The Facilitation of Learning Groups: A Study of a Dairy Discussion Group Facilitator

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A Study of a Dairy Discussion Group Facilitator

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INTRODUCTION

The New Zealand dairy industry has been almost entirely a farmer-owned cooperative since the early 1900s. At the end of the 1998/99 season, it included over 14300 dairy farm businesses with an average herd size of 229 cows (Livestock Improvement, 1999). Some 95% of New Zealand's dairy production is exported, accounting for 23% of New Zealand's export receipts and some 25% of the world trade in dairy products (NZDB, 1999). The New Zealand Dairy Board (NZDB) is the single-desk seller of all exported dairy-based products and coordinates the activities of the New Zealand dairy industry. A wholly owned subsidiary of the NZDB is the Livestock Improvement Corporation (LIC), of which Livestock Improvement Advisory (Advisory) is the farm management extension and consultancy group. One of the primary foci of Advisory is the activities of the industry funded Consultancy Officer (CO) service (Livestock Improvement Advisory, 1999, 2000).

The CO service is primarily involved with dairy farmer education through mass extension activities, predominantly farmer discussion groups, but also short workshops, field days, seminars and other initiatives (Livestock Improvement Advisory, 2000). The CO service is regionally based with 34 Consulting Officers (COs) living and working in dairying regions throughout New Zealand. The services provided by the COs are industry funded and available to all dairy farmers. The COs spend approximately 45% to 50% of their time with some 400 dairy farmer discussion groups (Murcott, 1995; Sherson, 2000). The groups provide a unique source of practical information that is highly valued (Murcott, 1995). Farmers from a similar locality come together for between 3 to 5 hours, once a month, for 7 to 10 months of the year (Murcott, 1995; Sherson, 2000). Membership of the groups is usually open, voluntary, and consequently fluid with attendees being dairy farm owners, managers, employees and sharemilkers. Between 6 and 40 farmers may attend a meeting (Sherson, 2000) which is predominantly held on a discussion group member's dairy farm. The host farmer provides the focus for critical reflection and discussion and a different group member's farm is visited at each meeting (Sherson, 2000).

The CO service plays a vital role in maintaining and enhancing the knowledge base of New Zealand's dairy farmers. Without this knowledge base, New Zealand would not be a leader in pastoral-based dairy farming. However, despite the importance of the CO service, little is formally known about the operation of discussion groups, and more importantly the role of the CO in facilitating such groups. Enhancement of the discussion group process could have major benefits for the New Zealand dairy industry. Expertise in the operation of discussion groups exists within the CO service. If this expertise could be captured and used in training of COs, the effectiveness of discussion groups could be enhanced. It was on this basis that a study was undertaken to investigate the process an expert CO uses in facilitating a dairy discussion groups. This paper reports on the results from this study.

METHOD

The principal objective of this study was to describe the processes used by an 'expert' Consulting Officer when facilitating dairy farm discussion groups. A case study method was used because the researchers sought to answer how and why questions, and to investigate contemporary events in their natural setting (Yin, 1989). A single rather than multiple case study design was used to ensure the phenomenon was investigated in-depth (Yin, 1989). The first step in the research process was to review the literature. The criteria for selecting the case study was that there be at least 10 years experience in facilitating dairy discussion groups, and "recognised expertise" in this area. Key informants were given the criteria and asked to identify a suitable CO. Once identified, the person was contacted, the research explained, and a commitment to the project obtained.

The literature review was then used to develop the data collection protocol and to ensure the researcher was theoretically sensitised (Eisenhardt, 1989; Yin, 1989). Data were collected using semi-structured interviews (Scott, Clayton and Gibson, 1991) and field observations (Gans, 1982). Four semi-structured interviews were undertaken and three discussion group meetings observed in the field. The first interview obtained background information about the CO and an overview of his facilitation of discussion group meetings. The second and third interviews investigated the process in more depth, and the final interview verified the results from the first three interviews. The interviews lasted about two hours and were taped and transcribed to ensure accuracy. A summary of each interview was sent to the CO for verification before the next interview.

To confirm the interview findings and identify areas not mentioned by the CO, field observations of "*typical*" discussion groups were interspersed between the interviews. Key data collected during the field visits included the sequence of events and the activities the CO undertook during each “event”. Detailed notes were recorded during the field visit and additional points were made soon after its completion.

Once collected, the data was analysed using a modified form of the qualitative data analysis technique advocated by Dey (1993). The first phase of the process is termed "description" during which the transcript and field data were summarised to provide an overview of the discussion group process used by the CO. During the next phase, "classification", important concepts within the data were identified, named and defined. These concepts were then placed in a logical hierarchy of supra- and sub-categories. The process was iterative with the output from the classification phase, the concept hierarchy, forming the basis for the next "summary". This in turn was used to refine the next iteration of the classification phase. The process was repeated several times before writing the final case report, which described the facilitation process used by the CO.

Once the case report was completed, the research findings were compared and contrasted with the literature. Important similarities and differences were identified, areas not reported in the literature were highlighted, as were areas in the literature which were not found in the study. The following section describes the results of the case study.

RESULTS

The processes used by the CO in facilitating discussion groups can be represented in the form of a goal/task hierarchy. The primary goal the CO had for the discussion groups is at the highest level. Subsumed under this are lower level goals, objectives and tasks the CO undertook to ensure the higher level goal was met. The CO’s primary goal for the discussion group meetings was "*to make it more rewarding for group members to be dairy farmers*", both in financial terms, and in the intangible aspects of dairy farming.

To make dairy farming more rewarding for group members, the CO focused on two principal areas. The first, an on-farm focus, encouraged the group members to change their attitudes, knowledge and skills to improve their farming practices. The CO also believed that a strong and vibrant dairy sector requires farmers who have a good appreciation of their industry. Therefore, his second area of focus was to

facilitate discussion on industry issues and their implications for group members. Although less emphasis was placed on this area, the CO saw it as an important area from an industry context.

The majority of the CO's time was spent helping group members improve their farming practices, which is the focus of this paper. The CO used two approaches to achieve this. Firstly, he created an environment that enhanced learning, and secondly, within this environment, he actively facilitated the learning process where this would help group members improve their farming practices.

Farmer learning within the discussion group was enhanced by creating a suitable learning environment. The CO identified four areas critical to its development; catering to different learning styles and knowledge levels of group members, providing a mentally and socially safe environment, making the day fun and enjoyable, and ensuring the physical comfort of group members (Figure 1).

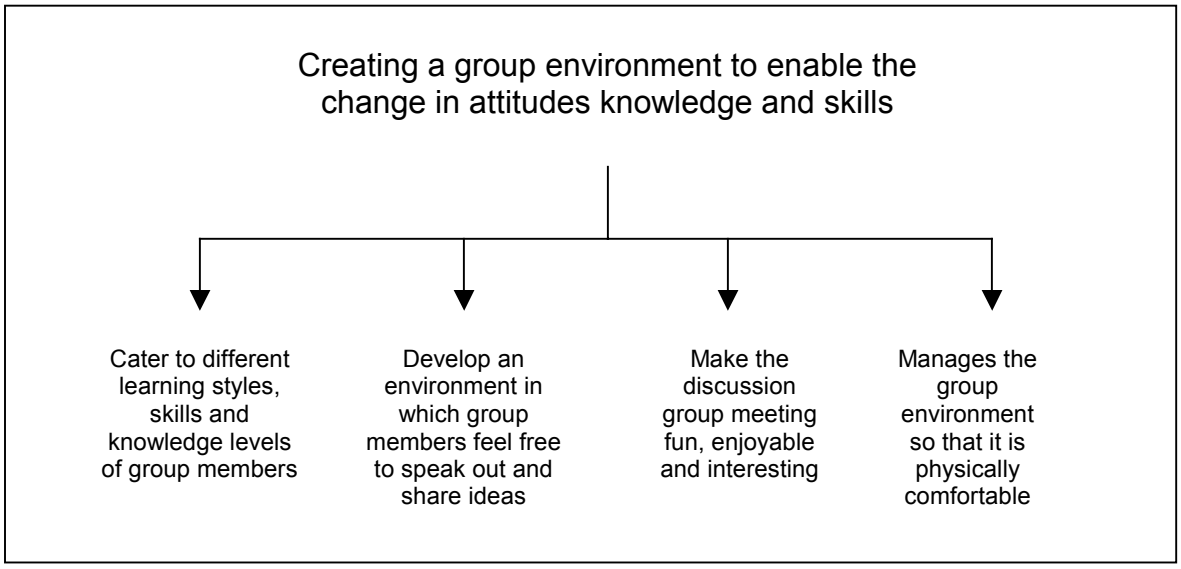

Figure 1. Methods by which the Consulting Officer creates a learning environment.

The CO used a mix of methods to meet the range of learning styles within the group. Similarly, he catered for differences in the knowledge and skill levels of the group members by pitching learning at the appropriate level. The CO assessed the knowledge and skill levels of group members through questions and pre-set tasks. Complex material was translated into an appropriate form and tasks were set to suit the knowledge and skill level of group members. The CO enhanced their understanding of important concepts by summarising and clarifying key points.

> *"I think that what people see and touch and walk over and all that sort of thing might be higher up the recall priority than listening to the spoken word. It makes a big impact on what they actually learn. We try and provide a range of activities ... that illustrate a point rather than talk about them".*

The creation of a mutually and socially safe environment, where group members felt free to speak out and share ideas, was the second aspect of a learning environment identified by the CO. To achieve this, the CO encouraged participation by all members, limited the input from dominant speakers and sought the development of mutual respect. Participation was encouraged by: requiring farmers to present their own farm data, asking questions of the quieter members, setting tasks in which all members participated, and managing the level of participation.

> *"It's a way of getting everybody to make a contribution to the group at the start... at least they have had the chance to say something... you always sense that there are some people hanging back, not speaking out, that may have some valid opinions."*

Developing mutual respect was also critical in obtaining a mentally and socially safe environment. To foster mutual respect, the CO demonstrated technical competence, ensured confidentiality on sensitive issues, and was aware of different personalities within the group and their reactions in certain situations. He also built rapport within the group by: joining in social discussions with group members, taking a general interest in members, communicating with them one on one, introducing new members to the group, setting tasks that were completed in sub-groups, and providing time for social interaction. The CO encouraged the group to value all contributions by promoting positive feedback, active listening, limiting negative feedback and highlighting innovative ideas provided by group members.

> *"People can speak out with the confidence that it's all to enhance the collective knowledge of the group, and not to be used against them. I've got to measure any information I pick up from the group about individuals, I have to be careful with it. So that's about keeping it within the group… some of its just working away behind the scenes, getting to know these people, talking to them when the group is not actually formally meeting... like while you're walking around, or going to see them on their own properties, or waiting for the group to meet on their farm… the farm walk was a bit of an interlude... it gave them a chance to talk to each other, rather than having to listen to a guest speaker."*

An important aspect of the group environment was that it be fun, enjoyable and interesting. To do this, the CO allowed time for socialising, encouraged humour, and made the day interesting. The interest level was

monitored and action was taken if this started to wane. Interest was maintained through the introduction of new ideas and by challenging existing practice.

> *"You watch the reaction of the group. Questions keep coming and they're from different people and the group is interested and they're paying attention... then you let the conversation flow, if one person is dominating and the group is starting to look elsewhere for stimulation, well you try and draw it to a close."*

The CO identified relevant topic areas from discussion with group members and integrated these into the day. The final aspect of developing an effective learning environment was to ensure the group was physically comfortable. This was assessed throughout the day, the CO ensuring that all members could see and hear, and that they were not cold or hungry.

An aspect of the learning environment not covered by the four learning environment categories is the role of the host farm in the process. The host farm provided a learning environment comfortable for group members. Also, it provided the CO with relevant, real world problems, issues and examples that were used to facilitate learning. The host farm acts as the catalyst for discussion and provides a physical learning environment where group members can see, hear, smell and touch aspects of the farming system, something which is not possible in a class room situation.

> *"I guess its their opportunity to have a number of their peers do a peer review of what they are doing... you can employ a consultant, in this case you're employing a group of your peers to come and do it for you."*

To help improve their farming practice, the CO focused the group on four key learning areas encouraging them to: reflect on their practices and knowledge, think objectively, take a farm production systems perspective, and identify opportunities and threats to the dairy farm business (Figure 2). To encourage the group to reflect on new practices, the CO facilitated the discussion making members aware of relevant new ideas. This was achieved by using salespeople, guest speakers and group members, along with the CO's own knowledge of new innovations. To encourage group members to reflect on a new practice, the CO asked them to consider its applicability to a particular situation such as the host farm, their own farm, or a hypothetical farm. A similar approach was used when the group members were asked to reflect on existing practices or knowledge.

The CO encouraged discussion about relevant new ideas provided by the CO, a guest speaker, or a group member. This was normally achieved by asking the group to consider the appropriateness and applicability of the new idea, to either the host farm, their own farm, or a hypothetical farm. Questioning is critical in this process. The CO uses these techniques also to get group members to reflect on their existing practices.

> *"In that sort of group, from the same locality, they're all confronting similar issues. So it's a process that they can go through, and going through it with one farmer helps identify issues that they can all think about, and they've all seen the situation by then, so they can relate their own situation to the host farmer's… it's to encourage them to bring information, or... recollect things that they've tried and the results to the group."*

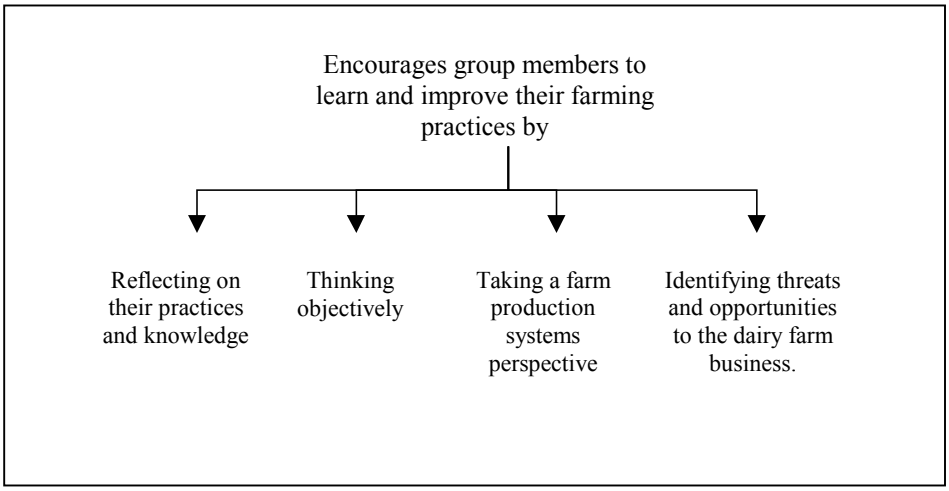

Figure 2. The areas of learning the Consulting Officer focuses on to improve group members' farming practices.

The second method the CO used to foster learning about farming practices was to encourage the group members to think objectively. The use of objective measures and objective (quantitative) problem solving techniques was encouraged. The CO demonstrated the use of objective measures explaining why such measures were important. These ranged from physical indicators such as condition score and average pasture cover through to important financial indicators. Similarly, the use of objective problem solving was encouraged through the provision of problem solving techniques suitable for a range of problem types and by assisting the group apply these techniques on the host farm.

> *"… showing the group tools that they could use on their own properties... by doing it, I'm trying to bring some objectivity into the discussion rather than subjectivity… my role... clarifying the process of arriving at the answer… putting problems up in front of them and saying well, give us your thoughts on*

that and perhaps showing them a methodology that they can use... exposing them to different methodology that they can go through, to use in problem solving."

The third method by which the CO helped group members learn about their farming practices was to foster a farm production systems perspective. To achieve this, he encouraged members to become aware of cause-effect relationships. They were challenged to constantly question the validity of what they were seeing, hearing and doing. The CO also encouraged group members to compare farming systems and identify the reasons for differences and similarities. "What-if" questions were used to force the group to consider the consequences of specific actions.

"What happens to the whole system if you change this? So it opens up a few other possibilities... if you change something in the system you're bound to get a reaction somewhere else… it makes them think about it... what would be the implications of doing something different in this situation."

The final method by which the CO encouraged the group members to learn about their farming practices was by getting them to identify the opportunities and threats facing the dairy farming business. He did this by helping members identify, analyse and present information to the group about the opportunities and threats facing a particular farm business.

"The whole group is probably about identifying opportunities and threats... some of it is having identified the opportunities, what steps can you put in place to get there?"

DISCUSSION

The CO's primary objective as a facilitator is for the group members to find it more rewarding to be dairy farmers through attendance at discussion group meetings. In effect, he is helping group members achieve their dairy farm business goals. This is achieved primarily by encouraging group members to change their attitudes, knowledge and skills in order to improve their farm practices. The literature defines the act or process by which behavioural change in attitudes, knowledge and skills is acquired as adult learning (Boyd, 1980). Therefore, a dairy farm discussion group is primarily a learning group, and the role of the CO is that of a learning process facilitator.

Learning in-groups is well recognised as an effective medium for encouraging change in people's attitudes and behaviour (Glaser, 1991). Farmer groups provide the opportunity for farmers to share their experiences, enhancing the knowledge and understanding of individual members (Murcott, 1995;

Christodoulou and Gray, 1997). In addition, farmers prefer a small group learning environment in which they can question, discuss and debate, rather than a classroom type setting (Moore, 1990). However, discussion groups are different from more typical learning groups which tend to be action-based, cohesive closed groups (Bentley, 1994). Discussion groups have a fluid, open membership and action is not undertaken by the group, rather, individual members implement actions on their home farms.

Effective facilitation is crucial to the success of a group learning process (Milliar and Curtis, 1997). An effective facilitator enhances the functioning of the group ensuring the needs of its members are met (Pedler, 1983; Simpson, 1995; Milliar and Curtis, 1997). This is achieved by offering encouragement, support, challenging and contradicting, and doing things together (Bentley, 1994). Pedler (1983) defined the role of facilitator as solely one of assisting others to learn. However, this does not include the passing on of specific knowledge to group members (Pedler, 1983). In contrast, an important part of the CO's role is to provide technical expertise. He considered that group members' respect for him and hence his ability to create an environment conducive to learning, depended upon his technical competency. Although this aspect was not identified in the facilitation literature, Love (1996) identified technical competency as important in the development of trust between farmers and their agricultural consultants.

The creation of a learning environment was emphasised as important both by the CO and the literature (Christodoulou and Gray, 1997; Handy, 1993; Keyton, 1999). The CO identified four methods by which he created an effective learning environment. He catered to the different learning styles, and skills and knowledge levels within the group and developed a mentally and socially safe environment. The CO also made the discussion group meeting fun, enjoyable and interesting while ensuring the group was physically comfortable. This cleavage provides a useful framework for thinking about the development of an effective learning environment and the components making up such an environment. Although these components are highlighted as important in the extension, education and adult learning literature, they are not presented as components of the learning environment framework.

Successful learning depends on the extent to which the learning environment is relevant to both the learning style and needs of the learner (Pigg, Busch and Lacy, 1980). In addition, an individual's learning is enhanced if they can be assisted to understand how they learn (Pigg *et al.,* 1980). Although the CO was aware of the importance of catering to different learning styles, he did not ascertain individual farmers' learning styles. Rather, he presented information in a range of ways to cater to all possible learning styles in the group. This strategy is consistent with that advocated by Pigg *et al.* (1980) when learning situations cannot be matched with learning styles. The CO did not assist farmers to understand how they learnt, but

he did assess their knowledge levels through questioning and specific tasks. This information was then used to ensure material was presented at the appropriate level, and tasks were tailored to individual capabilities. This strategy helped to ensure relevance of content and built on the existing knowledge of group members.

The importance of developing a mentally and socially safe environment is also stressed in the literature (Knowles, 1984; Rogers, 1992; Handy, 1993). Maintaining friendly, trusting and mutually respectful relationships between group members as well as between consultants and clients is a defining element in the success of these relationships (Bentley, 1994; Love, 1996; Rogers, McCosh, Gray, Kemp and Gardner, 1996; Lack, Cox, Collins and Kelly, 1997; Williams, 1997). The CO identified the importance of mutual respect as a factor contributing to making the learning environment mentally and socially safe. Interestingly, although the ability to manage conflict between group members was identified as an important attribute of a good group facilitator (Hunter, Bailey and Taylor, 1992; Bentley, 1994), this was not mentioned by the CO. He did, however, identify the importance of managing dominant speakers. As with Lack *et al.* (1997), the CO recognised the negative impact this type of behaviour could have on the learning environment. As with Knowles (1984), the CO identified participation as critical for developing a mentally and socially safe environment.

The importance of developing a fun, enjoyable and comfortable environment was stressed by the CO. Handy (1993) and Lack *et al.* (1997) also believed that the environment should be pleasant, physically comfortable and conducive to interaction. Lack *et al.* (1997) also found that group harmony and high quality learning was maintained when group membership was stable and consistent. In contrast, a dairy discussion group has a fluid membership. However, the extent to which this detracts from the relationship between group members and the learning process is unclear.

The CO identified four areas of learning that he facilitated. These were: reflection on new and existing practices, thinking objectively, using a systems approach, and searching for opportunities and threats. There was no mention of this type of framework in the literature. However, the elements within the framework were identified from a range of sources in the literature. For example, reflection is an integral component of the action learning cycle and can be used to improve understanding and self-development (McIntosh, 1994). Experiential-based reflection on previous actions leads to generalisations that can assist future planning (Zuber-Skerritt, 1993).

The CO asked challenging questions and encouraged group members to reflect on both new and existing practices. The literature stresses the importance of critical questioning because it encourages group members to challenge each others' assumptions and leads to the discovery of new ideas (Revans, 1981; Pedler, 1983; Bentley, 1994; Edmonston, 1997; Patel, 1997). This new information can then be incorporated into the learners existing knowledge (Knowles, 1984; Rogers, 1992). Revans (1981) stated that learning occurs when individuals gain insight through active questioning of their existing knowledge. New information can also be used to stimulate individuals to question their existing knowledge (Revans, 1981; Pedler, 1983; McCartney, Elwyn, Clark and Robinson, 1997; Patel, 1997).

The degree of reflection is influenced by the quality of the questions asked (Edmonston, 1997). For example, well-structured and explained questions will nearly always result in the correct information being reflected upon. The CO used questioning, particularly about the appropriateness and effectiveness of various activities, to encourage group members to reflect on their existing practices. They were also asked to reflect on the practices of other group members, and the host farmer. This forced them to apply their knowledge to new situations and generalise across farms. Such interaction between group members provides a supporting and challenging framework that enhances the learning process (Gregory, 1994).

Action learning theory acknowledges that people learn both through their own actions and experience and from the integration of new information. Experiences are translated by individuals into concepts which are then used to guide their choice of new experiences and the planning of new action (Kolb, 1984; Zuber-Skerritt, 1993). Action learning can be represented as a four stage knowledge creation cycle that comprises: concrete action (stage 1), observation and reflection on the action (stage 2), the development of concepts and generalisations from the reflection (stage 3), which are then used to plan and guide new action (stage 4). The actions individuals undertake become the concrete experiences that form the basis of another cycle of action learning (Zuber-Skerritt, 1993).

The nature of the discussion group limits the phases of the action learning cycle the group can undertake. In most cases, group members can only reflect on their own actions, those of the host farmer or other group members. They can observe the outcome of the actions of the host farmer, but they will tend to plan, undertake action and observe on their home farms. However, the CO uses tasks that allow group members to complete an action learning cycle on the day. Tasks allow repetitive experimentation and testing of generalisations and concepts in short time frames (King, 1997). In contrast to other group members, the host farmer may actually go through more stages (observation, reflection, planning) of the cycle during the day. Working through the action learning cycle in one’s own setting can enhance an

individual's performance (Gregory, 1994), suggesting that the host farmer obtains more out of the day than other group members.

The CO encouraged the group members to think objectively about dairy farming to enhance learning. He did this by encouraging the use of objective measures and formal problem solving techniques. This improves within-group communication and provides logical frameworks for working through problems. King (1997) argued that to gain maximum benefit from action learning, communication in the reflection stage is critical. This is made easier if information is discussed in a logical manner (Edmonston, 1997). The CO used hands-on activities on the host farm to objectively solve problems. Milliar & Curtis (1997) suggested that this approach builds confidence in assessment and monitoring. It also facilitates experiential learning (Kolb, 1984), and the monitoring and planning tools can be used for repetitive experimentation and testing of generalisations in short timeframes to enhance reflection (King, 1997). As such, the objective measures and problem solving frameworks illustrated by the CO can be viewed as tools that are used to enhance the reflection process.

The CO encouraged the group members to take a production system perspective to enhance learning by making group members aware of cause-effect relationships. He used their knowledge of these relationships to check the validity of different situations. A systems perspective is likely to help group members understand the implications of change and how and why something within the farming system will impact on other elements of the system. Critical to any learning is the ability to make generalisations (Zuber-Skerritt, 1993; King, 1997) and the adoption of a systems perspective should enhance this.

The CO encouraged the group members to think about opportunities and threats to their dairy farming businesses to enhance their learning. This aspect of the CO's practice was not covered in the literature, but is likely to provide a useful framework for questioning and enhancing the reflection component of the action learning cycle. Central to the learning process was the COs use of the host farm and farmer. The host farm provided (1) an environment in which group members felt comfortable, (2) relevant real world problems, and (3) a setting in which the outcome of actions could be observed and hands-on tasks undertaken. These are important elements for successful learning (Handy, 1993; Kolb, 1984; Lack *et al.,* 1997; Milliar and Curtis, 1997).

SUMMARY AND CONCLUSION

The discussion group is a type of learning group. It differs from other learning groups in that it is not action-based and membership is fluid and voluntary. The CO, unlike other facilitators also provides technical expertise to the group. The study found that the process used by the CO in managing a discussion group could be cleaved into two subprocesses, the establishment of an effective learning environment, and the facilitation of learning within that environment. To establish an effective learning environment, the CO catered to different learning styles and knowledge levels, fostered the development of a mentally and socially safe environment, ensured the day was enjoyable, fun and interesting, and that group members were physically comfortable. The CO used four methods to enhance farmer learning, encouraging members to reflect on new and existing practices, think objectively, develop a production systems perspective and identify threats and opportunities to the farm business. Central to these four methods was the role of critical questioning in enhancing reflection. Similarly, the role of the host farm and farmer was important in providing a suitable learning environment with relevant learning opportunities.

The processes used by the CO were, on the whole, consistent with the literature. However, due to the nature of the group, some important differences existed. For example, given the fluid nature of the group, the case CO did not attempt to identify the learning styles of individual members, nor did he make explicit their learning. This raises the question as to whether discussion groups could be more effective learning group if membership was closed allowing greater emphasis to be placed on the learning styles of individual members. Group members, with the exception of the host farmer, were primarily limited to undertaking the reflection stage of the action learning cycle. However, this is a constraint of the group type, but an area that could be investigated further. In conclusion, the study has made explicit the facilitation process used by an expert Consulting Officer and this should provide valuable material for training and future research in this area.

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