

# Overview

- How is literacy skill distributed across the New Zealand adult population according to educational participation?
- How is literacy skill distributed across the New Zealand adult population according to work-related factors such as labour force status, occupation or industry of employment?
- Have there been any changes in these distributions over the past 10 years?
- How do the up-skilling (ie, further education and training) activities of New Zealand adults vary according to both their measured and their self-assessed numeracy skill?

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The Adult Literacy and Life Skills (ALL) survey was designed to answer these and other questions.

Why do we need these answers? The labour force demands of a modern economy are becoming increasingly complex. If New Zealand is to improve (or even maintain) its position in the world economy it must develop a workforce with high levels of generic and technical skills. The ALL survey provides an insight into our current skill levels, and this insight is essential for the development of initiatives to enhance (and maintain) these levels. In the longer term, having datasets from the 1996 International Adult Literacy Survey (IALS) and ALL gives us a baseline against which to measure gain (and loss) in national levels of skill development.

This report is the second in a series of four that investigate the initial results of the ALL survey. It presents an overview of New Zealanders' skills in relation to educational and labour force characteristics, and any changes since 1996.

## Key findings

### Education

- Greater literacy, numeracy and problem-solving skills were strongly associated with higher levels of educational participation.<sup>1</sup>
- A large shift toward increased levels of educational participation of the 16-65 year-old population occurred over the decade between the 1996 IALS and the 2006 ALL studies.
- Literacy skill decreased for *each* level of educational participation, with the smallest decrease for those with tertiary education. However, due to very large shifts in the distribution of educational participation (toward participation in higher levels of education) the net change from 1996 to 2006 for all levels of educational participation *combined* was an increase in literacy skill.
- People with higher numeracy skill were, on average, more likely to participate in non-formal up-skilling than those with low numeracy skill (regardless of their perception of their numeracy skill).
- People with low numeracy skill who self-assessed as having low numeracy skill were, on average, less likely to participate in formal up-skilling than the rest of the adult population.

<sup>1</sup> Participants in the ALL and IALS surveys were categorised as "lower secondary or less", "higher secondary", or "tertiary" according to their self-reported highest level of educational participation.

### Work and income

- In almost all labour force categories literacy skill increased between 1996 and 2006. In particular, the literacy skill of the poorer performers in IALS (the unemployed, retirees and homemakers) increased substantially.
- In literacy, numeracy and problem-solving, the employed and students had, on average, the greatest skill, the retired and homemakers less, and the unemployed the least.
- Those whose incomes were in the highest 40% tended to have higher numeracy and document literacy skill than the rest of the adult population.

### Occupation

- Professionals<sup>2</sup> had the highest numeracy skill overall, and those employed in the elementary occupations the lowest.
- Service and sales workers made up the greatest proportions of both those with low document literacy skill and those with low numeracy skill.

### Industry

- Agriculture and fisheries industry<sup>3</sup> employees had the lowest numeracy skill overall, and employees in the finance and real estate and health and education industries had the highest.
- The health and education industry had the largest percentages of both employees with low document literacy skill and employees with low numeracy skill. The health and education industry also had the largest percentages of employees with high document literacy skill and employees with high numeracy skill.

<sup>2</sup> Participants in the ALL and IALS surveys were categorised into nine occupational groupings. An example of one grouping is managers, which includes such occupations as senior administrators, legislators and corporate managers.

<sup>3</sup> Participants in the ALL and IALS surveys were categorised into nine industry groupings. An example of one grouping is agriculture and fisheries, which includes such industries as agriculture, hunting, forestry and fisheries.