Abstract

This paper describes two case studies in which farmers, as the result of group extension programs associated with adult education and action learning cycles, implicitly and explicitly are held to have the responsibility for transferring group experiences to farmer networks outside the immediate group. The case studies look at both community-based and commodity-based programs. The discussion focuses on the potential difficulties for farmers and program organisers in following through on 'second generation' delivery. 'Extending the farmer' has theoretical and practical implications for practitioners and educators alike.
**Introduction**

Australia has experienced the promotion of group extension services, since the 1980s. In part this is attributable to reductions in government expenditure paralleling the diminishing of public agency services (Curtis, 1993; Martin, 1994). Farmers seeking extension support, however, are encouraged to voluntarily and continuously acquire this information and technical advice through group extension. These meetings are generally targeted to particular farm and land management issues and are organised and facilitated as adult learning groups. Cameron & Chamala (1993: 333) state that the extension agenda of the Government is to promote and maintain self-reliant rural communities. The definition of 'self-reliant' remains vague, but with regard to extension, it suggests communities evolving with minimal government assistance. The first step in achieving self-reliance is to assess the quality of contact between extension messages and the target audience. Extension agencies tend to monitor participation as the indicator of satisfactory interaction between the extension message and the group. They suggest an optimal indicator of a successful program is how farmers outside the target group (the ‘second generation’) perceive the value of the programs or the importance non-participants place on acquiring the same knowledge. In many instances, group extension has exacerbated the tendency for the critical stakeholders, the rural communities, to be restricted to the implementation phase of extension programs, and have no part in the planning or evaluation of these programs (Staley 1994). There are attempts to integrate design, implementation and evaluation as part of an adult participatory learning process. In Australia this includes community representation on boards and networks associated with extension programs, thereby linking ideas of community self-reliance and to a more participatory model of self-help farmer learning groups. We suggest their theoretical compatibility is attractive to funding agencies as vehicles for change and innovation because the focus is on group participants taking responsibility for disseminating the extension ideas further.

Group extension encourages adult learning and anticipates improving farm management practices and processes within the rural community through demonstration and positive interaction between farmers. We suggest there is an assumption that participants will charitably play the role of ‘extension change catalysts’ for their farming communities. However, the mechanism for ensuring the expectation of community involvement beyond the group is largely undescribed. The delivery of group extension information tends to be informal and oral in character; thus suitable information that is readily transferable to the ‘second generation’ requires careful planning, and that too remains a predominantly uncharted area. While the original group formation is generally voluntary, little is known about levels of voluntary participation beyond the initial participants and, Brookfield (1986) states that common understanding and community learning can only be stimulated if the act is voluntary. Therefore the current situation appears full of anarchic potential.

The model to this point can be imagined as follows: the extension idea(s) are as a stone thrown into the pond, and the water in the pond represents farming networks. The initial contact group are within the first circle of ripples and the idea(s) are transferred through the widening ripples. The subsequent ripples are as a result of the first ripple or group, contacting the farmers contained within the 'second generation' of ripples. This image is
significant. The ripples are not evenly dispersed, nor is the ripple line continuous; the idea(s) themselves change as they move through the farming circles; the idea(s) are transferred dissimilarly and the membership of each circle is fluid.

In considering the applicability of our 'ripple model' to the discussion, we turn to clarify the distinction between community and commodity-based extension programs. A community-based program is usually funded for the public good. The Government tends to provide funding for small initiatives to encourage experimentation and innovative approaches. There is typically no set target audience but rather an accumulation of different communities from both rural and urban environs that come together to resolve problems and/or community needs. A commodity-based program, conversely, has a specific commodity target audience with the incentives to participate generally reflecting some form of market advantage. In most instances, these programs are operated and/or funded either privately by the farm households themselves or through industry research and development corporations, thus the issue of 'second generation' contact, to non-participants, may require different messages, transfer strategies and approaches because it is realistic to expect difference associated with this wider community.

The community-based case in this paper reflects a longitudinal study on Landcare farmers in southwest Gippsland Victoria, undertaken between 1993 and 1997 (Beilin, 1998). Landcare is a voluntary partnership between Governments, private agriculturalists and land managers for the sustainable use of land and water. Initially, Landcare extension agents were largely State Government employees from conservation and production agencies--the technology experts--however, their role was to operate as facilitators. Lately, anecdotal evidence suggests that changes in funding have resulted in Landcare groups forming networks and facilitators are now network coordinators and more closely aligned to administrative and group funding issues.

The commodity-based extension case in this paper is part of a current research project, focussing on the dairy industry. The extension initiative is on improving the competitiveness and production efficiency through decision-making. It utilises facilitated farmer groups. The facilitators are professional consultants with technical expertise in production relating to optimal farm management. The three groups involved in this study formed after a pilot program, and the current research project involves a partial evaluation of the extension initiative. The farmer groups are exclusive, and the wider community has access to the program by invitation to farm field days twice a year and through industry newsletters. By contrast with the first case study, therefore, 'second generation' contact must be instigated from within the specific groups.

**Purpose**

Information transfer as a process of adoption and diffusion of innovation was focused on technology transfer (Garforth, 1987). Although it may be seen as being applicable to technological change, adoption and diffusion has minimal relevance to sociological change and in the post-modern era, we acknowledge that individuals are diverse and social organisations and structures complex. Change can no longer be conceived as a straight line, parallelling 'progress'. Nor can it be understood as tied to technological advances. It too
encompasses diversity and complexity in individuals. The difficulty in transferring information from participants to non-participants to initiate change becomes the heart of this paper. In today’s extension, there is more importance placed on community learning utilising the learning experiences evolved within the farmer groups. However, the participants may not recognise wider community learning as a natural outcome of their participation in a program. They may also not experience a sense of responsibility with regard to transferring what they have learned to the wider community. In commodity based groups, in particular, where the catch cry is 'continuous improvement' and where competitiveness is important, there is not an obvious reason why group participants would envisage a partnership between themselves and the wider community as a part of benefiting from the group extension program.

Methodological Approach

Both the Landcare community-based program and commodity-based program utilise action learning methods and participatory evaluation. The application of action learning methods as a component of an extension program ensures the full benefit of learning for participants. The action-learning model (Kolb, 1984), which follows a four-stage cycle of inquiry, action, evaluation and reflection, is widely accepted as a basic model for the way adults learn (Edmondston 1997). To grasp the action learning cycle, defining the generic principles of adult learning is necessary. Effective adult learning is problem and experience centred; the experience must be meaningful; the learning process must be voluntary; the objectives must be set and pursued by the learner; and, the learner requires feedback about their progress towards those objectives (Brookfield 1986). Reflection is also an important part of the process (Reason, 1994).

Five Landcare groups were studied over five years. This included attending 54 monthly meetings, field days and conducting two sets of detailed interviews with 18 Landcare family farm households. The interviewed households participated in a photo-elicitation process using a highly modified form of personal construct theory and detailed ethnographic narratives (Beilin, 1998; Beilin, 1999). Action learning in this study included the opportunity for the involved farmers to analyse their landscape practice through describing and reflecting on photographs they had taken of their farm landscapes. While Landcare focuses on conservation practices on productive land, the farmers used the photographs to demonstrate difficulties they were experiencing with government (mismanagement of roadsides); neighbours (fence lines and noxious weeds); industry support (placement of dairy sheds for milk delivery). In short, while the photographs were of the immediate scene, the reflective conversations generated a complex understanding of impinging values and practical realities.

The effectiveness of the commodity-based program as a learning tool is the primary objective of the study. The study utilised various research methods including participatory observation, interviews and surveys. During the participation in monthly group activities, it became clear that there was minimal communication between group members and the wider rural community. Consequently, an action research component was developed to explore the applicability of empowering group members to establish the relevance of their program outcomes with the wider farming community and establish ‘second generation’ contact. This approach implicitly incorporated an evaluation of the existing program. It also provided the
funding body and the researcher with a tool to assess whether these learning groups could develop a process to communicate program activities and outcomes to non-participants. Group members who volunteered to conduct the evaluation survey to determine the wider community's relationship to the target project were required to undertake a training program to ensure compliance with ethical requirements of the larger study. Each interviewer was required to complete 5 interviews with farming community members and report back to the researcher and the group on their findings. A total of 55 community household interviews were completed.

Results and Discussion

Both studies noted that there are numerous group extension programs operating within any given farming community. There is also some crossover between participants and programs. The Landcare program has spawned over 4000 groups and involves an estimated 30 per cent of the farming population across the nation (Baker, 1997; Mues et al., 1994), but in the area of the study, only 22 per cent of the farmers are members (Beilin, 1998); while the commodity-based program involves 10 per cent of the community (Andreata, n.a). The importance to funding agencies of these programs 'extending' to contact non-participants is demonstrated by these relatively low participation figures. The question remains as to whose responsibility it is for the transfer of information beyond the self-selecting groups to the wider community; and whether it is a realistic expectation of funding bodies that indicators of successful group extension programs include the dispersal of these messages by group participants.

The preliminary findings from the commodity-based study indicated that the research method utilising group members as community interviewers encouraged the reflective action learning cycle for the target group as a whole. In subsequent discussions of research findings, the researcher noted that the group had sufficient knowledge to modify their program to better suit both the groups' and the rural communities' needs. However, the framework of the original project design did not include a formal mechanism for making these changes within the group or the overall project structure. The question of the facilitator's role is central here. The facilitator is the official change agent thus their capacity to nurture and encourage the group is a critical factor in the success of the adult learning process. Brookfield supports this concept and states that facilitators should assist adults to effectively utilise local knowledge and resources to achieve the learning outcomes that learners have defined themselves (1986: 124). In this study, the facilitators did not have an investment in the long-term future of the groups. Their contracts are for the immediate project and as their skills are in technical areas; and when broached, their abilities to train and manage the farmers as 'extension catalysts' is understood by them to be counteractive to their principal tasks. Yet the industry funded agency sees the dispersal of information from the farmer groups to the wider community as an indicator of a successful project.

The farmers recognised the value of the group in giving individual's confidence to talk about change. One farmer stated that ‘...if I was asked to give an account of what I was doing on my own farm, I always integrated the extension program I am involved in to help demonstrate the rationale of my decision-making process and/or actions...it gives the farming community a sense of understanding as to what the project is about’ (Sam, April
Equally, farmers indicated that group learning does extend into the community. They believed that community learning leads to a robust rural community network that can rely on each other in times of hardship. Therefore, from the farmers' perspective in this study, group extension and 'extending the farmer' is a step towards a more self-reliant rural community.

The Landcare case study research demonstrates a different response with regard to dispersal of information from the group to the wider community. Several farmers offered to help neighbours plant trees in order to ensure non-participant farms became involved in corridors or networks in the region. In contrast, a third of the interviewed households complained that the government was withdrawing from its responsibility with regard to land management (noxious weed control, salinity and over grazing) and expecting local Landcare farmers to convince non-Landcare farmers to change their ways. The Landcare farmers did not think this would be a successful strategy, and all the interviewed farmers commented negatively on government withdrawing services while asking farmers to do more (Beilin, 1998). This case study also showed a significant difference between individual farm practices and Landcare group meeting discussions. Farmers took the information they needed or could strategically use from the meetings. Some discounted the practical Landcare applications, for example, suggesting they were unsuitable to their landscapes or impractical for the long-term well being of the farm family (ibid).

In general, groups go through a process of leadership transfer and fluxes of participation and heightened activity. The central viability of the groups over time often depends on key individuals rather than the contracted facilitators or coordinators. In the case of Landcare, the central funding encourages the group to keep going, but does little to assess the 'health' of the key players. On the other hand, the commodity-based program has an exhaustible funding period of three years, where on completion, a group has the option to continue with the group on a 'user-pays' system or alternatively disperse. At present, the program does not encourage groups to be self-directed but rather directed at the discretion of a facilitator. At the end of the three-year commitment, the groups then have the option for appropriate training to assist in constructing a self-directed learning group (Andreata, n.a).

Group learning has the potential to encourage group responsibility to help change the bases of social learning and the environment within the farming community. However, experiential learning could be non-transferable. The issue of groups not being homogeneous and farming situations not always being the same magnifies the possibility of non-transferability. For this reason, we emphasise that group extension can be most influential at the process level and not in the ultimate application of management and practices.

Educational Importance

Recognising that Australian farmers currently face particularly difficult times in world markets may assist readers to contextualise the cauldron into which the issue of on-going information contact falls. The implicit assumption made by many Government agencies and industry cooperatives is that information empowered farm households have an obligation to their fellow rural communities. As extension educators our concerns include: that farmers taking on of this responsibility may result in adverse consequences because non-participating

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2000 in Andreata, n.a.).
farm families may misunderstand the implication of the message, not fully comprehend the process, or simply utilise part of the message only to find that the sum of these elements is not equivalent to the whole. As well, in highly technical programs such as those associated with commodity extension programs, the missing technological information may be critical to the outcomes experienced by the intercepting 'second generation' contacts. By reflecting on the two cases in this paper, the authors' purpose is to encourage discussion of these concerns.

Paulo Freire, working among the Brazilian peasants, imagined a learning cycle that would encourage each participant to expand and extend their learning as a part of taking responsibility for changing their lives (Crotty, 1998). As action researchers have noted, the moment of reflecting on what has been accomplished leads almost immediately to perceptions of what can next be tackled. The building blocks of adult learning transferred to group extension methods, offers farmer groups some insights. However, extension educators, reflecting as we have, on the 'ripple model', may experience some of the qualms that initially motivated this paper.

Landcare was instrumental in changing extension group methods for sustainable land management outcomes. Very quickly it was recognised that the technological issues were not the limiting factor to changing farmer management practices. Human resource management required a more sophisticated approach to group extension, and the language of participation and action research was applied. Conversely, many Landcare facilitators and coordinators did not have training in these areas and were more comfortable with scientific technology transfer, which reflected their initial training. The idea that eventually each group might form a 'cadre' of activists, able to go out into the non-participating community and transfer a process or ideas for discussion was probably always there in the theory, but really not explored on-ground; nor were programs designed to be evangelical in this way. However, in retrospect, it is unclear how Landcare was meant to spread into the wider community if this did not happen.

The lack of facilitation skills among group members, and even among the initial group coordinators is an on-going issue. If we are right in hypothesizing the centrality of each group in relation to the non-participant wider community, then we must create an active interface for engagement between the 'generations'. Change catalysts need to explain the thinking and sorting within the information process rather than just provide the information to make changes. A final issue in extending group learning is the ethical responsibility involved. Farmer groups who take responsibility for 'empowering individuals’ to enhance ‘community ownership’ need clarification of their status and legal liabilities as volunteers. Activists operating without adequate resources or information are likely to experience dissolution and their activities, exacerbated by the 'ripple effect' we have described, could lead to disenfranchisement among already marginalised farmers.

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References


