6. Occupation

- How did the distribution of employees’ occupations change between 1996 and 2006?
- How did the distributions of document literacy skills according to occupation change between 1996 and 2006?
- How was the distribution of occupation for those with low skill different from those with higher skill?
- How did the prose literacy, document literacy, numeracy and problem-solving skills of employees vary for different sizes of employers?

This section examines these questions.

**Occupation**

The IALS and ALL surveys collected information on respondents’ self-reported occupation. This information was recorded using the ISCO (International Standard Classification of Occupation) classification. Here, for statistical robustness, this information is summarised (according to ISCO major group title) as follows (examples of occupations in each group follow the group name):

- **manager** – legislators, senior administrators and managers
- **professional** – professionals
- **technician** – technicians and associate professionals
- **clerical** – clerical workers, secretaries, receptionists
- **service and sales** – service workers and shop and market sales workers
- **agriculture and fisheries** – orchardists, fishery workers, farmers
- **trades** – craft and related trades workers
- **machine** – plant and machine operators and assemblers
- **elementary** – cleaners, labourers.

The most noticeable changes in the distribution of occupation across the employed adult population of New Zealand were increases in the proportions of professionals, and decreases in the proportions of agriculture and fisheries employees and machine employees.

Figure 6.1 shows the distributions of occupation across the employed population measured by the IALS and ALL surveys.
The Adult Literacy and Life Skills (ALL) Survey: Education, Work and Literacy

Figure 6.1: Distribution of occupation, IALS and ALL

Note: Percentages are rounded to the nearest whole number.

Figure 6.1 shows noticeable increases in the proportions of professionals and decreases in the proportions of agriculture and fisheries employees and machine employees.

Document literacy and occupation

Document literacy skill was measured by both the IALS and ALL surveys, and its relationship with occupation is explored in Figures 6.2 and 6.3.

Of those with low ALL document literacy skill, the greatest proportion were employed as service and sales workers. Of those with higher ALL document literacy skill, the greatest proportion were employed as professionals.
Figure 6.2 shows, for each occupation grouping, the percentages of the adult population of New Zealand at each document literacy level. Figure 6.3 shows the distribution of occupations among those with low document literacy skill and those with higher document literacy skill.

Information from Figures 6.1, 6.2 and 6.3 can be combined to draw a number of conclusions. For example, the proportion of trades workers with low ALL document literacy skills was middle-ranking when compared with other occupations (Figure 6.2). However, trades workers accounted for a relatively small proportion of all occupations (Figure 6.1) and they also accounted for a small proportion of occupations for those with low document literacy skills (Figure 6.3).

Figure 6.2: Document literacy and occupation, IALS and ALL

Note:
1. Levels 1 and 2 and levels 3, 4 and 5 are combined to give more robust statistical information.
2. Percentages are rounded to the nearest whole number.

Figure 6.2 shows the changes that have occurred in the document literacy levels by occupation categories between 1996 and 2006.
The Adult Literacy and Life Skills (ALL) Survey: Education, Work and Literacy

**Figure 6.3: Occupation distributions, by document literacy, ALL only**

Note:
1. Levels 1 and 2 and levels 3, 4 and 5 are combined to give more robust statistical information.
2. Percentages are rounded to the nearest whole number.

Figure 6.3 shows that professionals made up the largest proportion of those with higher document literacy skill, and service and sales workers made up the largest proportion of those with low document literacy skill.

**Numeracy and occupation**

Numeracy skill was measured by the ALL survey only, and its relationship with occupation is explored in Figures 6.4 and 6.5.

Professionals had the highest numeracy skill, and the elementary occupations the lowest. Professionals made up the largest proportion of those with higher numeracy skill, and service and sales workers made up the largest proportion of those with low numeracy skill.
Figure 6.4 shows, for each occupational grouping, the percentages of the adult population of New Zealand at each numeracy level. Figure 6.5 shows the distribution of occupations among those with low numeracy skill and among those with higher numeracy skill.

Information from Figures 6.1, 6.4 and 6.5 can be combined to draw a number of conclusions. For example, the proportion of the elementary and machine occupations with low numeracy skill was large when compared with other occupations (Figure 6.4). However, elementary and machine occupations accounted for a relatively small proportion of all occupations (Figure 6.1), and a middle-ranking proportion of occupations for those with low numeracy skill (Figure 6.5).

**Figure 6.4: Numeracy and occupation, ALL only**

![Bar chart showing numeracy and occupation](chart.png)

**Note:**
1. Levels 1 and 2 and levels 3, 4 and 5 are combined to give more robust statistical information.
2. Percentages are rounded to the nearest whole number.

Figure 6.4 shows that “professionals” had the highest numeracy skill and the “elementary” occupations the lowest (only slightly lower than those of “machine” workers).
Figure 6.5: Occupation distributions, by numeracy, ALL only

Figure 6.5 shows that, as for document literacy, professionals made up the largest proportion of those with higher numeracy skill, and service and sales workers made up the largest proportion of those with low numeracy skill.

**Size of employer**

Size of employer, as measured by the ALL survey, recorded the respondent’s estimate of the number of people employed by his or her employer at all locations. The association of size of employer with each of prose literacy, document literacy, numeracy and problem-solving skills was analysed. For each of the domains the results were similar, showing that the distribution of skill did not vary with the size of the employer.

The distribution of prose literacy, document literacy, numeracy and problem-solving skills of employees did not vary with the size of the employer.