Reading Between the Lines

The International Adult Literacy Survey – New Zealand’s performance
The International Adult Literacy Survey (IALS) was undertaken in New Zealand in 1996. Australia, Great Britain, Northern Ireland, and Belgium took part in this survey alongside New Zealand, which added to data already gathered in 1994 from Canada, The Netherlands, Switzerland, Germany, Poland, the United States, Ireland and Sweden. In 1998, nine other countries participated in the IALS.
The survey aimed to determine participating countries' literacy levels by assessing respondents on three types of literacy: prose, document and quantitative. Proficiency was then graded along five levels. Levels 1 and 2 indicated a low literacy level and Levels 3 and above indicated 'functional literacy' – that is, the literacy skills necessary to function within today's economic market. Levels 4 and 5 were considered the highest levels of literacy. For the purposes of the report, they were combined into a 'Level 3 or more' category.

New Zealand’s performance in the survey was, on average, in line with results for a number of countries, including; the United Kingdom, the United States, Australia and Canada¹. The survey found that 45% of adult New Zealanders were in Levels 1 and 2 for prose literacy, 50% for document literacy and 49% for quantitative literacy.

The Ministry of Education recently commissioned additional research using the New Zealand IALS data to predict adult literacy levels from certain demographics, to enable adult literacy programmes to be targeted at those most in need².

A statistical model analysed the number and location of people at Levels 1 and 2 for 1996 to arrive at predictions for 2001 and 2004. The key points are summarised here.

**How many people are taking part in adult training?**

The table above shows that in 1996 and 2001, those in the lower levels of literacy were less likely to take part in adult training than those with literacy levels 3 or above.

<table>
<thead>
<tr>
<th></th>
<th>Participating in courses</th>
<th>Not participating</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ESTIMATED FOR 1996</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Level 1</td>
<td>152,400</td>
<td>308,400</td>
</tr>
<tr>
<td>Level 2</td>
<td>294,800</td>
<td>387,000</td>
</tr>
<tr>
<td>Level 3+</td>
<td>782,200</td>
<td>438,200</td>
</tr>
<tr>
<td><strong>ESTIMATED FOR 2001</strong></td>
<td>157,600</td>
<td>324,200</td>
</tr>
<tr>
<td></td>
<td>303,600</td>
<td>399,600</td>
</tr>
<tr>
<td></td>
<td>803,200</td>
<td>451,400</td>
</tr>
</tbody>
</table>

**TABLE 1. Estimated numbers of people participating and not participating in some form of adult training by literacy level**


What kind of adult training are people taking part in?

Across all literacy levels, professional or career-upgrading courses were the type of adult training most often used. For those at literacy Levels 1 and 2, the major providers of adult training were commercial providers, followed closely by universities/polytechnics. Those with Level 3 and above literacy levels were more likely to turn to universities/polytechnics for adult training, followed by a commercial provider.

Literacy and employment

The data predicted that in 2001 1.3 million people of working age (16–65) would be participating in an adult training course of some type and that the majority would be in full-time work with a university-level education. A further 1.2 million people would not have been participating in adult training. Most of this group of people would be in full-time work, but were likely to have only lower secondary level education or below.

Those at Level 3 and above in full-time work were likely to be involved in some form of adult training, especially those in the professional and business occupations. These professional jobs by their nature encourage literacy practices, which in turn are likely to result in higher literacy levels. Thus, it is important for employers to consider how they target their adult training courses, to ensure that those of lower literacy levels do not miss out on training opportunities which may lead to increased literacy and increased chance of career progression.

As can be seen in the graph above, respondents with Level 1 literacy ability were more likely to be looking for work and not working, than to be in work. Those of Levels 3 and above showed the opposite trend.

It was also found that people in blue-collar occupations were more likely to have Level 1 literacy than any other level. While a proportion of people in Level 2 undertake blue-collar jobs, they are more likely to be found within 'professional', 'clerical', 'service' and 'skilled' occupations than those in Level 1.
Literacy and career choices

Those with Level 1 literacy proficiency were most likely to be working within the manufacturing and agriculture, hunting, and fishing industries and least likely to be in the business sector.

The opposite pattern was true for those with literacy Level 3 or above. Given that the manufacturing and agriculture, hunting and fishing industries have high proportions of people in Level 1, literacy training providers should target employees in these industries. Adult training programmes working within these industries should ensure that literacy is integrated into courses, particularly for blue-collar workers in these industries.
Education levels

The graph above outlines that those of literacy level 2 or below were most likely to have three years or less of secondary school education. Those with literacy Level 3 or above showed an opposite pattern, with the majority having tertiary education. University educated respondents were most likely to be engaged in some form of adult training. This highlights again that people with higher literacy levels are more likely than those of lower levels to be involved in adult training or education of some kind.

The model showed that the strongest predictor of literacy level was educational achievement for all three literacy categories; prose, document, and quantitative. However, the research also found that people with lower secondary education or below can have literacy levels of 3 or above. This indicates that other factors must also contribute to the prediction of Levels 1 and 2 literacy scores.

A great deal of research indicates that literacy proficiency in later life begins at the pre-school and early childhood level, so this is an area that needs to be the target of future policy. This should also inform best practice in the workplace, school, and home.
Ethnicity

As Figure 4 shows, people who identify as Asian, Pacific, or Maori appear to be more at risk of low English literacy than those who identify as European/Pakeha. Pacific peoples within literacy Level 2 show an extremely high adult training participation rate above all other ethnic groups. Pacific peoples with literacy Level 3 and above also participate in adult training at a significantly higher level than any other ethnic group.

It would be interesting to investigate what type of adult training Pacific peoples are drawn to, given that this group has lower literacy levels overall than both European/Pakeha and Maori. These courses could provide a gateway to providing some literacy training where needed.

Disability

In terms of health factors, learning and ‘other’ disabilities (as defined by the IALS), were the strongest indicators of low literacy levels of all the health factors measured. Vision and speech impairments were also related to later literacy level, while hearing impairments seemed to have no direct effect on literacy levels. However, hearing impairments affected educational attainment, perhaps having an indirect outcome on literacy level.
Regional variations in literacy

The Ministry report also sought to predict whether the proportions of the population by region at Levels 1 and 2 literacy would change from 2001 to 2004. As shown in Figures 5 and 6, it was predicted that in 2004 the highest need for literacy provision would be in the top of the East Cape and through parts of the Bay of Plenty, parts of Taranaki, Auckland, and the Far North. While the change from 2001 to 2004 may appear striking, it is important to note that only a 2–5% difference in estimated proportions is necessary to cause a colour change in any region.

**FIGURE 5.** Regional distribution of predicted level 1 and 2 literacy proficiency for the years 2001 and 2004.
FIGURE 6. Regional distribution of predicted level 1 literacy proficiency only for the years 2001 and 2004.
Most people participating in adult training courses do so for professional or career-upgrading reasons, therefore, to varying degrees, participants from all levels chose universities or polytechnics for further training. However for Levels 1 and 2, the major providers of adult training were commercial providers, followed by university courses. Commercial and university training providers could therefore target this section of the population by ensuring literacy is integrated into their courses.

Pacific peoples show the highest participation rate in training programmes, yet are one of the ethnic groups most at risk of low literacy levels. Adult training courses need to ensure that literacy training is offered as a part of their course, to target people in need who are already participating in training.

Those of Level 1 literacy, when working, are largely in blue-collar occupations and in the manufacturing and agricultural, and hunting and fishing industries. To increase employee literacy, employers could look at ways of targeting these specific groups, perhaps in collaboration with a community adult literacy provider.

Those with three years or less secondary education and those who are unemployed or looking for work are most likely to fall into the lower levels of literacy proficiency.

Regional analysis indicates that higher proportions of those in Levels 1 and 2 are found in parts of the East Cape, Bay of Plenty, Taranaki, the Far North, and Auckland. These regions are most likely to benefit from services offered by literacy training programmes.

While this analysis focused on those of working age, it is important to note that literacy experiences and interventions at an early age impact on later literacy level. Health factors are also associated with later literacy proficiency. So family support workers and schools need to remain aware of the importance of literacy practices in early life.

FURTHER INFORMATION
If you would like to read the full report, this can be found on the Ministry of Education website: www.minedu.govt.nz