Building Capacity for Social Learning in Environmental Management

Margaret J Kilvington

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This thesis focuses on the increasingly recognised problem of how to build capacity for social learning into environmental management initiatives that address complex multi-stakeholder issues. It examines the proposition that participatory and development (P & D) forms of evaluation, when integrated into environmental management initiatives, can be a useful vehicle for building this capacity. In doing so it addresses three specific challenges.

The first concerns the competing definitions and purposes of the concept of social learning in the current academic and practice literature. Social learning has emerged as an important concept in the discourse around addressing complex environmental management issues. However, the multiple venues in which social learning appears have led to divergence in terminology, and difficulties for the theoretical and practical development of the concept. The thesis responds to this with an analysis of literature and a synthesis of ideas into a proposed framework for translating this normative concept into practice. This involves four interlinked areas for focusing awareness and developing practice in complex-problem-solving situations:

1. How to managing group participation and interaction
2. How to work with and improve the social and institutional conditions for complex problem solving
3. How to improve the learning of individuals, groups and organisations
4. How to enable systems thinking and the integration of different information

The literature also reveals more has been written about the meaning of social learning, or whether social learning has occurred in any given situation, than about the 'how to' of social learning, suggesting the relationship between practice and theory is incoherent. While new approaches in evaluation offer mechanisms by which the ideas of social learning can become a basis for practice, the second challenge addressed in this thesis is an absence of established connection between social learning and evaluation. The thesis responds to this with an examination of the theoretical and practice literature on P & D evaluation and a proposed match with specific social learning capacity development needs of environmental

initiatives. This involves four arenas in which (P & D) evaluation approaches and social learning can intersect:

1. Scoping the environmental-management-problem situation
2. Supporting the capacity to enquire and problem solve
3. Supporting the management of programmes or interventions in the problem situation
4. Research and development that facilitates the growth of theoretical and practical knowledge about addressing complex-environmental-management situations

The third challenge is the limited availability of case history and practical experience of building capacity for social learning in environmental management contexts, or using P & D evaluation to contribute to improving environmental management initiatives. This thesis examines the practical experience of using P & D evaluation to support social learning through four case stories from the Collaborative Learning for Environmental Management group (CLEM) based at Landcare Research. As these cases were concurrent with this thesis they represented an opportunity to put new ideas about social learning into practice. The cases highlight three factors important to the pragmatic potential of using P & D evaluation to support the social learning capacity of a given situation :(i) the evaluator, their skill, values, and role; (ii) the mandate and location of the evaluation; and (iii) organisational disposition to learning and change. Further guidelines for working with P & D evaluation to support social learning are to (i) find champions who are interested, willing, and able to make change happen within their organisation; (ii) review the social learning challenges of the situation; and (iii) use this contextual analysis to design an appropriate response that can take forward some aspect of the social learning potential of the situation.

Skills, understanding and motivation to work in the field of building capacity for social learning remain a limiting factor in the New Zealand environmental management sector. In conclusion I propose a reconsideration of what is currently regarded as core expertise in environmental management, rejecting the primacy of biophysical science, and planning, and rather seeking proficiency in integration, facilitation, systems thinking and knowledge brokerage. Furthermore, social learning is a sophisticated concept of high practical value. However, to be a conscious framework of use to resolving resource use and environmental management dilemmas there must be greater literacy about the core elements of social learning and their relationship to the problem situation and its practical application requires rigorous attention that is responsive to the individual conditions of the situation.

Key words: social learning, participatory evaluation, developmental evaluation, environmental problem solving, integrated environmental management, environmental policy, environmental planning, capacity development, evaluation practice

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Glossary of terms and acronyms

ACAP	Atlantic Coastal Action Programme
AGM	annual general meeting
ANZEA	Aotearoa New Zealand Evaluation Association
Artsci	abbreviation for projects which unite artists and scientists
CBM	community-based management
CCC	Christchurch City Council
CEMP	comprehensive environmental management plan
CLEM	Collaborative Learning for Environmental Management (LCR group)
Creative NZ	Creative New Zealand – arts council of New Zealand
CRI	Crown Research Institute
CRG	community reference group
DOC	Department of Conservation
DSS	decision support system
EAG	end-user advisory group
ECNZ	Electricity Corporation of New Zealand
ENSIS	forestry research agency (a CRI)
FG evaluation	fourth-generation evaluation
FRST	Foundation for Research, Science and Technology
ICM	Integrated Catchment Management programme, Motueka 2000–2010
IGNS	Institute of Geological and Nuclear Sciences (a CRI)
IRAP	Integrated Research into Aquifer Protection programme 2004–
ISKM	Integrated Systems for Knowledge Management
LAMS	local area management strategies
LCR	Landcare Research (a CRI)
MAF	Ministry of Agriculture and Forestry
MfE	Ministry for the Environment
MIRMAK	Motueka Iwi Resource Management Komiti
MoRST	Ministry of Research, Science and Technology
NIWA	National Institute of Water and Atmospheric research (a CRI)
P & D	participatory and developmental [evaluation]
RMA	Resource Management Act 1991
SMF	Sustainable Management Fund (grant administered by MfE)
TDC	Tasman District Council (unitary resource management agency)
TNS	The Natural Step (a sustainable business framework)
TQM	Total Quality Management (a business management framework)
TZ	Target Zero waste minimisation programme run by the CCC
WCMP	Whaingaroa Catchment Management Project
WE	Whaingaroa Environment (group established from the WCMP)
WEC	Whaingaroa Environment Centre
WMU	Waste Management Unit of the CCC