



Faculty of Land and Food Resources
 The University of Melbourne

Submission to Inquiry into Rural Skills Training and Research

Principal Recommendations

Faxed June

- It would be in the best interest of delivering quality agricultural and related education programs in Victoria if there were fewer than the present 19 TAFE Institutes and several other private providers offering VET courses. A reduction in the number of providers would increase the concentration of resources and contribute to a well coordinated State-wide delivery system.
- TAFE to Higher Education articulation and inter-institutional articulation pathways need to be improved through clear credit transfer processes, targeted scholarships and sponsored transition summer school courses.
- There is no agreement within an industry sector of the required skills needs. Increased coordination by industry bodies to determine industry skills needs would be welcomed.
- Improved knowledge transfer mechanisms are warranted because in many sectors agriculture practitioners are unaware of research outcomes and the potential impact of findings for their industry.
- The Australian Government should be encouraged to increase funding support for both rural skills programs and quality research initiatives that are held to be in the national interest. There is a particular role to play in the support of basic longer-term research not directly aligned to short-term industry needs.

CONTEXT

The University of Melbourne has offered agricultural programs for the past 100 years and during a similar period of time the State Department of Agriculture has offered farmer and horticultural training through various colleges in Victoria. In the mid-eighties, these colleges were transferred to the State Government's education portfolio. By this time there were six colleges known as the Victorian College of Agriculture and Horticulture (VCAH) and offering both TAFE and higher education programs. In the mid-nineties, the VCAH merged with the University of Melbourne. Two Universities in Victoria currently offer agricultural science degrees and other universities offer environmental science and other related degrees. There are 19 TAFE Institutes in Victoria and several private providers, many of whom offer agriculture and related programs. The University of Melbourne offers about 60 percent of agricultural-related courses. There are a number of research agencies operating in Victoria (eg Department of Primary Industry, CSIRO) with activities also overlapping those undertaken by the University of Melbourne.

This has led to a very fragmented approach to providing agricultural education in Victoria and is counter to the 15 year old McColl Report which recommended the amalgamation of agricultural education delivery in each State. It is also counter to the

trend in other Australian States which has seen Tasmania, South Australia and more recently Western Australia move to joint provision between universities and the State's Department of Primary Industry (or equivalent title).

It would be in the best interest of delivering quality educational programs if there were fewer providers and an increased concentration of resources.

TOR 1: The availability and adequacy of education and research services in the agriculture sector, including access to vocational training and pathways from vocational education and training to tertiary education and work.

Sufficient agriculture courses are available (possibly too many); the major limitation is a lack of student demand for full-time on-campus courses, especially at regional campuses. A well coordinated State-wide delivery system of TAFE skills-based training is required.

The agricultural-related research undertaken is generally of high quality, but limited funding has restricted the quantity of research undertaken to underpin Australian industry which is faced with strong international competition.

The term "vocational education and training (VET)" often means different things to different people because of the breadth of activity encompassed by practitioners in the field. In an endeavour to aid understanding and debate, the agricultural training market may be segmented based on the concept that participation in VET is very often a function of career/work goals and stage in the lifecycle. This approach is well supported in the literature.

Secondary school students

- VET in Schools participants have not necessarily settled on a career, but are using VET to extend and enrich their secondary schooling experience and, perhaps, are using this experience to evaluate and confirm interest in an industry for their chosen career.
- The current generation of agriculturists comes largely from a farming background – either a home farm, or through school vacation visits to a family member with a farm. With the rapid decline in the number of farms, this experience is now drying up, and there is a need to re-create the experience if we are to continue to recruit bright young people into a career in agriculture. For this reason we have been supportive of the VET in Schools program, and other agricultural training initiatives for secondary school students. University of Melbourne campuses have hosted visits by many school students.

Career establishers

- These participants are predominantly school leavers. They are more likely to be willing to undertake a full-time course, to enroll in higher level VET qualifications and to complete these qualifications. Some may have aspirations to then proceed to a higher level qualification.

- Medium-longer term demand for full-time VET courses is difficult to predict because a number of both positive and negative influences are in play.
- The most positive influence is that career prospects for those graduating from full-time VET programs appear to be sound.

Labour market entrants

- These participants tend to be younger early school leavers, interested in combining work and training, often as an apprentice/trainee.
- Included in this segment are various (often disadvantaged) groups undertaking training as a precursor to gaining employment in the industry.
- The new apprenticeship program has been reasonably successful in some sectors in attracting young people into a career in agriculture; dairying perhaps being the best example. However, it is difficult to see demand expanding much further until trainees are paid.

Career improvers

- These participants are already engaged in the industry. Some will have entered the industry as an apprentice/trainee. They are usually in the 25-40 year old age group. They tend to have supervisory/managerial aspirations, and view a formal qualification as being of assistance in achieving their career aspirations.
- As agricultural enterprises become larger and more specialized, the demand for qualified professional farm managers expands. Demand for training within this segment is growing, but is dispersed across a broad geographic area.

Skill improvers

- For these participants, the skills acquired through training (as distinct from a qualification) are an end in themselves.
- The motivation for training within this segment will generally be to improve organizational productivity and profitability; to achieve prescribed regulatory or other compliance standards; or perhaps simply to pursue a land-based lifestyle or recreational interest.
- These participants tend to be older (40+) and often are self-employed or company sponsored.
- There are a large number of public and private providers competing within this segment.

An issue for the University of Melbourne has been the tension between maintaining infrastructure to support on-campus full-time programs for *career establishers*, whilst also servicing the growing demand by *career improvers* for predominantly off-campus flexibly delivered training.

There is a perception that full-time VET courses are “terminal”. The creation of more streamlined articulation/credit-granted pathways into higher education programs should act as a stimulus to demand.

Articulation pathways between higher education advanced diplomas and bachelor degrees through to postgraduate coursework and research are well established. For example,

- The Faculty of Land and Food Resources of the University of Melbourne offers clear articulation pathways from their Advanced Diplomas (Higher Education) into their bachelor programs in Forestry, Agriculture, Resource Management and Horticulture and thence into postgraduate research degrees (Master and PhD).
- Suggested improvements to the above to further promote pathways between different streams of (higher) education in forest science: A graduate degree in Forest Science open to persons holding an appropriate degree, and post-graduate coursework degree (Masters) would complete the current availability of higher education pathways in forest science.

TAFE to Higher Education articulation and inter-institution articulation are less well developed.

- The major issue is articulation that recognises legitimate prior learning. Fully documented pathways that allow significant number of articulating students should be a right of prospective students;
- Prerequisites and hurdles (especially those that are hidden) need to be addressed. There is currently only limited scope for articulation/credit transfer pathways for those proceeding from management-based VET courses to science-based degree courses;
- Articulation pathways are important with the capacity for transition from VET to Higher Education to be improved through targeted scholarships and sponsored transition summer school courses;
- There needs to be a clear distinction between the Advanced Diplomas (Higher Education) offered by Universities and TAFE-level Advanced Diplomas offered by other providers; the Higher Education Advanced Diplomas are being redesignated as Associate Degrees.

TOR 2: The skills needs of agricultural industries in Australia, including the expertise and capacity of industries to specify the skills-sets required for training, and the extent to which vocational training meets the needs of rural industries.

- There is no agreement within an industry sector of the required skill needs. Increased coordination by industry bodies of needs would be welcomed.
 - Skill sets can vary on a regional basis
 - Skill sets may be specified at the highest level regardless of the level of training
 - Components of the skill sets are not always appropriate to industry and student needs

- Too many generic skills, especially at the higher level could have the unintended consequence of de-skilling rather than upskilling
- The focus on management skills in higher level VET programs can lead to lower practical skill levels and contribute to future skills shortages
- In general the relevance of training to the needs of agricultural industries and students already employed in the industry has been substantially enhanced by the adoption of an industry-led training system
 - Industry training boards are closely involved in vocational training, particularly in Victoria where they contribute to ensuring that the skill needs of agricultural industries are well-addressed through a range of course offerings.
 - Industry training boards should be more active in promoting employment opportunities.
- Some difficulties are encountered in provision of package-based training programs for those seeking skills to gain employment in agricultural industries

The University of Melbourne, through TAFE programs ranging from full time on-campus to flexible delivery on workplace sites, caters for a wide diversity of skills training. This diversity adds considerably to course delivery costs. These costs should be more fully recognised in funding agreements.

TOR 3: The provision of extension and advisory services to agricultural industries, including links and coordination between education, research and extension.

The provision of extension, advisory and research services to agricultural industries currently ranges from informal discussions through to strong formalised links in the research area provided by such agencies as Australian Research Council Linkage Projects, Rural Industry Sector Development Corporation projects and Cooperative Research Centres and by research alliances between research groups in the education sector and relevant state departments. Across many sectors, practitioners are unaware of research being done and/or the implication of the results for their industry.

- Strong links between education and research providers and industry groups may be enhanced by a number of strategies:
 - Inclusion of industry projects and placements in education programs
 - Encouragement of linking student research projects with programs in association with industry through such avenues as ARC Linkage projects
 - Coordination of low cost abstracting services to disseminate new knowledge – a source of funding for such initiatives needs to be identified
 - Encouragement and enhancement of strategies such as industry advisory notes produced by such agencies as DSE, DPI, CALM, CSIRO. Using web-based technologies, these could be provided at little cost to the consumer.
- Many extension and advisory services are directed towards the “skill improver” discussed under TOR #1. A strategy is required to map extension outcomes against competency enhancement. An example of such a strategy is

the Target 10 dairy extension program. The effectiveness of existing and proposed extension and advisory services should be measured.

- Participation in field days, industry sponsored events, special seminars should be facilitated and encouraged.

TOR 4: The role of the Australian government in supporting education, research and advisory programs to support the viability and sustainability of Australian agriculture.

The Australian Government should be encouraged to increase funding support for both skills programs and research activity that are held to be in the national interest. Recognition on the part of Government of the diversity of skill and research requirements across industry sectors will be most important:

- The role of RIRDC boards should be reconsidered to encourage greater investment in building the national agriculture skills base through more investment in postgraduate and postdoctoral research scholarships.
- There should be an increase in investment in teaching and research infrastructure required to ensure quality education programs in recognition of the importance of agriculture as an export industry.
- There needs to be transparency in the assessment of relative merits of prospective projects and their outcomes to avoid a perception that only big projects are funded regardless of value.
- Mechanisms are required to identify and encourage new players and new initiatives.
- Government has a key role in assisting the promotion of careers in agriculture and related industries from the vocational level through to professional level.
- Government should support outreach or extension of research outcomes – it should be noted that in some sectors there are no appropriate refereed journals for dissemination of research outcomes.

Government has a particular role to play in the support of basic longer-term research not directly aligned to short-term industry needs.

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