NEW ADULT EDUCATION OPPORTUNITIES IN THE WOOL INDUSTRY

D.R. Lindsay

Faculty of Agriculture, The University of Western Australia, Nedlands, WA 6097
Manager, Education Program, CRC for Premium Quality Wool

SUMMARY
The wide geographic distribution of wool growing and processing provides challenges to establishing a comprehensive education program in Australia. The Co-operative Research Centre for Premium Quality Wool is combining its broad base of personnel with modern video technology to provide both undergraduate education and education for the industry as a whole through its "Access to the Experts" program.

Keywords: Adult education, training, wool industry.

INTRODUCTION
It is only very recently that education and communication of new research and ideas has been attempted in the Australian wool industry in a structured way. The industry's capacity to respond to modern concepts of "responding to market forces" depends on all sectors of the industry from production through the many manufacturing processes to retailing, being aware of what the other sectors are attempting to achieve. This depends, in turn, on good communication, communication depends on understanding and understanding requires a dynamic process of education.

CHALLENGES TO ESTABLISHING A COMPREHENSIVE EDUCATION PROGRAM IN THE WOOL INDUSTRY
There appear to be four major challenges that must be overcome to achieve a comprehensive educational program in wool in Australia.

The first of these is the wide geographical distribution of wool growing and processing. Wool is grown in significant amounts in every region of Australia with the exception of the Northern Territory. Early stage processing is spread across a wide section of the country and much of Australia's raw wool is processed overseas. Later stage processing and the manufacture of cloth and garments is effectively an overseas activity. Most Australian wool is therefore neither manufactured nor sold in this country. Yet, the economic health of the industry depends on successful, efficient and continuing manufacture and sales.

The second challenge is the lack of a formal structure for a comprehensive education network within the country. There is certainly a formal mechanism for "hands-on" training in some sectors of the industry through the TAFE and, occasionally, other systems. Shearing, wool classing, basic production systems and some aspects of general textile technology are covered by these
organisations who have a relatively large resource base. In addition to these there are many informal sources from which people in the industry obtain information. These include the staff of broking houses and agencies, networks, firms producing veterinary chemicals, departments of agriculture and field days and special meetings arranged to address specific issues from time to time. Both the quality of the information from these sources and access to it are highly variable and the sources themselves may have a greater or lesser degree of pecuniary interest in the sort of information that they pass on.

The third challenge that must be addressed is the lack of means whereby trainers and providers of advice to the industry can, themselves, update their own knowledge and understanding of the industry. The concept of "training the trainers" was specifically devised by K.D. Atkins and A. Casey (Casey, 1995) to address this issue. They recognised that much of the advice given to commercial sheep breeders about selection and breeding programs came intentionally or unintentionally from people who understood few of the theoretical concepts of quantitative genetics or of the techniques available to speed up breeding programs. Atkins and Casey devised courses of lectures and hands-on demonstrations to bring people up-to-date. These courses began in New South Wales, but in a cooperative arrangement with the Wool CRC will soon be available in other States of Australia.

The fourth challenge, and the one that has probably inhibited newer initiatives in education more than any other, is the fact that, relative to other industries, there are very few experts from which new and timely information can emanate. They are occupied in a wide range of activities, they come from a number of organisations outside the education sector, their time is restricted and, because of these constraints, have been largely unavailable to participate in education.

THE ROLE OF THE COOPERATIVE RESEARCH CENTRE IN PROVIDING EDUCATION FOR THE WOOL INDUSTRY

With the formation of the Cooperative Research Centre for Premium Quality Wool in 1993 a new potential basis for a comprehensive educational program became available. The CRC can be described as a loose affiliation of parties with interests in research into a wide range of wool-related fields. The research program of the CRC does not cover all of this range, but importantly, the aggregate research program of all the parties involved in the CRC most certainly does. In addition, the CRC is a national body although its party organisations have a more restricted regional base. Because of its wide geographical spread and its relatively large resource of personnel with expertise in research or teaching or both, the CRC saw and took advantage of the opportunity to broaden the training of undergraduates in wool science and technology within the country. There are now four to five times as many students undertaking wool-related undergraduate courses than there were previously and the site of teaching has broadened from the base for over 40 years at the University of New South Wales to include, the Universities of New England, Adelaide and Western Australia. Instead of five or six professional people providing undergraduates with lectures there is a base of about 40 people now involved, with the potential for many more. This comprehensive program required the use of new technology in communication which involves simultaneous lecturing by a single teacher to all of the sites in which students are involved. The technology is proving
extraordinarily successful in achieving efficiencies in the use of human resources to the extent that a number of universities are now seeking to emulate with other degrees, the successes that they are seeing in the undergraduate wool courses.

The expanded resource base of the CRC has also been helpful in providing a wider range of options for postgraduate students in both facilities and supervisors.

It has become increasingly apparent over the last three years that these developments within the CRC present unprecedented opportunities to develop a structure for providing adult education in the wool industry that was hitherto unavailable. The result has been the "Access to the Experts" program which is coming on stream in 1997.

"ACCESS TO THE EXPERTS"

The objective in this program is to provide a structured mechanism by which people who relay information within the wool industry can ensure that they are up to date and have the wherewithal to remain so. People who are very knowledgeable within their own sector of the industry, generally do not have the means or the contacts that can keep them in touch with developments outside their own sector. The "Access to the Experts" program is about broadening the knowledge base of individuals within the industry and providing contacts for the further development of their expertise. We have argued that the format for undergraduate lectures where the dialogue is heavily biased toward the lecturer is usually inappropriate for industry personnel. Instead, in the new program, the emphasis is on discussion between the participants and the panel of experts. Each session in the program lasts for three to three and a half hours. The early part of this time involves edited, excerpts from the undergraduate lectures shown as an integrated video. This sets the scene and the theme for the discussions to follow and, together with extensive written material, provides the technical background for those participants who need it. The second half of the session consists of an open forum via the video lecturing system in which question, answer and discussion flows across all sites. The CRC lecturing staff provides the linkages, both verbally and electronically, and it is the job of the coordinator for each session to ensure that the course of the discussions is sufficiently broad and comprehensive to satisfy the requirements of the participants.

The first of the "Access to Experts" programs began in February 1997. There are three courses, each occupying half a day in four successive weeks. The three courses are:

- Measurement and prediction: keys to an efficient industry
- The market driven wool production system
- Wool marketing and selling.

Participants in each of the courses can expect to have spoken, argued and discussed directly with 10 or 12 experts in the field of the course. During this time they will get to know the "expert" and the nature of the medium will ensure that they, themselves, are familiar by name, or face, or both to the "expert" lecturers. This will undoubtedly make follow-up enquiries about particular issues easier to initiate.
In developing this new format, the CRC is being careful to ensure that it complements, and
certainly does not compete with the existing institutions and individuals who provide information
to the industry. In doing so, it provides a source of information and a mechanism of obtaining it
that have not existed in the wool industry until now.

There will no doubt be modifications to these experimental programs as they develop.
Nevertheless, even at this stage, they are seen by many educators to represent a new approach to
providing adult education opportunities, not only in the wool industry but in other agricultural and
non-agricultural sectors.

REFERENCES
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