



EXTENSIONNET

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THEME - EMERGENCE OF THEORY THROUGH CRITICAL PRACTICE

From the Chair

Terry Makin

This edition of ExtensionNet is themed around the development of theory in extension practice. "There is nothing as practical as a good theory" is a quotation that I like and is particularly relevant.

One of the first tasks carried out by APEN was to process the results of a survey of extension professionals and to consider the extension environment and the changes taking place (see *ExtensionNet* Vol 3 No 2). My most outstanding insight in this exercise was how extension practice had rarely been informed by extension theory and that this was a fundamental reason for the way extension was perceived. It seemed, that historically in Australia, extension had been mostly learned on the job as practical experience. Extension officers learned like farmers, from "looking over the fence/desk". My own experience as a producer was of an experienced extension officer, who on leaving, asked me to assist to train the new graduate replacement.

I believe this lack of attention and valuing of extension theory to support our practice is one reason for what has previously been a lack of recognition of the importance of extension as a discipline and profession. Funding, academic status and publication have tended to focus on production research.

The formation of APEN, the range of post graduate courses, the increasing number of people with explicit extension education, and the growing body of theory being developed by reflecting critically on our practice are all contributing to the growing recognition and valuing of the importance of extension in assisting change processes to deliver real outcomes to industries and communities.

I believe that developing extension theory by critically reflecting on our practice is of fundamental importance to the development of extension practice and the furthering of the profession.



Terry Makin, Inaugural President

It is with a sense of fulfilment that I advise you of my intention to stand down as the President of APEN at the AGM in December. I have been in the chair of APEN since its inception, 3 years ago, at the International Conference at Surfers Paradise. I believe that it is now time for others to continue the development of APEN, bringing new ideas and energies to the position and organisation. This is probably one of the most important projects that I have been involved in.

APEN is steadily growing in members, strength and awareness of practitioners needs and an ability to fulfil those needs. The international conference next year, which the conference committee has well underway, including major sponsorship by NSW Land and Water Conservation, will provide a major focus and image raising vehicle for APEN. I believe that as extension develops and the number of providers, both public and private grow, APEN's role will continue to grow in importance.

I thank you for the opportunity to assist you in developing APEN. ♦

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THEME - EMERGENCE OF THEORY THROUGH CRITICAL PRACTICE

Elwin Turnbull

For this edition *Dr. Bob Fisher* (an anthropologist involved in community forestry) has provided the introductory comments about the articles. We have presented articles which explore the theoretical basis of the extension profession, we hope they give you some leads in challenging your own framework for extension.

Dr. Bob Fisher

It is common nowadays to attack "traditional" agricultural extension because it has been dominated by a model in which new knowledge is created by research and transferred to farmers by extensionists. Significantly, much of the attack on formal extension theory has been mounted by extension practitioners who actually engage in genuine communication with farmers

and take into account the context when recommending new technologies.

A second limitation in extension theory has been the dominance of the "communication of interventions" approach which assumes that a technical innovation is communicated to the client population and that adoption depends on certain characteristics of the adopters who are classified in five categories including "innovators" at one end and "laggards" at the other. The problem with this theory is that it doesn't really explain why people are in one category or another, except that willingness to innovate seems to be seen as essentially a characteristic of the *personality* of the adopter. Sociological and anthropological studies of agricultural change tend to suggest that farmers are likely to be innovators because they are relatively wealthy and can afford inputs and can take risks. Alternatively people may avoid changing technology because necessary labour is not available. In

other words, the emphasis is on more systemic factors.

The articles in this issue reflect an emerging sophistication in the way extensionists are exploring or could explore, the context in which innovations take place, both in terms of the particular farming system (Kaine and Lees) and in the wider social and economic context (Lawrence). This is not to say that the papers represent a consensus about the way extension should be practised. Kaine and Lees recognise the need for sensitivity to context, but propose an approach which is much more structured than proposed by Pinheiro, Pearson and Ison. The latter paper reflects the contemporary emphasis on genuine two-way communication and participative learning involving both farmers and extensionists. What is most evident in this issue of the newsletter is the sense that emerging extension theory is being created largely through the active involvement of critical practitioners. ❖

APEN is pleased to acknowledge the support of:



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PUBLIC SECTOR EXTENSION IN QUEENSLAND

Public sector extension in Queensland is alive and well if the recent South Queensland Extension Forum is any indication. The Forum entitled "Sharing Ideas, Experience and Outcomes" was attended by 195 South Queensland extension staff and managers from the Department of Primary Industries and the Department of Natural Resources.

The aim of the forum was to support the continuous improvement of professionalism and service delivery of extension activities related to agriculture and resource management, with an emphasis on South Queensland. This was done through:

1. Recognising and sharing achievements, knowledge and networks in extension. Individual officers and teams reported on 67 extension projects which documented major achievements due to the application of modern approaches to extension.



John Childs
Executive Director (Research, Innovation and Extension) DPI

2. Developing the vision and direction of extension. Interactive discussion sessions identified and prioritised the issues and goals for improving extension professionalism.
3. Building morale and teamwork. Action plans for future activities were developed by both individuals and work teams.
4. Exploring issues that will set directions for 2000 and beyond.

The Forum was supported by seven independent observers who critiqued the extension services using a SWOT analysis. The observers included a farmer from Goondiwindi, a private sector agribusiness operator, an officer from the Victorian Department of Natural Resources and Environment, a fourth year Agricultural Science student, the manager of Telstra rural services and

lecturers from the University of Queensland and the Dalby Agricultural College. The insights offered by these observers were a great way to highlight attributes and issues of which the people involved in the extension services may be unaware.

Overall, the Forum reinforced the major advancements made in knowledge and

use of modern extension methodologies and in extension practices and achievements over the past three years. It also emphasised the importance of gatherings of extension staff in learning and strengthening teams and networks in improving performance potential and in personal development. ♦

PATTERNS IN INNOVATION -An analysis of the adoption of practices in beef cattle breeding

G.W.Kaine and J.W.Lees

University of New England

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Introduction

Under the traditional model of agricultural extension, it was assumed that:

- a) Researchers generated knowledge
- b) Extension workers packaged and transferred that knowledge to progressive farmers
- c) The knowledge was then spread through the agricultural community through demonstration of the benefits by progressive farmers.

As farming has become more sophisticated, it has become increasingly clear that this model of information transfer does not reflect the reality. Recent studies have recognised that information originates from a variety of sources and that the process of information exchange may begin at many points in the agricultural information system.

This suggests a system based on a synergistic network structure which links researchers, extension workers and the agricultural community, which allows for multi-directional flows of information and can provide insights into its sources. However, the authors suggest that a limitation of the traditional system is not redressed by the network model in that it does not explicitly allow for the possibility that new information is not equally valuable to all farmers.

The assumption that new information is equally valuable will be valid only to the extent that new ideas apply across all farming "contexts". ("Context" is defined as "the resources, practices and technologies currently used by a farmer in production and the key attributes of the farmer such as his or her business and farming aspirations and objectives"). If production contexts differ from farm to farm, but an innovation can only be applied in particular contexts, then the value of that innovation will vary across farms. If the fit between the existing context and the innovation is high, the chances of successfully adopting the innovation are high, and vice versa.

The authors believe that, on the basis of work done by Crouch (1981), the range of contexts which are suited to the adoption of more advanced innovations becomes increasingly restricted as technological sophistication increases and farm development proceeds. The implication of this is that the key to successful technology transfer is the establishment of networks involving homogeneous groups of farmers with a similarity of interests, both between themselves and with extension workers and researchers. Conversely, differences in contexts may create barriers to extension.

Objectives Of The Study

With the above background, the principal aims of the study were:

- a) To classify farms into groups on the basis of differences in context
 - b) To determine whether the rate of adoption of an innovation differed across these groups
- This involved the following specific objectives:

1. Identifying a set of practices and technologies that are functionally related to the adoption of a particular innovation

2. Classifying farms into groups on the basis of the set of practices and technologies identified
3. Determining whether or not the frequency of adoption of the innovation is statistically different between groups.

Conduct Of The Study

In order to conduct the study, a relatively recent innovation in the management of reproduction of beef cattle was selected i.e. the confined calving of heifers and cows. Analysis was undertaken from the responses of beef producers in southern Australia to a mailed survey which was developed in conjunction with Beef Cattle Extension Officers in the Victorian Department of Agriculture.

The herd management practices that are considered to be precursors to the successful implementation of confined calving were described. Discriminant analysis was then used to verify that:

- a) The presence, or absence, of these practices in the operation of a beef herd did in fact influence the period over which heifers and cows were calved.
- b) The period over which the calving of heifers and cows occurred was significantly related to producer attitudes towards confined calving and the management practices they followed.

Identification Of "Context" For Confined Calving

Management practices that influence confined calving, together with producer beliefs about its' importance on profitability, were used to classify producers into groups. Five groups emerged as follows:

1. Believed confined calving was very important and had adopted all the necessary practices
2. Believed it was unimportant and had adopted none of the practices
3. Believed it was important and were