengthen the capacity of the DoE and teacher training institutions to support teachers to deliver quality education at all levels of the education system	Number and quality of training programs Number of teachers trained to professional standard Changes in school performance	Document review, baseline surveys, critical reflection, case studies, photographs, interviews, focus groups, site visits, observation	Activity progress and completion reports, data base, manuals, plans, internal and external review reports, site inspection reports	2006 ongoing	DoE (national and provincial offices), National Education Commission, local level government, top management team, AMC, AusAID



*'Here I am!'—Goroka Elementary School, Eastern Highlands, PNG. Elementary education is the first stage of formal education. Children are taught in the language of their community and over 800 languages are spoken. (Source: A National Plan for Education 2005–2014, PNG Department of Education)*

as needs analysis, search conferencing, review of best practice and benchmarking.

### Summary and conclusion

ECBP's current evaluation strategy derives from Owen's model, which offers a smorgasbord of evaluation forms and approaches. These are set out along a spectrum coinciding with a program's life cycle, that is, conception to implementation to completion to reflection. The ECBP team has selected approaches from two of those forms—interactive and clarificative—and did so 'out of sequence'. This has not been, nor should it be, a problem. Time and circumstance are the main drivers, and in any event the boundaries between Owen's five main forms are flexible. There can be overlap and crossover. Neither is there a uniformity of time scale. Some approaches are short-term, while others are much longer.

Selecting developmental evaluation as an approach from the interactive form was not difficult. The focus on teamwork and joint evaluation activities within an organisation has intrinsic appeal for an aid program concerned with capacity building. In terms of timing it is open-ended and continues as long as the stakeholders in

that organisation want it to continue. It has also been an easy decision to make use of program logic and evaluability assessment from the clarificative form. This is not just because ECBP has been designed around a logframe, but rather because program logic techniques are a proven means for conceptualising and laying out a program's design coherently.

It is still relatively early days in the implementation of the ECBP evaluation strategy. It is premature to assess the extent to which a culture of evaluation may be forming within the DoE. The process is ongoing. However, the initial objectives of forming a team, conducting small-scale formative evaluation activities, and producing subsequent design modifications based on experience have been met.

Feedback indicates that the evaluation results to date are supportive of ECBP's management and development. This is encouraging as evidence-based decision-making relies on being able to attribute outcomes with interventions. Although some would suggest this is a modern aspect of management, it is in fact not new. Poet George Herbert (in van den Berg, 2004, p. 32) may not necessarily have been thinking about program logic in 1633, but he certainly had causality in mind when he penned the following:

*For want of a nail the shoe is lost,  
 For want of a shoe the horse is lost,  
 For want of a horse the rider is lost,  
 For want of a rider the battle is lost.  
 For want of a battle, the kingdom is lost!*

Or, when applied to an aid program in PNG, for want of a consistent, clear and logical evaluation approach, millions of dollars worth of taxpayers' money may be lost. This in itself should be a powerful motivating force to use evaluation not just at the front end, but also on an ongoing basis within an organisational culture that needs to be focused on continuous improvement.

**Note**

- 1 Although there are other conceptual frameworks within evaluative literature, this paper uses Owen's forms as the central point of reference.
- 2 Presentation to the 2005 Australasian Evaluation Society International Conference, Brisbane.
- 3 Any range 0–10, 0–20, 0–100 etc, can be used—whatever has best utility.

**References**

Crocombe, R 2001, *The South Pacific*, Institute of Pacific Studies, University of the South Pacific, Suva.

Emery, M 1990, 'The search conference as evaluation planning', in *Proceedings of the National Conference of the Australasian Evaluation Society*, Sydney, pp. 255–258.

Kelly, S 2005, 'Goal attainment scaling', paper presented at the Australasian Evaluation Society International Conference, 10–12 October, Brisbane.

Krueger, RA & Casey, MA 2000, *Focus groups: a practical guide for applied research*, Sage, Thousand Oaks, California.

Owen, JM with Rogers, PJ 1999, *Program evaluation: forms and approaches*, 2nd edn, Allen & Unwin, St Leonards, New South Wales.

Patton, MQ 1994, 'Developmental evaluation', *Evaluation Practice*, vol. 15, no. 3, pp. 311–319.

van den Berg, RD 2004, 'Results evaluation and impact assessment in development cooperation', paper presented at the DAC Network on Development Evaluation Conference, 15–16 January, OECD, Paris.

Wholey, JS 1994, 'Evaluability assessment', *Evaluation News & Comment*, Australasian Evaluation Society, vol. 3, no. 2, December, pp. 2–13