

## EDUCATION

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There is a well-known association between education and wellbeing, which is important throughout the life course. The relationship is complex and it appears that most of it is due to our level of education affecting our employment, income and health [1]. For example, educational attainment strongly predicts health literacy, and the skills, knowledge and confidence needed to access and use health and social care services [2]. Differences in educational attainment between different population groups also provide information about access to education and the equity, or fairness, of the education system.

By participating in early childhood education, young children are prepared socially and academically for their transition to primary school. Engagement in primary and secondary education facilitates the development of the knowledge, understanding and skills needed by children and young people to function successfully in the modern world [3]. People who achieve higher educational qualifications tend to earn more, which allows them to maintain better health, participate more in community life and live in better-quality housing [4-6]. In addition, their children tend to go further in their own education.

Education is a resource for life that, apart from providing qualifications and facilitating future employment, can have broader beneficial impacts on health and wellbeing through for example developing values, emotional intelligence, self-esteem, and social skills.

### Key trends within education

Early Childhood Education (ECE) participation has increased steadily in greater Christchurch over recent years and has consistently remained above the national target of 98 percent (98.6% in 2016). Since the National Certificate of Educational Achievement (NCEA) was introduced, NCEA Level 2 pass rates for Christchurch City students have been consistently rising and are generally higher than the New Zealand average (82.4% and 80.7% respectively, in 2017). Selwyn District students have achieved at a high level over time (90.3% in 2017). Results in the Waimakariri District have generally been similar to the national average. The Highest Qualification indicator shows that the distribution of qualifications across the greater Christchurch population is broadly similar to the national picture. In greater Christchurch, the NEET rate (the proportion of young people not engaged in employment, education, or training) decreased substantially over the years following the Canterbury earthquakes and remained well below the national rate through to mid-2016. However, the current data indicate that this post-earthquake difference has now dissipated.

### Key equity issues within education

Overall, education data show differences across population groups. While differences across geographical areas, ethnicity, and gender are not statistically significant for ECE participation, large and statistically significant differences are evident at the higher education levels when outcomes are considered by ethnicity. European/Pākehā and Asian ethnic groups consistently have higher levels of mid-level to high-level educational attainment than Māori and Pacific ethnic groups.

### What this means for wellbeing

Overall, the four education indicators presented within this domain show a satisfactory picture for greater Christchurch. Compared to New Zealand overall, the educational achievement of greater Christchurch residents is, overall, strong and consistent.

Strong, consistent and equitable educational achievement is an important determinant of community wellbeing [1,7,8]. However, total population data can conceal differences between population groups, including those seen by socioeconomic status and

ethnicity. These differences are important given the known associations between educational achievement and other life-course outcomes.

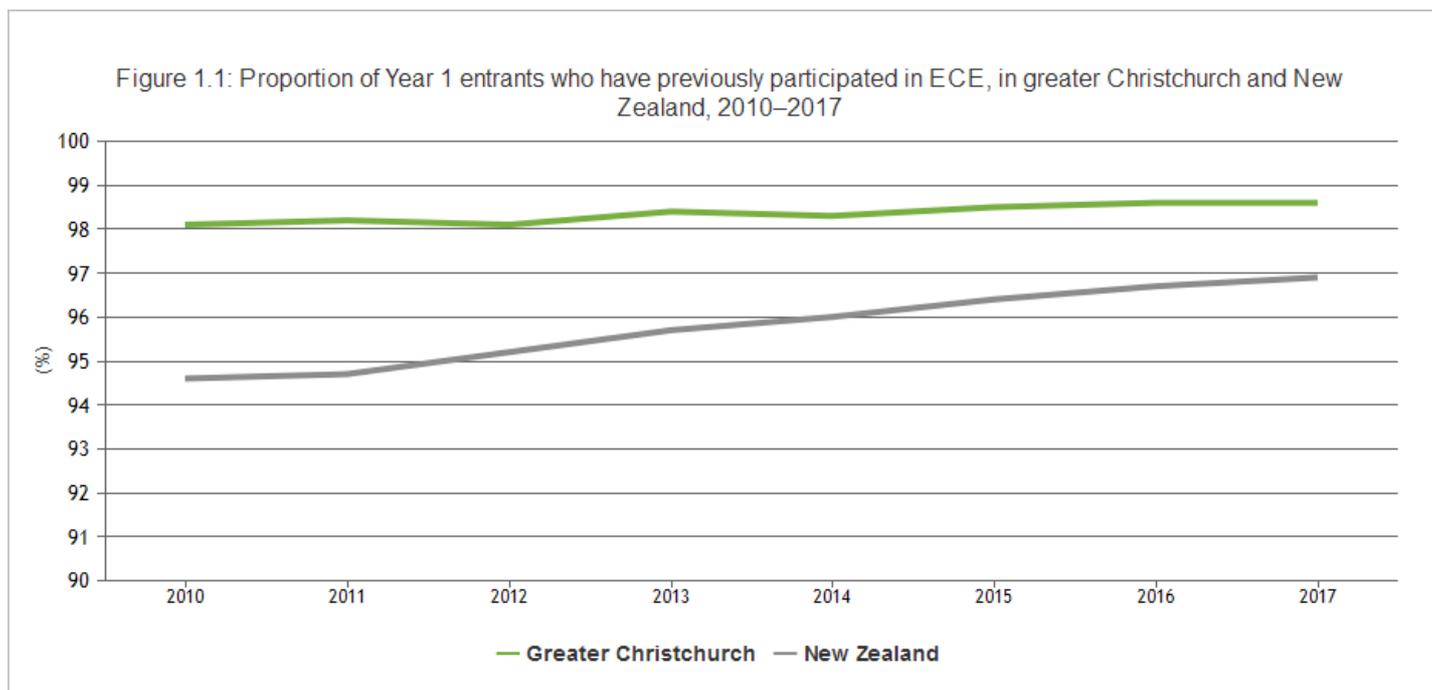
## Indicators in this domain

- **ECE participation**
- **NCEA Level 2 achievement**
- **Highest qualification**
- **Not engaged in employment, education, or training**

## ECE PARTICIPATION

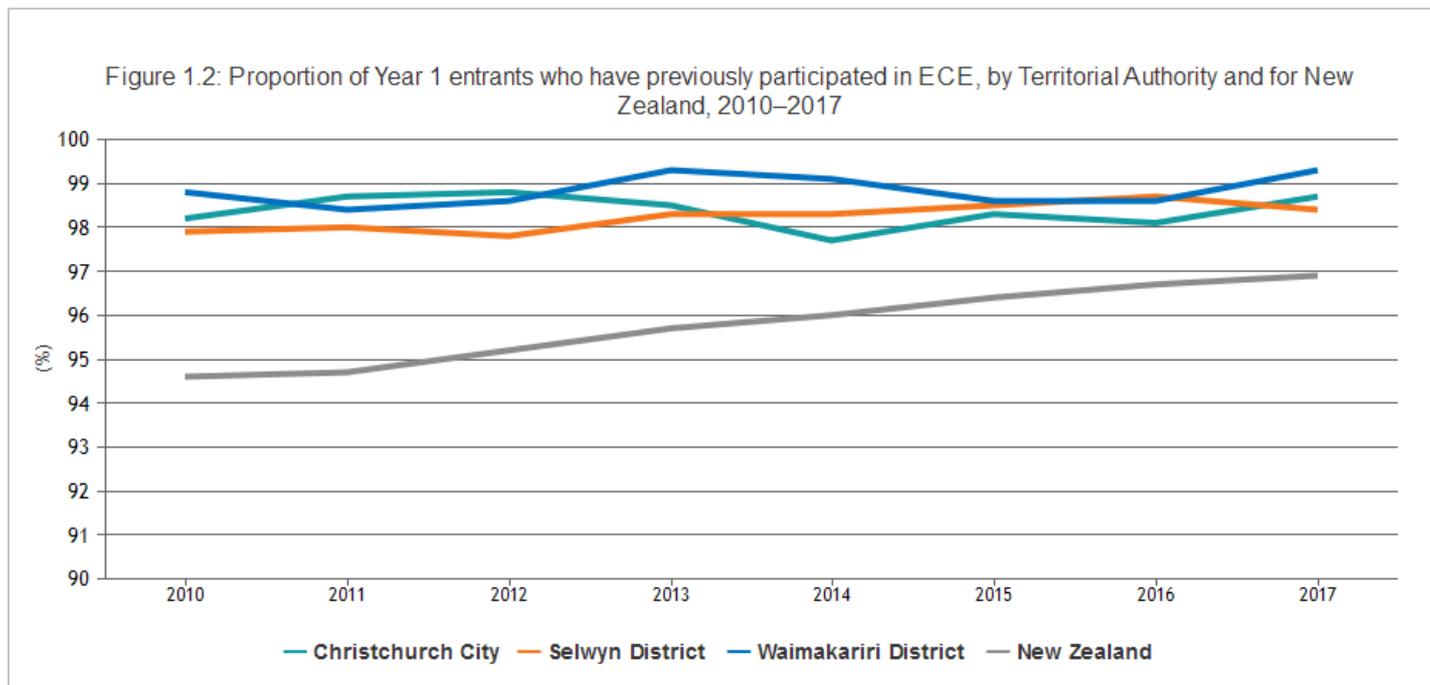
Participation in Early Childhood Education (ECE) has been shown to positively impact literacy, numeracy, and problem-solving skills well into the teenage years. Studies have shown that high-quality ECE also leads to better social outcomes [7,9,10]. ECE participation has been identified as an important factor in supporting vulnerable children and there has been a strong emphasis on increasing participation across New Zealand in recent years (with the target level of 98% having been set in 2012).

This indicator presents the proportion of Year 1 entrants who had previously participated in ECE in the sixth months prior to starting school, using Ministry of Education data. Breakdowns of the data show participation in ECE separately for each Territorial Authority, and for greater Christchurch by ethnicity.



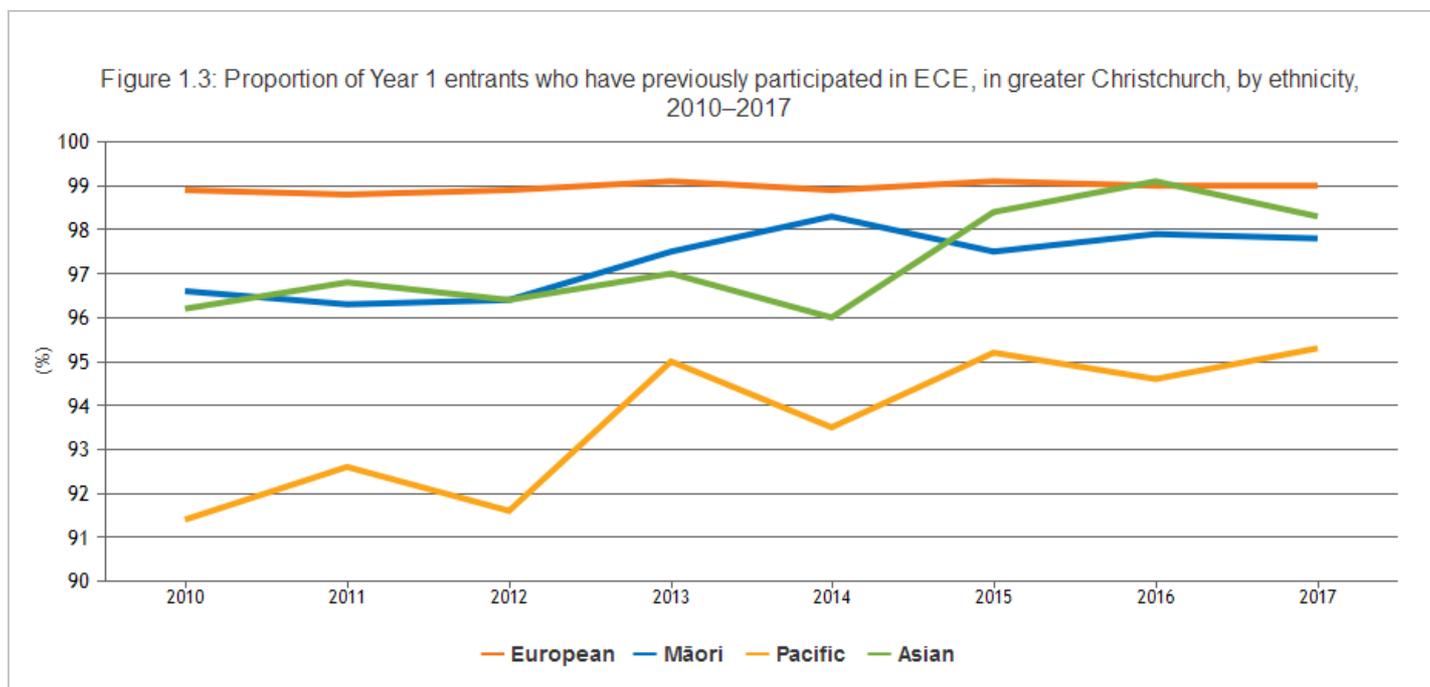
In greater Christchurch, participation in ECE has stayed above the national target for several years, remaining steady at over 98 percent (98.6% in 2016 and 2017). Nationally, participation in ECE has steadily increased over time, with 96.9 percent of new entrants having attended ECE in the year ending December 2017.

## Breakdown by Territorial Authority



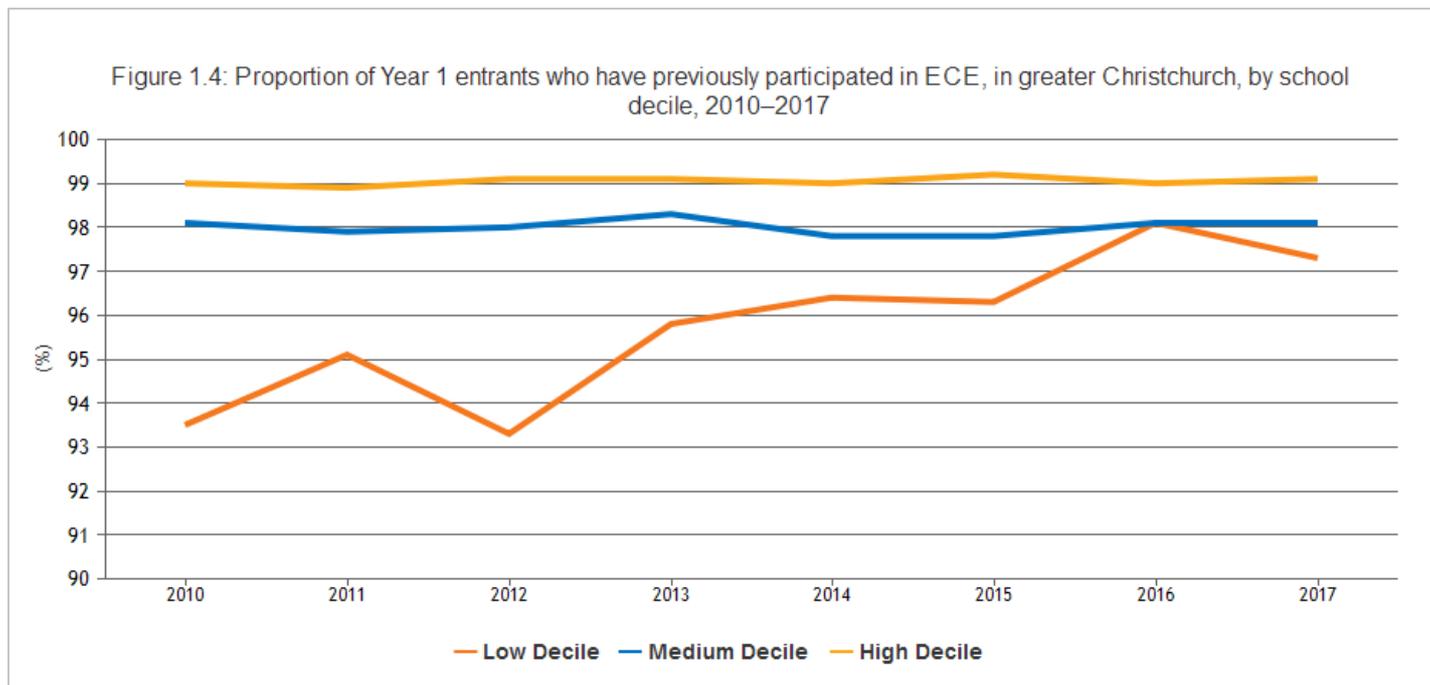
The figure shows participation in ECE for each of the three Territorial Authorities in greater Christchurch. Participation in ECE for each of the three Territorial Authorities appears similar, with rates in Selwyn District and Waimakariri District being within one percentage point of Christchurch City for most years. Selwyn District and Waimakariri District show greater variability in ECE participation rates (due to smaller absolute numbers) but no other differences are evident.

## Breakdown by ethnicity



The figure shows high and stable ECE participation rates for European/Pākehā children in greater Christchurch for the period 2010–2017 (99.1% in 2017). The figure also shows increasing ECE participation for Māori and Asian children, with both groups reaching the national target for this indicator in 2016 and 2017. While ECE participation for Pacific children has been trending upwards in recent years, the rate remains below the national target (by approximately 2.7 percentage points in 2017). ECE participation rates show greater variability for non-European/Pākehā groups due to smaller absolute numbers.

## Breakdown by deprivation



The figure shows high and stable ECE participation rates for children in medium and high decile schools in greater Christchurch for the period 2010–2017 (98.1% and 99.1% respectively, 2017). The figure also shows steadily increasing ECE participation for children in low decile schools over the same time period, with this group reaching the national target for this indicator in 2016.

### Data Sources

**Source:** Ministry of Education.

**Survey/data set:** Ministry of Education ENROL Database. Access publicly available data from the Education Counts website [www.educationcounts.govt.nz](http://www.educationcounts.govt.nz)

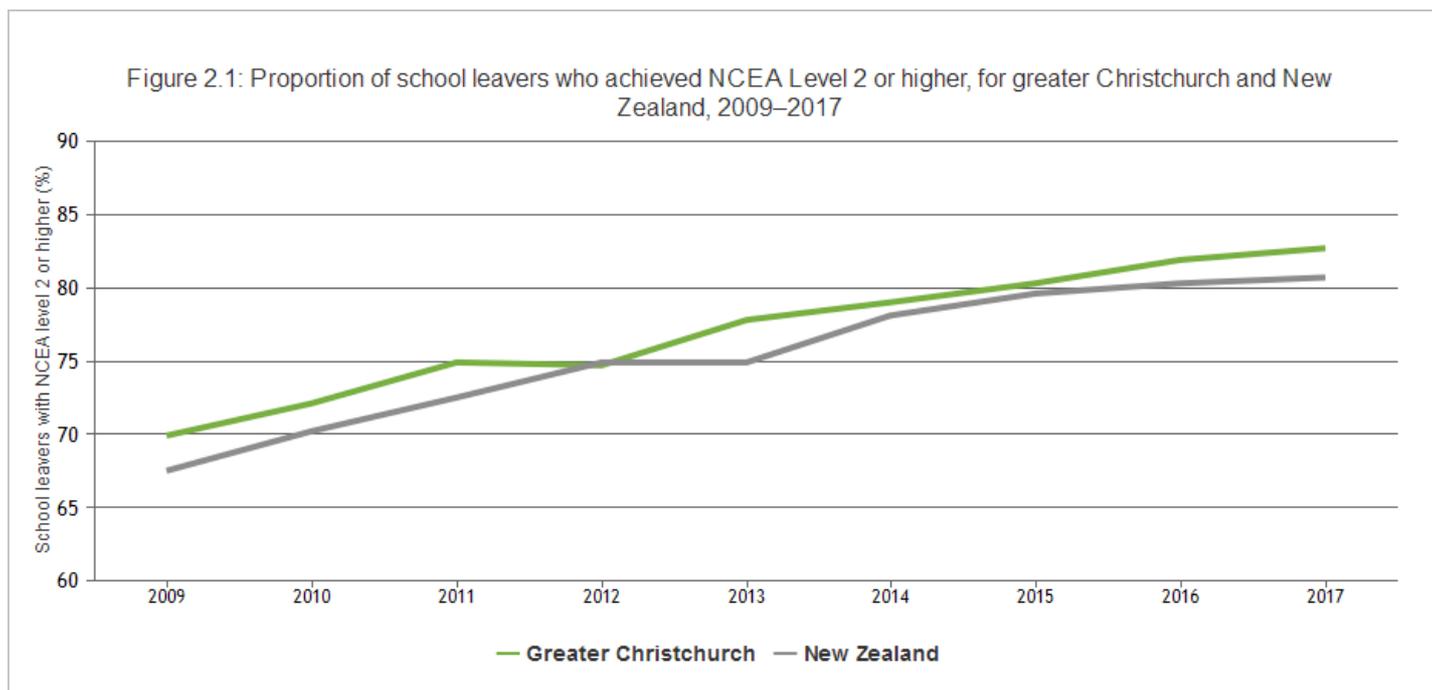
**Source data frequency:** Annually.

Metadata for this indicator is available at <https://www.canterburywellbeing.org.nz/index-data>

## NCEA LEVEL 2 ACHIEVEMENT

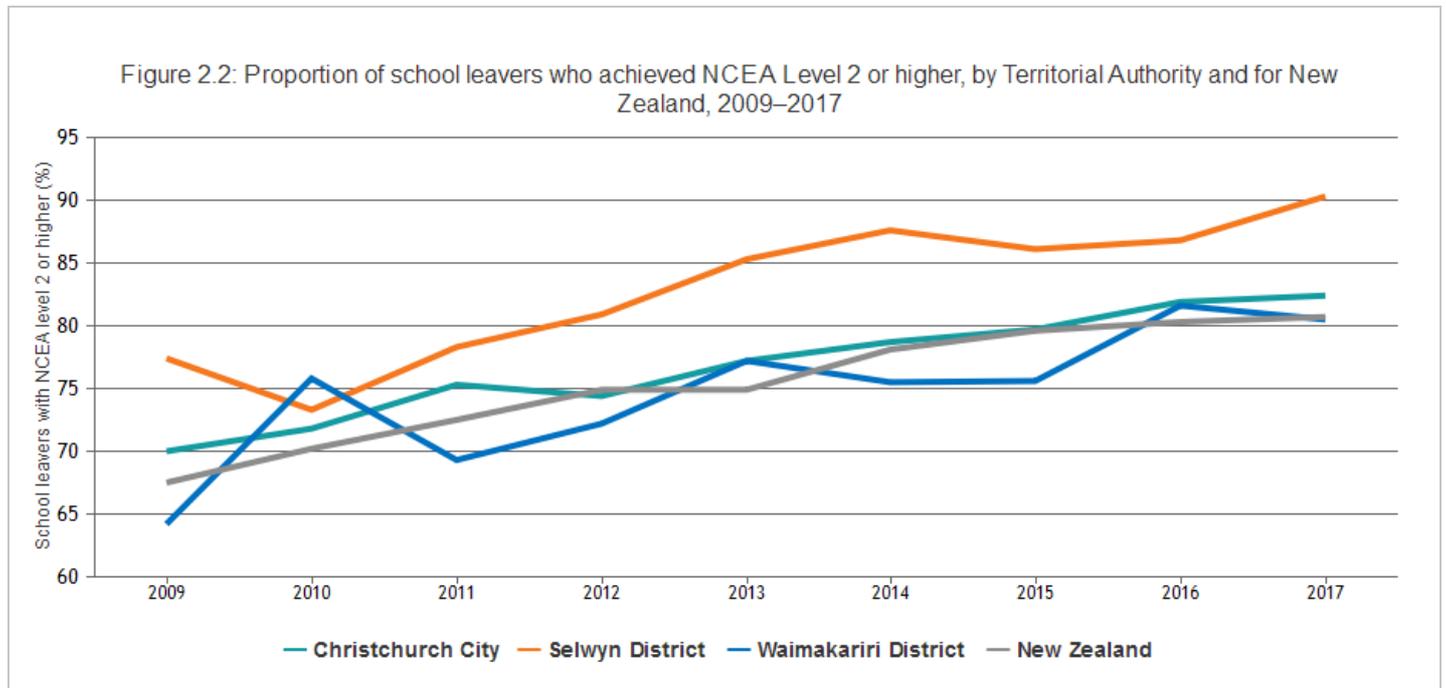
A formal school qualification is a measure of the extent to which young adults have completed a standardised prerequisite for higher education and training and many entry-level jobs. The main qualification available to secondary school students in New Zealand is the National Certificate of Educational Achievement (NCEA). NCEA Level 2 is often a necessary requirement for entry-level employment opportunities. In 2016, New Zealanders with no qualifications had an unemployment rate approximately 50 percent higher than those whose highest qualification was a school qualification [11]. One of the Government's priorities is to increase the proportion of 18 year-olds with NCEA Level 2 (or an equivalent qualification).

This indicator presents NCEA achievement, defined as the proportion of school leavers who achieved NCEA Level 2 or higher.



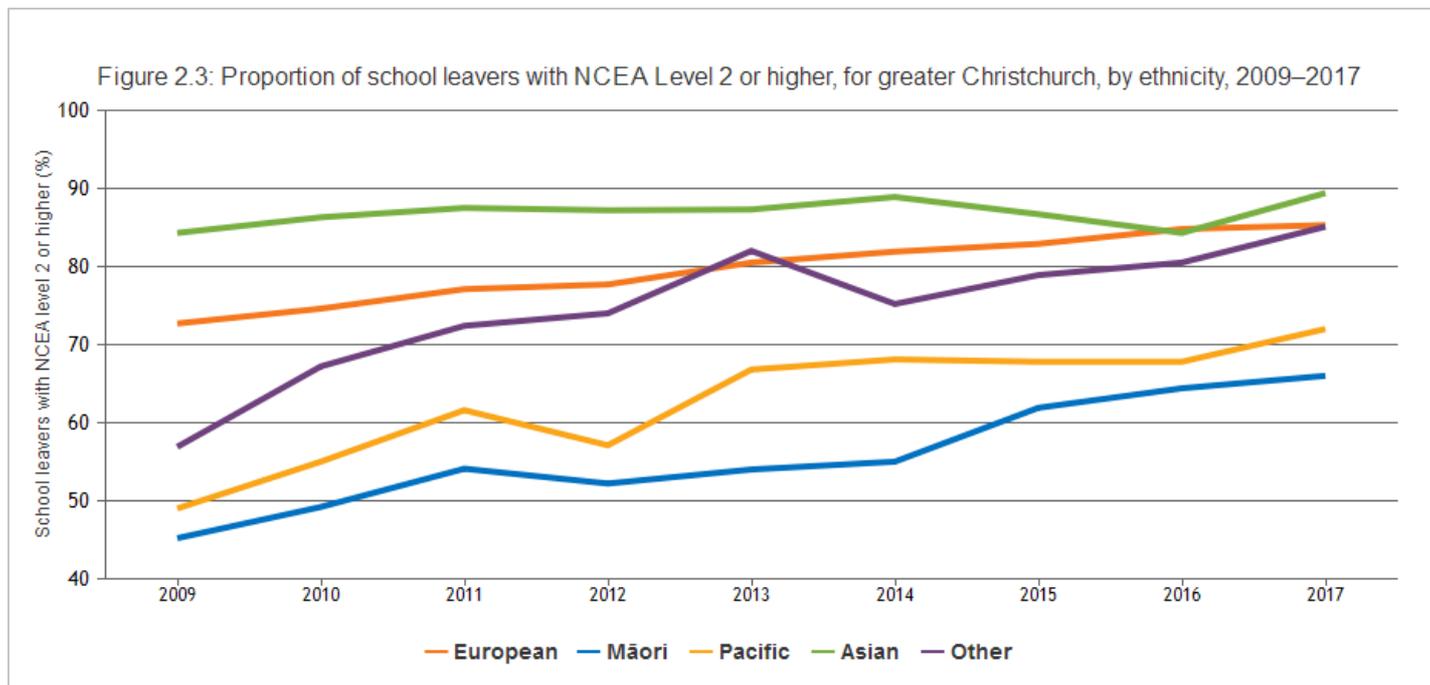
The figure shows that the proportion of school leavers in greater Christchurch achieving NCEA Level 2 or above has increased steadily over the period 2009–2017 (82.7% in 2017), despite substantial challenges caused by the earthquakes. The proportion remains higher than the pre-earthquake level (70% in 2009). National figures have also shown a steady increase over this time period.

## Breakdown by Territorial Authority



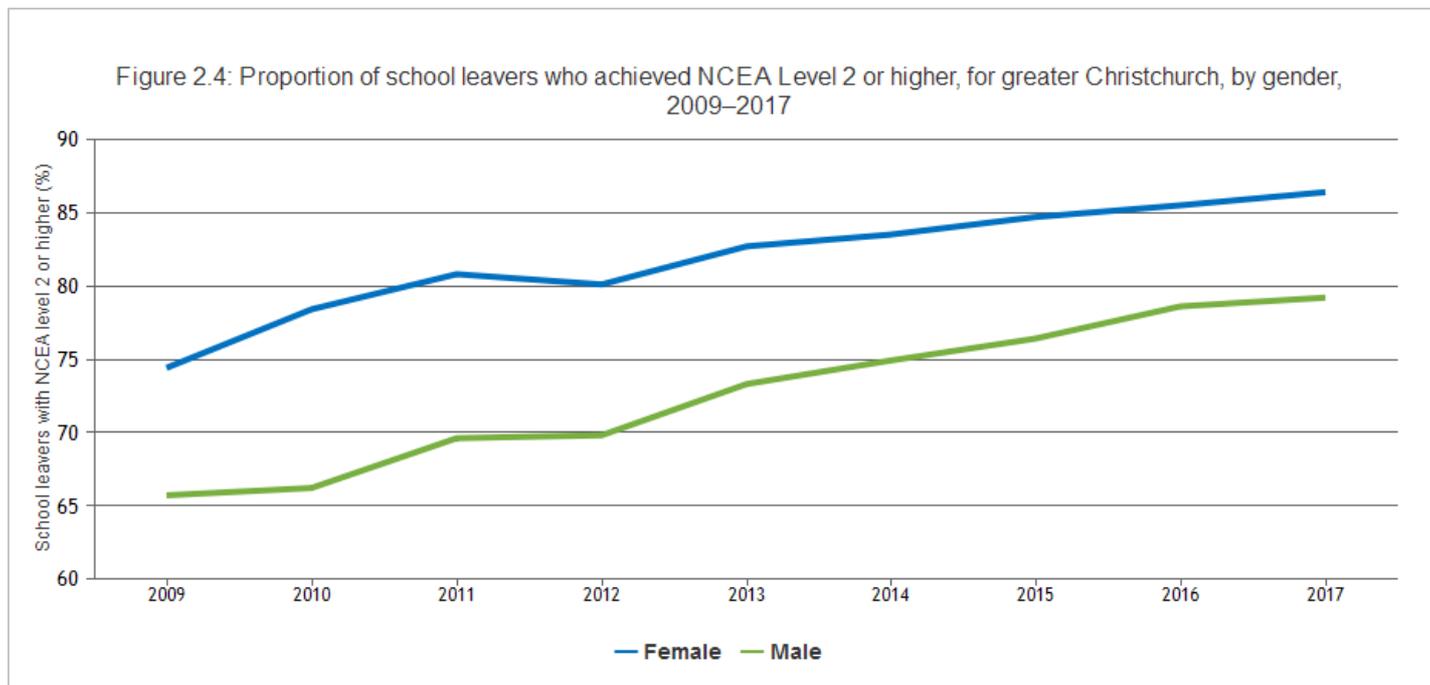
The figure shows that the proportion of Christchurch City students achieving NCEA Level 2 or higher has been consistently rising over the last few years, and is generally higher than the proportion for New Zealand overall (82.4% and 80.7% respectively, in 2017). Selwyn District has had a notably high proportion of students achieving NCEA level 2 or higher, with this proportion increasing to 90.3 percent in 2017. The proportion in the Waimakariri District (80.5% in 2017) has generally been similar to the proportion for New Zealand overall.

## Breakdown by ethnicity



This breakdown highlights the substantial disparity between the NCEA Level 2 achievement of Māori and Pacific students and other ethnicities. Between 2009 and 2017, school leaver NCEA Level 2 achievement for European/Pākehā students in greater Christchurch increased from 72.7 to 85.3 percent. By comparison, Māori and Pacific school leaver NCEA Level 2 achievement has improved from 45.2 and 49 percent, respectively, to 66 and 72 percent of students over the same time period. While there may be some convergence between Māori and Pacific students', and European/Pākehā students' outcomes, European/Pākehā NCEA Level 2 achievement remains approximately 20 percentage points above that of Māori (85.3% vs 66% respectively, 2017). Asian students' NCEA Level 2 achievement has generally been above that of European/Pākehā students. After trending down over the last few years (from 88.9% in 2014, to 84.3% in 2016) Asian students' NCEA Level 2 achievement peaked in 2017, at 89.4 percent, the highest proportion within this time series. This overall pattern is generally consistent with the national picture.

## Breakdown by gender



The proportion of school leavers gaining NCEA Level 2 or above has consistently been higher for female students than for male students. In greater Christchurch, 86.4 percent of female school leavers gained Level 2 NCEA or above in 2017 compared to 79.2 percent of male school leavers. This difference is also evident for all of New Zealand (data not shown).

### Data Sources

**Source:** Ministry of Education.

**Survey/data set:** Ministry of Education ENROL Database. Access publicly available data from the Education Counts website: [www.educationcounts.govt.nz/statistics/indicators/main/education-and-learning-outcomes/1781](http://www.educationcounts.govt.nz/statistics/indicators/main/education-and-learning-outcomes/1781)

**Source data frequency:** Annually.

Metadata for this indicator is available at <https://www.canterburywellbeing.org.nz/index-data>

## HIGHEST QUALIFICATION

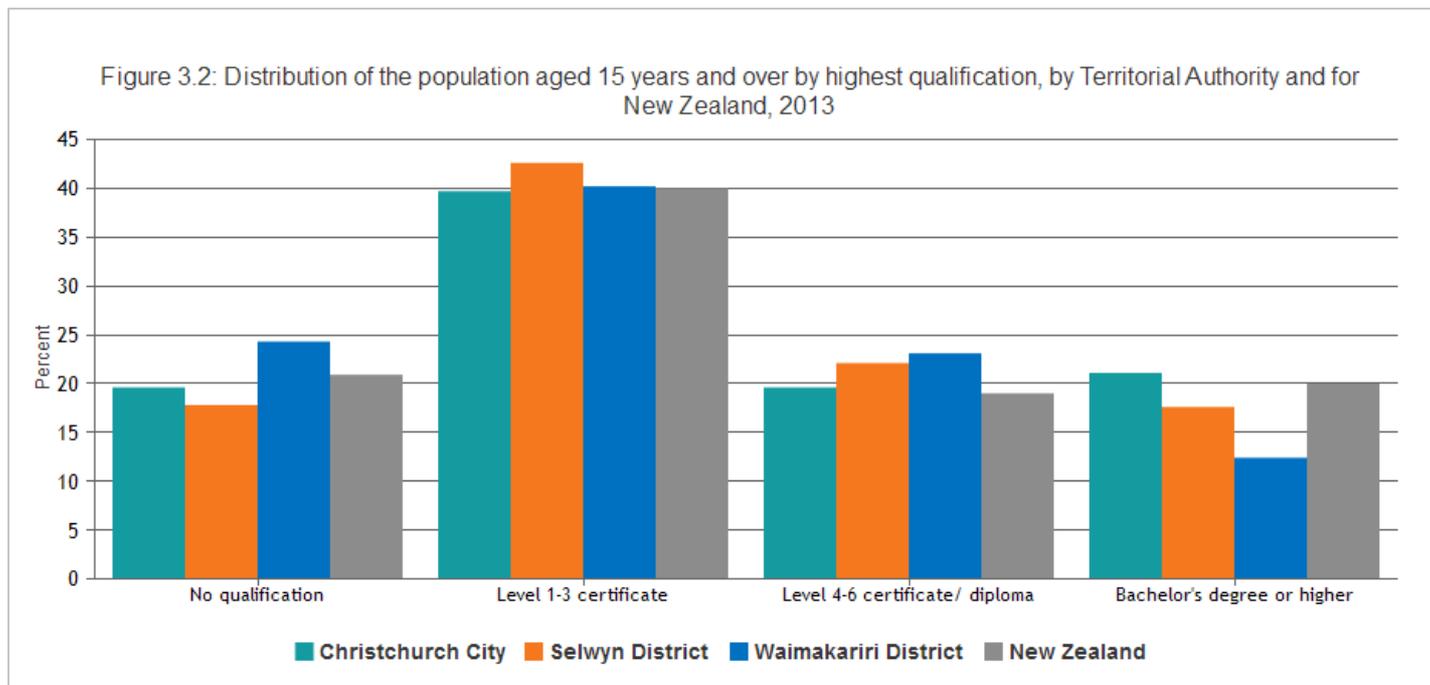
A higher level of formal education is associated with lower unemployment rates and higher income [11] as well as better self-rated health. Changes in the educational attainment of the population also provide information about access to education and the equity or fairness of the education system. Across New Zealand, employment rates are highest among people who have a tertiary education [11].

This indicator presents the distribution of the population aged 15 years and older by highest qualification, using census data.



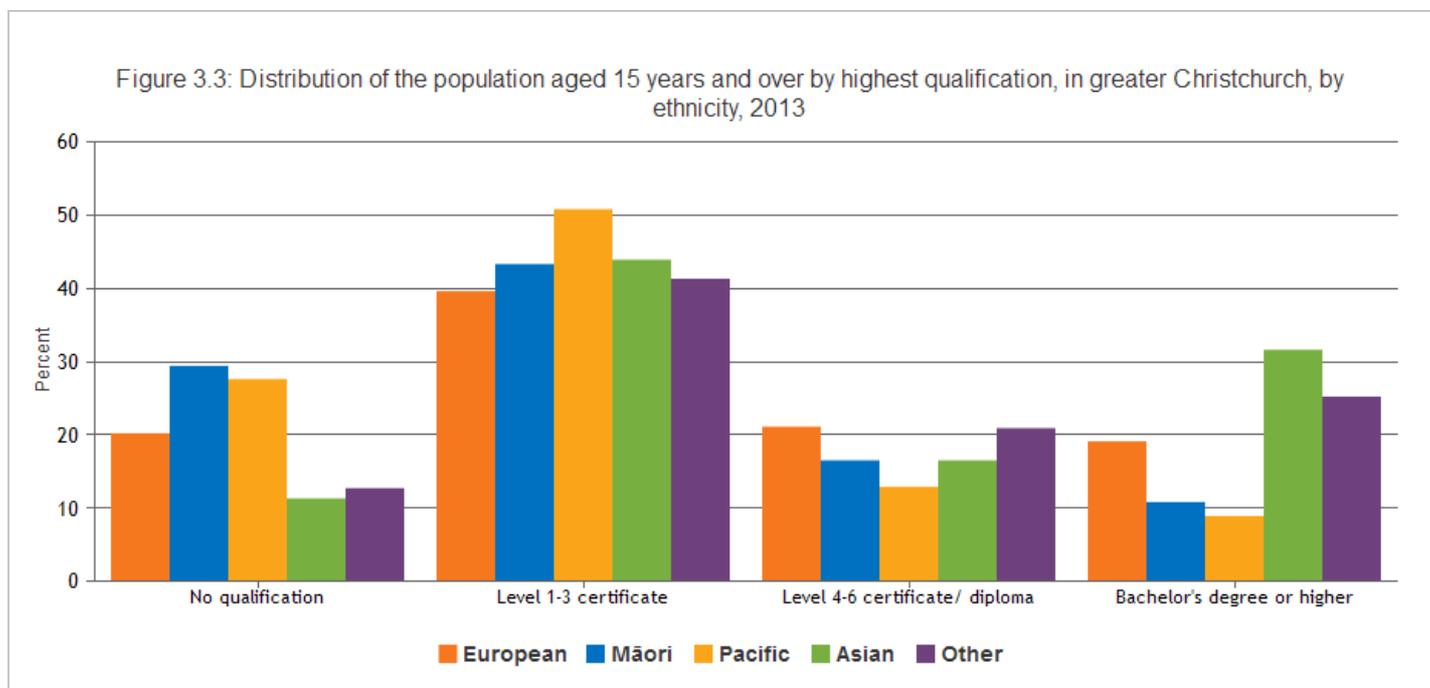
For the approximately 80 percent of people aged 15 years and over with a qualification, the distribution of highest qualifications gained is similar between greater Christchurch and New Zealand. For greater Christchurch, 40 percent of people aged 15 years and over hold a level 1–3 qualification (including overseas secondary school qualifications), 20.3 percent hold level 4–6 qualifications, and 19.7 percent of people aged 15 years and over hold bachelor's or higher-level qualifications.

## Breakdown by Territorial Authority



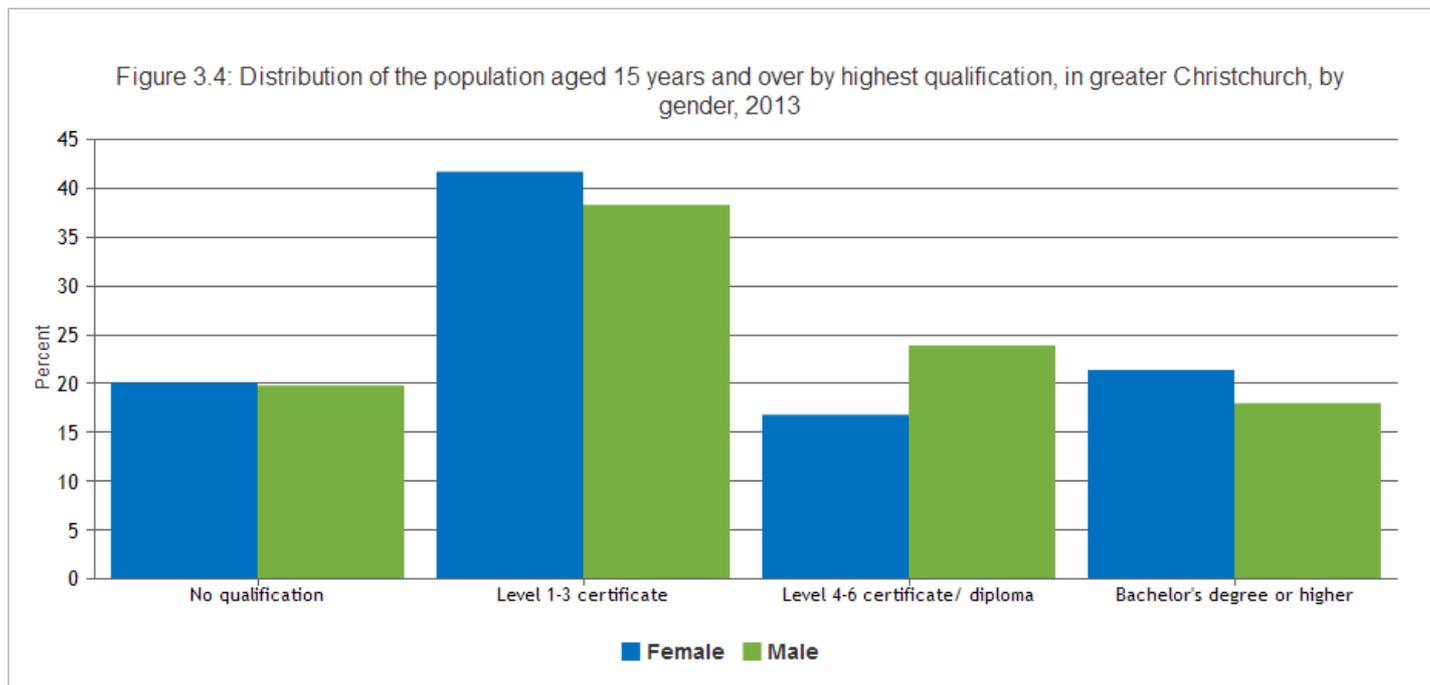
When the distribution of highest qualifications gained is broken down by Territorial Authority (TA), similar levels of overall achievement are evident at the 1–6 certificate/diploma levels. However, some TA-level differences are evident for low versus higher educational attainment levels. For example, Selwyn District has the highest proportion with school-level qualifications, while Christchurch City has a higher percentage with Bachelor’s degree or higher qualifications than Selwyn District, Waimakariri District, and New Zealand overall.

## Breakdown by ethnicity



In 2013, the Asian ethnic group had the highest proportion of people with a formal qualification in greater Christchurch, at 88.7 percent. Just over 10 percent of the Asian population in greater Christchurch had no qualification compared to 20 percent of European/Pākehā and almost 30 percent of Māori. Further, the proportions of Māori and Pacific with qualifications at Bachelor’s degree or higher were substantially lower than for the Asian and European/Pākehā ethnic groups.

## Breakdown by gender



In 2013 the proportion of women with any qualification was equal to that of men (both in greater Christchurch and nationally). However, in greater Christchurch, higher proportions of women have Bachelor's degree or higher qualifications (except for doctorate degrees). These patterns are generally consistent with the national picture. Note that Level 4 certificate qualifications (markedly dominated by men) include many trade qualifications and the demand for trade qualifications remains strong in greater Christchurch due to the ongoing post-earthquake rebuild.

### Data Sources

**Source:** Statistics New Zealand.

**Survey/data set:** Census of Population and Dwellings. Access publicly available data from the Statistics New Zealand website <http://archive.stats.govt.nz/Census/2013-census/profile-and-summary-reports/qstats-education-training/highest-qualification.aspx>

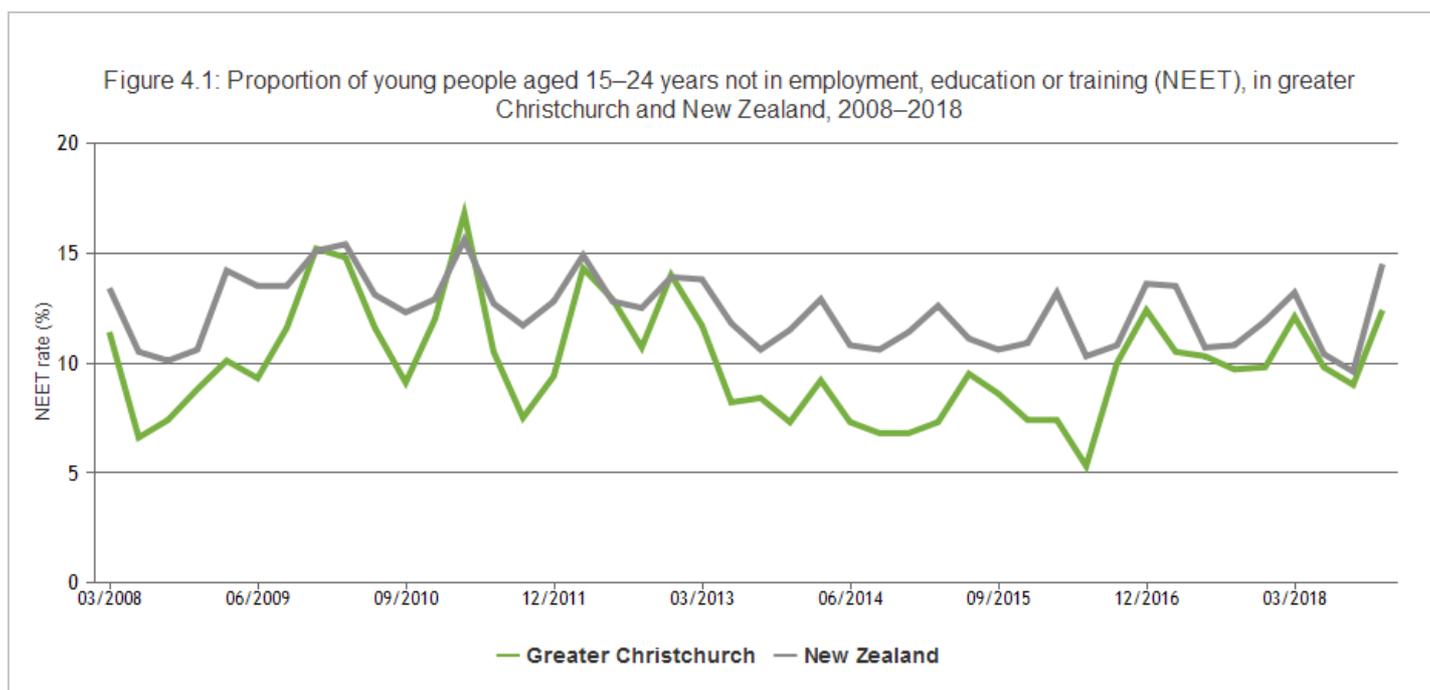
**Source data frequency:** Census conducted every 5 years.

Metadata for this indicator is available at <https://www.canterburywellbeing.org.nz/index-data>

## NOT ENGAGED IN EMPLOYMENT, EDUCATION, OR TRAINING

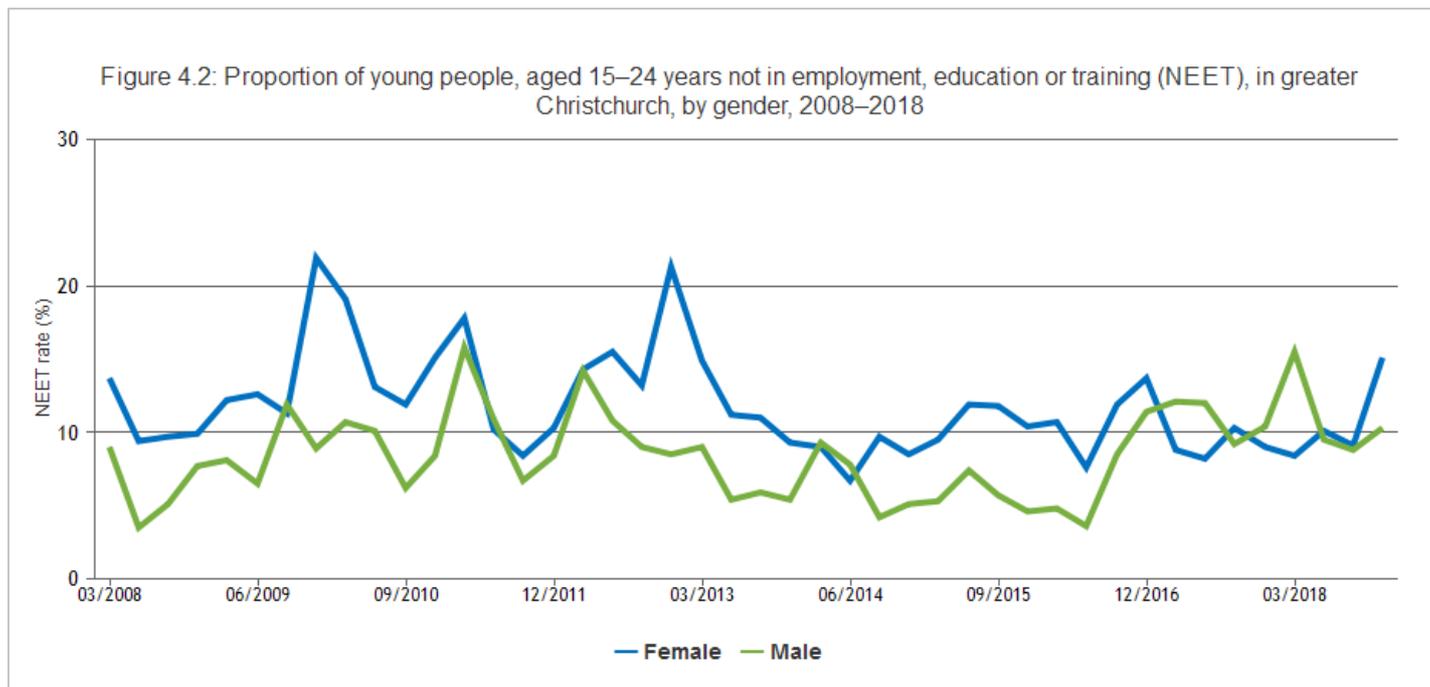
The proportion of young people who are not in employment, education or training (NEET) is commonly used as a measure of non-utilised youth labour potential [12]. Young people who are NEET are at risk of becoming disadvantaged or marginalised in the future [12-14]. How young people transition from education to employment can have major implications over their lifetime. The long-term impacts of becoming NEET include lower levels of earnings in later life, future unemployment, poorer physical and mental health, increased risk of teenage and early parenthood, insecure housing, homelessness, and involvement in crime [12]. NEET rates tend to follow a seasonal pattern reflecting the academic year.

This indicator presents the proportion of young people aged 15 to 24 years who are not engaged in employment, education, or training (NEET).



The proportion of young people aged 15 to 24 years who are not in employment, education or training (NEET) in greater Christchurch peaked after the February 2011 earthquakes at 16.8 percent in March 2011. Then, as young people in greater Christchurch took advantage of rebuild and other opportunities, the NEET rate decreased steadily to a low of 5.3 percent in June 2016. However, by December 2016, the greater Christchurch NEET rate had increased to 12.4 percent (13.6% for New Zealand). The figure suggests that the post-earthquake drop in the NEET rate for greater Christchurch has now dissipated. In December 2018 the greater Christchurch NEET rate was 12.4 percent, compared to 14.5 percent for New Zealand overall.

## Breakdown by gender



The gender gap seen in the greater Christchurch NEET rate in the initial post-earthquake years has dissipated. This may reflect further shifts in the training and employment opportunities available during the ongoing earthquake recovery/rebuilding phase. In 2018 the mean quarterly NEET rate was 11.0 percent for males and 10.7 percent for females in greater Christchurch; 0.3 percentage points difference. Nationally, the mean quarterly NEET rate was 11.2 percent for males and 12.7 percent for females in 2018, 1.5 percentage points difference (data not shown).

### Data Sources

**Source:** Statistics New Zealand.

**Survey/data set:** Household Labour Force Survey to December 2018. Custom data request for greater Christchurch region.

**Source data frequency:** Quarterly.

Metadata for this indicator is available at <https://www.canterburywellbeing.org.nz/index-data>

## REFERENCES

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- 1 Feinstein L, Sabates R, Anderson TM, Sorhaindo A, Hammond C (2006) What are the effects of education on health? Copenhagen Symposium: Measuring the Effects of Education on Health and Civic Engagement. Copenhagen.
- 2 Public Health England (2015) *Local action on health inequalities: Improving health literacy to reduce health inequalities*. London: Public Health England.
- 3 Hughes D, Lauder H, Robinson T, Simiyu I, Watson S, et al. (1999) *Do Schools Make a Difference?: Hierarchical Linear Modelling of School Certificate Results in 23 Schools: The Smithfield Project, Phase Three: Eighth Report to the Ministry of Education*. Wellington.
- 4 CSDH (2008) Closing the gap in a generation: health equity through action on the social determinants of health. Final Report of the Commission on Social Determinants of Health. Geneva: World Health Organization.
- 5 Marmot M (2004) Social Causes of Social Inequalities in Health In: Anand S, Peter F, Sen. AK, editors. Public health, ethics, and equity. Oxford: Oxford University Press on Demand.
- 6 Marmot M, Bell R (2012) Fair society, healthy lives. *Public Health* 126: S4-10.
- 7 Mitchell L, Wylie C, Carr M (2008) *Outcomes of early childhood education: Literature review. A report by the New Zealand Council for Educational Research for the Ministry of Education*. Wellington: Ministry of Education.
- 8 Ross CE, Wu C-I (1995) The Links Between Education and Health. *American Sociological Review* 60: 719-745.
- 9 OECD (2013) *OECD Indicators: Education at a Glance 2013*. Paris: OECD.
- 10 Wylie C, Hodgen E, Hipkins R, Vaughan K (2009) *Competent learners on the edge of adulthood: A summary of key findings from the Competent Learners @ 16 project*. Wellington: Ministry of Education and New Zealand Centre for Education Research.
- 11 OECD (2017) *Education at a Glance 2017: OECD Indicators*. Paris: OECD Publishing.
- 12 Allen M (2014) *Local action on health inequalities: Reducing the number of young people not in employment, education or training (NEET)*. Nottingham: Department for Children, Schools and Families.
- 13 Statistics New Zealand (2011) *Introducing the youth not in employment, education, or training indicator*. Wellington: Statistics New Zealand.
- 14 International Labour Organization (2011) *Manual on decent work indicators (DWIs): Methodology and progress. How can DWIs and ILO's manual be used for quality of employment work?* Geneva: International Labour Organization.

## FIND OUT MORE

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> **Education Counts website**

This Ministry of Education managed website provides a wide range of statistics about the early childhood, school and tertiary education system with data available at both a national and local level.

> **Ministry of Education News and Links**

This webpage provides links to the websites of key education sector organisations in New Zealand and important education-related newsletters including the newsletter for the Greater Christchurch Education Renewal Programme.

> **NZCER research report**

A research report from New Zealand Council for Educational Research based on a survey of how primary and intermediate schools approach students' wellbeing.

> **Health Promoting Schools in Canterbury**

A Community and Public Health (Canterbury DHB) webpage presenting information about creating health promoting schools.

> **Health promotion in early childhood settings**

A Community and Public Health (Canterbury DHB) webpage presenting information about CPH's role in health promotion in early childhood settings.

> **Health promotion in tertiary settings**

A Community and Public Health (Canterbury DHB) webpage presenting information about CPH's role in health promotion in tertiary settings.