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FACILITATING LEARNING: ENHANCING DAIRY FARMER COMPETENCE THROUGH WORKSHOPS

A thesis submitted in partial fulfilment of the requirements for the degree of Masters of Applied Science in Agricultural Extension

Massey University

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Abstract

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Agricultural extension in New Zealand pastoral dairy farming systems has traditionally comprised a mix of technology transfer, education and consultancy. Activities have been targetted at individuals, discussion groups and farmers mostly through the mass media and group activities. It has been assumed that the provision of information (technology transfer) will lead to individuals being better placed to make sound decisions, be innovative and make appropriate changes to their management practices. Individuals were assumed to benefit through a mix of improved profitability, more efficient use of resources and the achievement of non-profit oriented goals (e.g. personal satisfaction, lifestyle/family, land stewardship). Due to ever-changing circumstances, managing a viable farming business in the future will, however, require a different way of thinking compared to the past.

This study focused on the provision of learning tools tailored to the future needs of dairy farmers. Agricultural extension has evolved over the last two decades from "Transfer of Technology" to a paradigm of participatory action learning. The learning process involves the building of knowledge. Two areas of dairy farmer learning needs were identified using a competence questionnaire and workshops were then designed to meet these needs. The facilitated workshops "Northland Dairy Cow Nutrition" and "Preferred Future" were piloted and evaluated with dairy farmers. The latter showed that as well as achieving specific learning outcomes and applying new knowledge to their farming business, participants also gained confidence in their ability to learn. The outcomes for the "Preferred Future" workshop were comparable to those reported for "Dairy-MAP" (Pennsylvania, USA), "Smart Move" (Queensland, Australia) and "Farm Finance" (Pennsylvania, USA) workshops.

Reasons for a lack of enthusiasm for formal learning in the farming community have been outlined in the literature. Knowledge construction has rarely been acknowledged as an outcome of agricultural extension or education programmes. If, however, farmers become more aware of their learning needs through the application of a competency framework, they are in a stronger position to demand learning experiences that are relevant, timely, convenient and effective for them.

The major implication arising from this research, for both agricultural education and extension workers, is the need for a paradigm shift from the Transfer of Technology model to one of facilitated learning. This will require education and extension professionals to learn new skills themselves in order to provide leadership in facilitating learning. This will require competence in designing materials and tailoring activities to the learning needs of farmers. Positive learning experiences occur in facilitated workshops where there are: clearly identified learning objectives; a course design that builds participants' knowledge to meet these objectives; and facilitation that utilises the principles of adult learning and creates a non-threatening, non-judgmental and enjoyable learning environment.

Keywords: agricultural extension, education, dairy farmers, facilitation, learning, workshops

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PREFACE

"For every group of learners someone must take the role of instructor

- the individual responsibility for helping the people present to learn".

Włodkowski 1995 p. ix

None of us are exempt from change. In 1977 I enthusiastically started my career as a Farm Advisory Officer with the Ministry of Agriculture and Fisheries - as it was then. At that point I considered that I had a job for life, with a simple, linear career path ahead of me. After nine years practising agricultural extension I resigned. The working environment was rapidly changing and agricultural extension as we knew it was no longer an option. I spent two years providing a farm management consultancy service (on a fee-charging basis). For the following five years I sold rural real estate. This was not a planned career move, but more an act of fate. It taught me a lot about myself, about other people, and about coping with change.

In 1993, I was fortunate in securing a short-term appointment as Agricultural Extension Co-ordinator at Massey University. Although I came to the job with a fresh outlook and a desire to somehow improve agricultural extension, the first major change did not occur until I started studying for my Masters. A paper from educational psychology, "Cognition and Instruction", provided me with a new vocabulary and enabled me to build a new conceptual framework about learning. A review of the international literature on agricultural extension provided me with volumes of inspiration. The literature also provided me with insight in workshop design, facilitation, and evaluation and organisational learning.

I am enthusiastic about agricultural education and extension. This is due to the new knowledge I have recently built, and the opportunity to think differently about what it is we are trying to achieve, and how we might achieve it. This has given me new confidence. I hope to use this to give others new confidence also. This thesis provides some clues about how this might be achieved. It is supported by evidence from the international literature and from personal experience gained during the research.