Ethnicity, gender, socioeconomic status and educational achievement: An exploration

A companion report to Who achieves what in secondary schooling?

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Executive Summary and Conclusion

The average PISA scores on the three dimensions of reading, mathematics and science literacy of New Zealand fifteen year-olds are high among the OECD countries. There are differences by ethnicity and class (and to a lesser extent gender), which are explored in this report.

Ethnicity

Students were asked their ethnicity. It is a self-categorisation and is not an objective measure. It may even have a different meaning for boys and girls; it is possible that an individual's ethnic choice is influenced by educational achievement. Even so the following conclusions may be reached – with caution.

The mean achievement scores for those who classify themselves as *sole Pakeha* are well above the OECD average, a situation which is often described as a 'world class education'.

The same is true for those who classify themselves as *sole Asian*, although their scores are a little lower than the Pakeha ones. They too are in receipt of a 'world class education'.

The heterogeneous *Other* group of those who classify themselves as sole 'Other' or of multiple ethnicities (other than Maori and Pakeha) score about the same as the OECD average.

The group of those who describe themselves as either *sole Maori* or *Maori and Pakeha* score lower than the OECD average. When their scores are adjusted for socioeconomic status they are very near the OECD average. They may be said to be in receipt of an 'OECD average education'.

(Those who describe themselves as *sole Maori* are somewhat below the OECD, even after adjustment for SES, but they are offset by those who describe themselves as *Maori and Pakeha* who achieve more than the OECD average. It is possible that individual students may choose their ethnic classification in part – directly or indirectly – on the basis of their educational achievement. This is why the two groups have been combined.)

Those who describe themselves as *Pasifika* score markedly lower than the OECD average, even after adjustment for socioeconomic status.

Gender

There are large differences in scores in reading achievement by gender, with girls having a markedly higher achievement than boys. This is not peculiar to New Zealand but reflects OECD outcomes generally. As in the rest of the OECD, boys score a little higher in mathematics while the science literacy scores are about the same. (On the whole, the scores by the individual ethnic groups reflect these generalisations.)

Socioeconomic Status

Socioeconomic status seems to affect educational achievement, even after controlling for ethnicity and gender – students with higher SES tend to achieve better than those with low SES. Those in the top SES decile typically average over two years more in attainment than those in the bottom SES decile.

Conversely some of the difference among ethnic performance can be explained by the OECD SES variable. There are good reasons to believe that an SES variable (or variables) designed specifically for New Zealand would explain an even greater proportion.

Effectiveness of the New Zealand Education System

The OECD also finds not only that the New Zealand students perform well on average, but that their annual gain is higher than the OECD, suggesting that for those in the mid-teens the New Zealand (formal and informal) educational system is more successful on these achievement measures than that of the typical OECD country. The superior effect of the New Zealand (formal and informal) education system is that New Zealanders are about a year ahead on the achievement measures compared to the OECD average.

Summary

New Zealand students up to the age of 15 experience a world class education system on these achievement measures. This applies especially to Pakeha and Asian students (on average).

Some minority ethnicities – including Maori and Maori-Pakeha and the heterogeneous Other groups – do not achieve as well; their level is comparable to the OECD average, including Britain and the United States, when socioeconomic differences are allowed for.

Only the Pasifika ethnic group scores markedly worse than the OECD average.