

---

**SUBMISSION**

---

**LANGUAGE, LITERACY  
AND NUMERACY PROGRAM**

**NATIONAL FARMERS'  
FEDERATION**

**ABN 77 097 140 166**

**Prepared by:  
Andrew Wilshire  
Manager – Education & Training**

# Contents

---

<b>EXECUTIVE SUMMARY .....</b>	<b>3</b>
<b>1. INTRODUCTION .....</b>	<b>4</b>
<b>2. LLN AND FARMING .....</b>	<b>5</b>
<b>3. THE IMPORTANCE OF SKILLS TO FARMING .....</b>	<b>9</b>
<b>4. CONCLUSION.....</b>	<b>11</b>

# Executive Summary

---

- **The agricultural sector will need an additional 100,000 workers as it emerges from drought and production approaches pre 2002 levels. The majority of which will be skilled positions.**
- **The agricultural sector is in the midst of pervasive changes in terms of the approach and method in which farming is conducted. Technological and scientific developments have been increasingly pertinent to an industry facing harsher climatic conditions and striving to remain internationally competitive on global markets.**
- **Traditionally the skills necessary to working in the industry have been hands-on, developed through on-the-job training, however, the nature of farming has and continues to significantly change. Mechanisation, automation, and technological advancements have made farming a much more highly skilled industry than ever before.**
- **As the knowledge and abilities required to work on the farm continue to move into higher-skill levels, the future workforce will need to one that has proficient levels of Language, Literacy and Numeracy (LLN).**
- **The most notable success for interventionist LLN Programs is during school years, delivering social inclusion and the greatest human capital return.**

# 1. INTRODUCTION

---

The National Farmers' Federation ("the NFF") is the peak farming lobby group representing producers of all major commodities in relation to issues affecting more than one State or commodity. The NFF's membership comprises State farm and commodity organisations with individual farmer members.

In September 2005, the NFF released its Labour Shortage Action Plan in response to increasingly severe labour shortages in the agricultural sector. The Plan aimed to bring about a better understanding of employment in the industry and consequently, the nature and extent of labour shortages. Based on this, it outlined key measures in a multi-faceted labour sourcing strategy. Importantly, it also identified areas in which the research and development of ideas were needed to more effectively formulate ways in which to resolve regional and rural labour shortages.

The NFF Policy Council, from the Plan, determined to once again place a priority on the education, training and skills requirements for the farming community.

In doing so, a NFF Skills Taskforce was formed who reviewed and set out a range of education, training and skills policies.

Included in this was recognition of the changing nature of farm work and the present misalignment with workforce skill complexity expectations.

Whilst not in a position to comment on the service agreement to providers of LLNP services, the NFF does have submissions to make concerning the skill, language, literacy and numeracy levels of the population.

## 2. LLN AND FARMING

---

Studies show that rural and regional school students have lower literacy and numeracy outcomes than city students. There are also smaller numbers who go on to commence University.

This is contrasted with higher uptake of Vocational and Further Education in rural and regional area than in the cities.

The National Centre of Science, Information and Communication Technology, and Mathematics Education for Rural and Regional Australia (<http://www.une.edu.au/simerr/>) research has demonstrated significantly lower results for rural Australia than metropolitan, even after socio-demographic corrections.

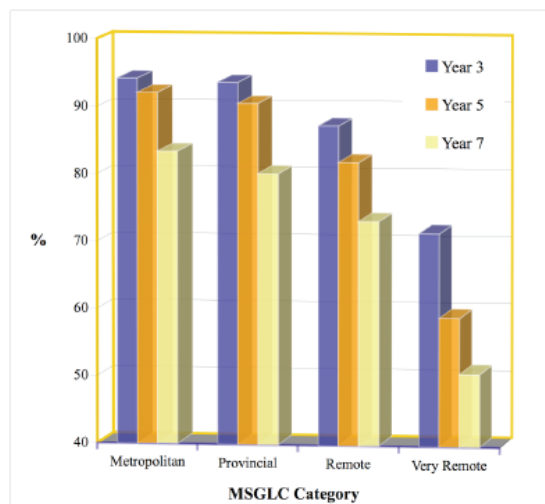


Figure 2.2 Percentages of Year 3, 5 and 7 students in different MSGLC categories achieving the National Numeracy Benchmark in 2004 (adapted from MCEETYA, 2006)

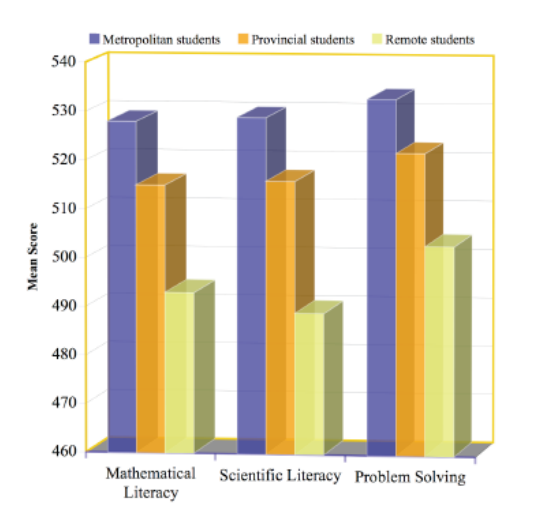


Figure 2.3 Mean scores of Australian students from different locations in the PISA 2003 tests of mathematical literacy, scientific literacy and problem solving (adapted from Thomson, Cresswell & De Bortoli, 2004)

The NFF recognises that the image of farming is viewed extremely poorly by the teaching profession and career advisers in particular.

As such, those students who have usually poor academic achievement are guided to consider a career in farming.

This has substantial impacts on farming business operations and practices as these students progress in their careers to become future farm leaders who lack the skills and ability required to professionally manage a farm business. This is, however, changing generationally as farms move to higher complexity business operations.

Farmers, who have in the past been able to provide hands-on training and entry-level jobs to those with poor language, literacy and numeracy levels, are now operating commercial business enterprises utilising high technology and equipment that requires significantly higher skill levels than in the past.

Certainly, low-skill level jobs still exist, most notably in horticulture which, due to its nature, has not moved to mechanisation and still has a manual labour component.

The NFF Labour Shortage Action Plan

(<http://www.nff.org.au/policy/workplace.html>) identifies a shortfall of 100,000 farm workers as the drought breaks and production returns to normal levels.

Of this, approximately 22,000 will be entry-level positions with the vast bulk requiring higher level skills.

Labour shortages within agricultural employment traverse every subsector of Australian farming. The seven top occupations in agriculture are livestock farmers, farm hands, crop farmers, mixed crop and livestock farmers, mobile plant operators, bookkeepers and shearers.

Each of these occupations is highly skilled – for example, mobile plant operators and shearers are trade qualified or experienced to such a degree, the various farmer occupations are managerial and demand a wide skills and experience base, and bookkeeping is paraprofessional occupation.

It is these higher level skill occupations that are most in need of attracting a worker with proficiency in language, literacy and numeracy.

Equally so, the entry-level positions are also requiring a proficient level of language, literacy and numeracy.

The greater complexity of legislation governing farms has implications for their workforces. Entry-level workers need basic language literacy and numeracy levels in order to understand Occupational Health and Safety Laws, how to handle chemicals, and to safely operate equipment.

There are many instances of farmers taking on school-leaver apprentices whose language, literacy and numeracy skills are so low that they are unable to read or complete the paperwork to commence the apprenticeship.

Generally, farming does not engage with Centrelink and Employment Service Providers. The reasons for this are many and varied and included in the NFF Labour Shortage Action Plan.

As such, tying LLN programs (especially in rural areas) to this obligation as part of the Productivity Places Program would be detrimental to the stated outcomes in many parts of regional Australia.

The NFF submits:

- The low level of LLN skills to function effectively in the workforce is principally a failure of the education system.
- It is preferable to address this problem in the school system as this provides the greatest outcome and offers the highest form of social inclusion.
- LLN Programs should provide intervention assistance to school students for special LLN coaching/training. Gains from intervention have been shown to bring the student back to the class level and achieve significant academic improvement across all disciplines (<http://www.une.edu.au/simerr/projects/Docs/Project%2022.pdf> ). Efforts to correct LLN levels at later periods of life lead to significant social exclusion.
- Remote, rural and regional students (in that order) have lower language, literacy and numeracy outcomes than metropolitan Australia and should be a foci of LLN Programs.
- Career advisers should be stressing the importance of language, literacy and numeracy skills to students considering careers and play an active role in identifying LLN deficiency and providing a conduit to support services.
- Client eligibility to the LLNP should be expanded to include those undertaking an Australian apprenticeship / school-based apprenticeship.



### 3. THE IMPORTANCE OF SKILLS TO FARMING

---

The agricultural sector is in the midst of pervasive changes in terms of the approach and method in which farming is conducted. Technological and scientific developments have been increasingly pertinent to an industry facing harsher climatic conditions and striving to remain internationally competitive on global markets.

Traditionally, the skills necessary to working in the industry have been hands-on, developed through on-the-job training requiring little in the way of LLN. For a significant proportion of occupations on farms, this continues to be how employees are trained.

It should, however, be noted that the nature of farming has and continues to significantly change. Mechanisation, automation, and technological advancements have made farming a much more highly skilled industry than ever before.

As an export-commodity competing industry, Australian farming boasts the highest productivity improvements of any other outside of Information Technology. Farming has needed to reduce its cost inputs every year in order to remain internationally competitive.

This has resulted in GPS guided tractors, soil moisture profiling, computerised drip irrigation systems, laser levelling and minimum-till farming methods replacing previously manual labour.

The days of hand-cutting grains or cane have ended and in their place are multimillion harvesters. No longer do cows get hand-milked and in their place are 24 hour milking sheds using the highest quality and surgically clean assembly milkharvesting equipment.

With the increased skill requirements to work in farming, the importance of appropriate education and training that can meet the demands of the industry and also prospective employees, has been reinforced.

Further, education and training in the agricultural sector must be wider ranging than simply focusing on employees.

By its very nature, training and education must be broadly handled and encompass all those who work on a farm including the owner/operator of a family farm business.

A sustainable farming industry requires an improvement in the skill capacity of all those who work on a farm. This adjustment in farmers' attitudes to learning is seen as a crucial step towards improving the sustainability of farming.

Farming is also unique in that the majority of competency-based learning is actually undertaken by the farm-business-owner rather than their employees. This has usually been brought about by the farmer realising he or she is missing critical skills to effectively compete in the market place.

There is a crucial need to ensure that all those involved in agriculture have high level skills and capacity to undertake work in the sector to enable the agricultural industry to remain competitive and productive in an international market place both now and into the future.

There is also a strong need for farming to move towards higher level skills in order to compete with the job attractiveness of other industry groups.

Farmers need to distinguish themselves as 'employers of choice', highlighting the many wonderful and engaging job and career opportunities that exist both on and off farm.

## 4. CONCLUSION

---

The employment, education, training and skills needs of regional and rural Australia will need to constantly adapt and engender flexibility in order to meet the challenges facing farming into the future.

As modern farming involves high-tech equipment, science, and skill proficiency, the need for peak farming organisations to engage on education, training and skills has never been more paramount.

The basis for these higher level skills is founded with an aptitude in language, literacy and numeracy.

LLN Programs are best directed during the school years with specific intervention required to ameliorate long-term social exclusion.

The future for Australian farming is bright.

Realising this potential is contingent on an appropriately skilled and educated workforce.