

EDUCATION

What is this?

Education occurs throughout the life span.¹ This measure looks at education from early childhood (education of children prior to attending school 0-6 years) as well as at school and tertiary level.

Why is this important?

There is a well-known large and persistent association between education and health. This relationship is quite complex and is inter-related with links between qualifications, income and employment. The level of income an individual receives is closely related to their level of educational qualification. Median annual personal incomes, in New Zealand for 2006, were highest for those whose highest qualification was a doctorate degree (\$69,900 per year) and were lowest for those with no qualifications (\$16,900 per year).²

This may impact on an individual's quality of life, both in terms of financial compensation and job satisfaction. The ability to obtain and keep employment can in turn have an influence on other socioeconomic factors such as increased fuel poverty and reduced access to food.

Education across all ages is important. Children's growth and development are most rapid during their early years. Participation in early childhood education provides a critical first step in building a foundation for future learning and educational achievement. New Zealand children are not required to attend formal early childhood education, although the majority do, prior to starting school. Formal early education takes place in education and care centres, home-based services, kindergartens, kōhanga reo and playcentres.³

Data

The majority of Christchurch residents aged 15 years and older have achieved some form of formal education (recognised by the Ministry of Education). This percentage has increased over the last twenty years from 57 per cent of the population in 1986 to 70 per cent in 2006. Attainment of qualifications for Christchurch and total population was very similar in 2006 with 37 percent of residents having a high school qualification as the highest qualification gained (36% nationally). 15 percent gained a bachelors degree or higher degree (14 % nationally); and 18 percent of residents had gained other post-school qualifications as their highest qualification (17% nationally).⁴



¹ University of Michigan National Poverty Centre. 2007. Education and Health (Policy Brief 9).

http://www.npc.umich.edu/publications/policy_briefs/brief9/policy_brief9.pdf Accessed 02.08.11.

² Statistics New Zealand <http://www.stats.govt.nz/Census/2006CensusHomePage/QuickStats/quickstats-about-a-subject/education-and-training/qualifications-and-income.aspx> Accessed 23.05.11.

³ Ministry of Education. 2002. Pathways to the Future: Nga Huarahi Arataki. A ten year strategic plan for early childhood education, 2002 – 2012.

<http://www.minedu.govt.nz/NZEducation/EducationPolicies/EarlyChildhood/ECEStrategicPlan/PathwaysToTheFutureEnglishPlanAndTranslations.aspx> Accessed 23.05.11.

⁴ Christchurch City Council Community Outcomes Monitoring Programme and Statistics New Zealand.

<http://www.ccc.govt.nz/thecouncil/policiesreportsstrategies/communityoutcomes/index.aspx#jumplink6> Accessed 23.5.11 and Statistics New Zealand. 2006. Census 2006: Tables about Christchurch City.

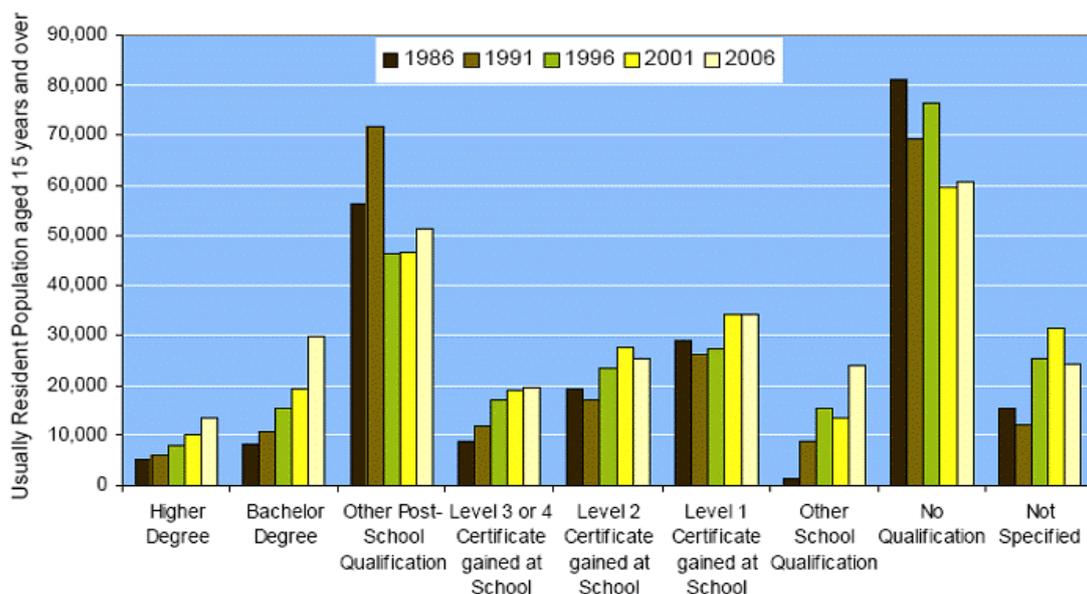


Figure 1 Highest qualification gained, 1986 to 2006 for Christchurch City⁵

Figure 2 below shows qualifications gained in Christchurch are similar to those across New Zealand though slight larger proportion with higher qualifications and slight less with lower or no qualifications.

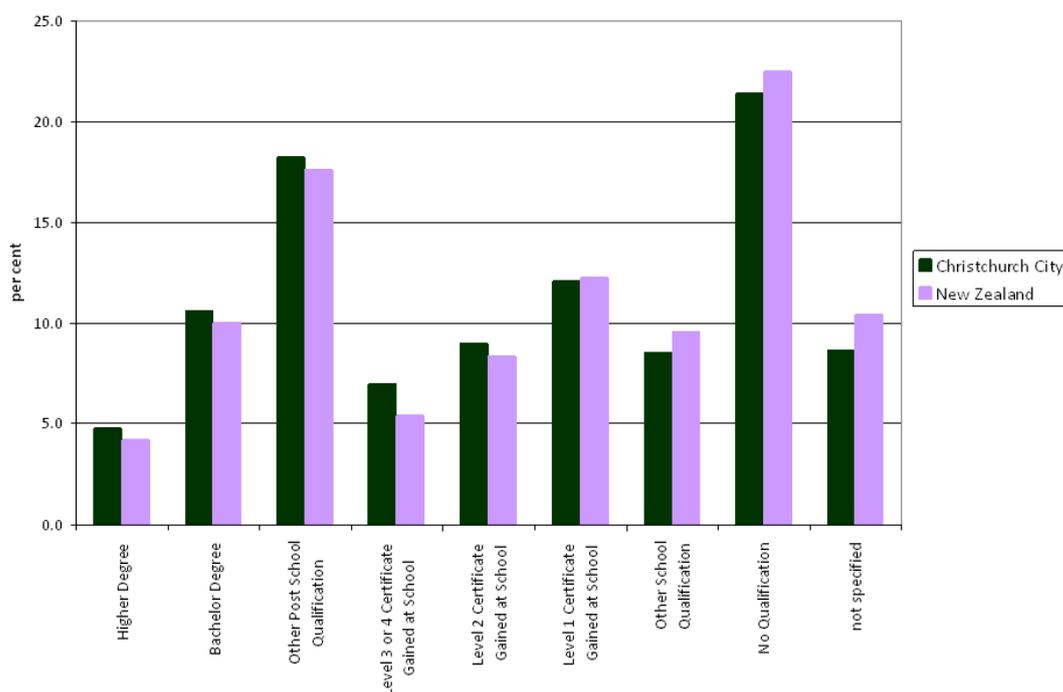


Figure 2 Highest qualification achieved, local and national comparison, 2006 Census⁶

<http://www.stats.govt.nz/Census/2006CensusHomePage/Tables/AboutAPlace/SnapShot.aspx?ParentID=1000013&type=ta&tb=Education&id=2000060> Accessed 23.10.11.

⁵ ibid

⁶ Statistics New Zealand. 2006. Census 2006: Tables about Christchurch City.

<http://www.stats.govt.nz/Census/2006CensusHomePage/Tables/AboutAPlace/SnapShot.aspx?ParentID=1000013&type=ta&tb=Education&id=2000060> Accessed 23.05.11.

Māori are significantly more likely to have no formal qualifications than the overall population of Christchurch city. The 2006 census found that 36 per cent of Māori aged 15 years and over in Christchurch had no formal qualification, compared with 23 per cent of the total Christchurch population.

When looking at early childhood attendance the most often reported statistics is prior participation at early childhood taken at entry to Year 1 at school. Figure 3 shows that participation rates are generally high.

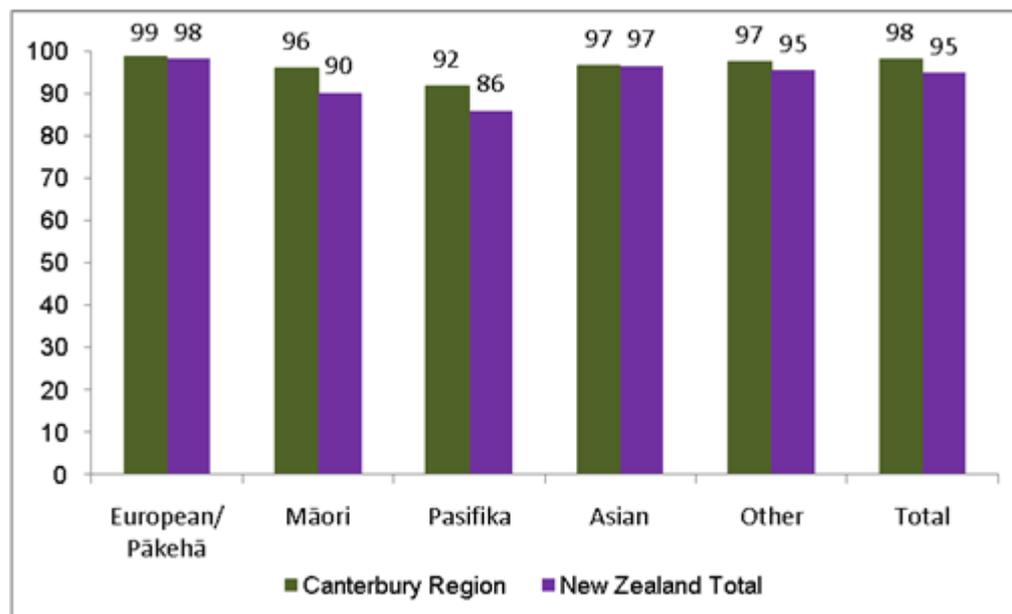


Figure 3 Prior participation rates at early childhood education as at school Year 1, March 2011⁷

Participation rates in Canterbury are consistently the same as or higher than for New Zealand, with slightly higher rates in Canterbury for Māori and Pasifika as compared to the rest of New Zealand.

Impact on inequalities

In general unemployment rates are greater for those without any formal qualifications (see Employment indicator) and as such incomes are also lower.

Research conducted as part of the Christchurch Health and Development Study found that socioeconomic status at birth was strongly correlated to educational achievement.⁸ This may result in a vicious cycle in which children in households with a greater degree of deprivation are less likely to attain higher levels of educational achievement which in turn could result in reduced incomes and/or employment success later in life. The same study found that those who failed to achieve qualifications were at increased risk of criminal offending.⁹

⁷ Ministry of Education, Prior Participation in Early Childhood Education, year ending March 2011.

<http://www.educationcounts.govt.nz/statistics/ece/prior-participation-in-ece> Accessed 02.08.11.

⁸ Ferguson, D.M., Horwood, L.J., Boden, J.M. 2008. The transmission of social inequality: examination of the linkages between family socioeconomic status in childhood and educational achievement in young adulthood. *Research in Social Stratification and Mobility* 26 (3), 277-295.

⁹ Ferguson, D., Poulton, R., Horwood, J., Milne, B., Swain-Campbell, N. 2003. Comorbidity and coincidence in the Christchurch and Dunedin Longitudinal Studies. Report for the New Zealand Ministry of Social Development, the Department of Labour and the Treasury. Christchurch: University of Otago.

This was also identified in the WHO research on Social Determinant of health where it was identified that social inequities in early life do contribute to inequities in health later on, through factors such as educational attainment. The report notes that children from disadvantaged backgrounds are more likely to do poorly in school and subsequently, as adults, are more likely to have lower incomes and be less empowered to provide good health care, nutrition, and stimulation to their own children, thus contributing to the intergenerational cycle as noted above.¹⁰

Māori students in Christchurch make up the sixth largest Māori student population in New Zealand. The 2009 Christchurch City Council progress report on community outcomes found that schools, as reported by the Ministry of Education, were still not meeting the needs of Māori students as well as they should be and that school attainment for Māori students in Christchurch is lower than for the total population in Christchurch.¹¹

Solutions

Early childhood education has become more accessible to three and four year olds due to the government funding of 20 free hours per week as of July 2010.¹²

Ministry of Education research has found that high quality early childhood education (ECE) can have a positive and long-lasting effect on a range of cognitive and attitudinal competencies. Traces of this effect can still be identified at age 16: “High quality ECE can both boost achievement, long-term, and can afford a measure of protection for at-risk children”.¹³ When linked to a number of other variables including socio-economic mix, maternal qualification and early childhood education centre teachers being responsive to children, duration of early childhood education makes up a component of the overall contribution to children's achievement.

The National Administration Guidelines¹⁴ for schools requires all schools to identify students who are not achieving, together with those students who are at risk of not achieving. They must also, in conjunction with the school's Māori community, develop and make known to the school's community, policies, plans and targets for improving the achievement of Māori students. There is also a requirement to provide appropriate career education and guidance for those students who have been identified by the school as being at risk of leaving school unprepared for the transition to the workplace or further education/training.

Data limitations

Linking participation levels of early childhood education to further educational outcomes is not available.

¹⁰ WHO. 2008. Commission on Social Determinants of Health Final report; Chapter 5 Equity from the start http://whqlibdoc.who.int/publications/2008/9789241563703_eng_part3.pdf

¹¹ Christchurch City Council Research and Policy Unit. 2009. Community outcomes progress report: a city of lifelong learning. Christchurch: Christchurch City Council. <http://resources.ccc.govt.nz/files/CommunityOutcomesProgressReport2009-ACityOfLifelongLearning.pdf> Accessed 16.05.11.

¹² 20 Hours ECE Information for Parents <http://www.minedu.govt.nz/Parents/EarlyYears/HowECEWorks/20HoursECE/20HoursECEInfo4Parents.aspx> Accessed 26.05.11.

¹³ Early childhood education and young adult competencies at age 16. Technical Report to the Ministry of Education. http://www.educationcounts.govt.nz/data/assets/pdf_file/0005/11786/cc16-ece-young-adult-tech-report.pdf Accessed 26.05.11.

¹⁴ Ministry of Education. National Administration Guidelines. <http://www.minedu.govt.nz/NZEducation/EducationPolicies/Schools/PolicyAndStrategy/PlanningReportingRelevantLegislation/NEGSAndNAGS/TheNationalAdministrationGuidelinesNAGs.aspx> Accessed 26.05.11.

Connections with other issues

Employment, Income.

Impact of the earthquakes

As time passes and these papers are updated the initial sections on the impact of the earthquake are going to be kept as an archive of what we thought the situation was at the time. Updates where possible are provided.

As at November 2011

Education across Canterbury has been disrupted by the earthquakes in September and more significantly by the February earthquakes. Around 4,500 school students have left the Christchurch region on the 5th of July.¹⁵

School properties have been extensively damaged leading to around 10 schools needing to site share, some for long periods of time. In these schools children attend in morning and afternoon shifts, with reduced teaching time per day. NZQA has looked at a number of mechanisms to ensure Canterbury students are not disadvantaged due to these events.¹⁶ The Ministry of Education has embarked on research to understand the impact of arrangements such as site sharing.

Tertiary establishments were affected with the University and Polytechnics having much disrupted first semesters. The total impact in terms of numbers not completing studies is unknown at this time.

While site sharing and other disruptions has been very difficult, there has also been some positive collaborations come from schools and other institutions working closely together to ensure the education sector delivers. The early childhood sector was also affected by closures.

Paper prepared by Community and Public Health.

¹⁵ Statistic New Zealand, Earthquake, 2011 http://www.stats.govt.nz/browse_for_stats/education_and_training/earthquake-schools.aspx Accessed 02.08.11.

¹⁶ NZQA. 2011. <http://www.nzqa.govt.nz/about-us/publications/qa-news/qa-news-june-2011/christchurch-earthquake-response/>. Accessed 02.08.11.