

Educational Issues for Communities Affected by Transience and Residential Mobility

Report on Phase 1 (2003–2004)

Jane Gilbert



NEW ZEALAND COUNCIL FOR EDUCATIONAL RESEARCH

TE RŪNANGA O AOTEAROA MŌ TE RANGAHAU I TE MĀTAURANGA

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Executive summary

This report documents the findings of the first phase of a project designed to investigate the educational issues arising in four New Zealand communities affected by residential mobility. The four case study areas are Waitangirua/Cannons Creek—a predominantly Pasifika community near Wellington City; Amuri—a rural area in North Canterbury; Opotiki—a town and its surrounding district in the Eastern Bay of Plenty; and Kawerau—a mill town in the Eastern Bay of Plenty. The project is part of a larger study focusing on these four communities. Other researchers are looking at health, housing, labour market, child development, youth, and community safety issues. The wider project's aim is to provide information that government and other community agencies can use to maximise community attachment and human capital development in areas affected by high mobility.

The New Zealand population as a whole is highly mobile. High levels of mobility can bring benefits to a community, but they can also have adverse effects, particularly where there is loss of infrastructure and where people are moving for negative reasons. The four case study areas have residential mobility rates that are broadly similar to—or slightly lower than—those for New Zealand as a whole: however, all are communities that are, in different ways, being affected by high levels of movement.

In this study we collected data on student movement, achievement, and attendance in 20 schools (a mixture of primary, intermediate, secondary, area, and kura kaupapa Māori) in the four case study areas. We interviewed the principals of all of these schools for their views on the effects of student mobility on their school. We calculated the rates of movement (at non-standard times) for each school (using 2002 information), and worked out the proportion (from a sample of three year groups) of students in each school who were moving frequently from school to school. We then compared the achievement and attendance records of this group of students with those of the other students in the same year group.

The mean school movement rate for the Waitangirua/Cannons Creek schools we visited was 31 percent. For the Amuri schools it was 26 percent, for the Opotiki schools it was 36 percent, while for the Kawerau schools it was 40 percent. Two schools had movement rates of 45 percent, and the lowest rate was 9 percent. The schools in the Waitangirua/Cannons Creek, Opotiki, and Kawerau areas are all decile 1 or 2 schools, and these rates are similar to those found in many low-decile schools in New Zealand. The Amuri schools are decile 9, 7, and 5, and the rates found there are higher than in other mid-high-decile New Zealand schools. Rates were higher overall in primary schools than they were in secondary schools.

Thus in the schools we studied, a quarter to nearly a half of their students are “turning over” each year at “non-standard” times. According to the principals of these schools, this has a major impact on their ability to manage, plan, and resource their core work. It is also likely that this high student movement has a long-term impact on the ability of schools to contribute to their community’s social capital (but we do not yet have firm evidence of this). These high levels of movement appear to reflect—rather than cause—other community patterns (housing and family issues in particular).

We looked at the E19/22A (or “progress”) cards of all students in Years 5, 8, and 11 in the 20 schools to see how often they had moved schools, and where they had moved from. We classified Year 5 students as frequent movers if they had been to three or more schools in their 5 years at school. We classified Year 8s as frequent movers if they had been to four or more schools and Year 11s as frequent movers where they had been to five or more schools. A few students had moved very frequently (there were children in Year 5 who had been to seven or eight different schools, children in Year 8 who had been to between 10 and 15, and several students in Year 11 who had been to 14 or 15 different schools). Some were moving in and out of the same schools (many of the schools referred to these students as “boomerang” students).

Twenty-three percent of students in the three sample year groups in Waitangirua/Cannons Creek were frequent movers. In the Amuri schools this proportion was 20 percent, in Opotiki it was 15 percent overall, while in Kawerau it was 21 percent. However, it is likely that the proportions are higher than this. Many of the progress cards had obvious inaccuracies, and the way information is entered varies widely. In some of the secondary schools up to half of the students had no progress cards at all. Rates were lower in the secondary schools than in the primary schools (which brought the overall rates down): however, anecdotally, it seems likely that many of the very frequent movers have dropped out of the system by secondary school.

When we compared the achievement and attendance records of the group of students we had defined as frequent movers with those of the other students in the same year group, we found few differences. However the data we were able to use to make this comparison was patchy in quality. Schools collect different kinds of student achievement information, and this information is often not readily comparable across different schools. From the point of view of statistical analysis, for each type of achievement information we had low overall numbers of students, and the most commonly used kinds of achievement information were not standardised. We found some differences in mathematics achievement, especially in the earlier years, a possible difference in reading level for some Year 8s, and some differences in secondary subject choices: however, these differences were small. There were no statistically significant differences when the attendance rates of frequent movers were compared with those of others in their year group.

These findings are in general consistent with those of international research in this area. Other studies have found links between high mobility, low income, and reduced educational attainment. However, it has proved to be difficult to disentangle the effects of frequent movement from other factors that are associated with low income that could influence educational attainment. Some

studies have shown that, when the relative impact of these other factors is taken into account, the direct effect of high mobility on student achievement is small.

High mobility rates clearly impact negatively on schools, however. Students who move frequently (especially during the school year) are regarded negatively by schools. They are seen to disrupt school programmes and routines; to impact negatively on a school's performance; and to create extra administrative work that cannot be budgeted for. In addition, the principals we interviewed said that it was difficult for them to meet the needs of children who moved a lot, and that these children often took resources away from other children who had been in the school since they started school. Schools are organised—and funded—to meet the needs of relatively stable cohorts of students who progress through them in a reasonably predictable way. When this pattern breaks down, there are problems. It appears to us, from what the principals we interviewed told us, that it is for this reason highly mobile students are experienced by schools as problematic.

Schools don't seem very confident that they are addressing the issues posed when they have large numbers of highly mobile students: however, the principals made a number of suggestions for improving the way the education system as a whole deals with this issue. These included: better communication and information exchange between schools, and between schools and other agencies; greater standardisation of student information; and more appropriate funding arrangements for schools. The recently announced Ministry of Education's Student Management System project may address some of these concerns. However, the initial findings of this project tell us that while this initiative will undoubtedly help to track—and keep better records on—students as they move around, it probably won't reduce the school disruption effects of high mobility.

1. Introduction—The Building Attachment in Communities and Families Affected by Transience and Residential Movement project

This report describes the findings of the first phase of a research project designed to investigate the educational issues faced by communities with high levels of residential mobility. The project is part of a much larger study called Building Attachment in Communities and Families Affected by Transience and Residential Movement. The aim of this wider study is to investigate how communities can balance the benefits of residential mobility with the potentially negative impacts¹. The research is being carried out in four New Zealand case study communities: Waitangirua/Cannons Creek (an urban area in Porirua City, near Wellington); Amuri (a rural community in North Canterbury); Opotiki (in the Eastern Bay of Plenty); and Kawerau (an Eastern Bay of Plenty town). The wider project has several modules. Other researchers are looking at health, housing, and welfare issues; at labour market and employment issues; at community crime and safety issues; at the issues for young people aged between 16–18 years; and at child development issues. Information is being collected on family and household movement in the four case study areas, and there is a historical adviser who has expertise in the construction of identity and community in New Zealand. The project's overall aim is to provide local communities and government agencies with information and tools they can use to optimise community attachment and human capital development in areas of high residential mobility.

The first section of this report outlines the context in which the wider project was developed and briefly describes each of the four case study areas. The second section reviews research literature on the educational implications of high levels of residential mobility. The NZCER study of mobility in schools in the four case study areas is then outlined and the findings presented. The final section of the report discusses some of the issues that are raised by this research and outlines some areas for follow-up work.

¹ The wider project is being co-ordinated by the Centre for Research, Evaluation and Social Assessment (CRESA), and is funded by the New Zealand Foundation for Research Science and Technology.

Research context²

The New Zealand population as a whole is highly mobile. According to the 1996 Census data, 60 percent of children aged 5–9 (and about half of the total population) had moved at least once in the previous 5 years. High levels of mobility can be highly beneficial to communities, individuals, and families. People who are moving to pursue employment or educational opportunities are likely to bring considerable economic and cultural benefits to the communities they move to and to add to its overall infrastructure. However, high mobility can also bring significant costs to individuals, families, and communities, particularly when people are moving for negative reasons—such as escaping debts or family violence. Highly mobile families and individuals can have difficulty finding suitable housing. They may find it difficult to access health, education, or other community or government services. There are likely to be issues around continuity of health care and schooling, and where there are family problems—such as child abuse or neglect—these problems are difficult to address if the family is regularly moving house. These difficulties eventually impact on the wider community. Highly mobile families are unlikely to be a stable labour resource for prospective employers in the community, so large employers may move their operation elsewhere, forcing others to move. Communities that have a net loss of high-resource individuals and a net gain of low-resource individuals often go into a spiral of decline, eventually losing key community resources and infrastructure that, in turn, produces further decline. The individuals and families who are left are increasingly disadvantaged—irrespective of their individual socioeconomic status. In contrast, vibrant, functional communities with strong public infrastructures can protect people from the effects of disadvantage—the “neighbourhood” or “community mix” effect.

At central government level there seems to be a range of views as to whether mobility is good or bad. Some see high mobility as an indicator of economic efficiency and upward mobility, while others see it as a critical factor in the decline of some localities. However, on the basis of the existing knowledge base, we simply do not know which of these two positions is sound. Most research focuses on the movement of individuals and families. There is very little analysis of how people understand their movements, or of how communities respond to these movements. We know very little about how the views of individuals and/or communities interact with or reflect policymakers’ views. This project aims to address some of these gaps.

² This section summarises points made in the research proposal.

The four case study areas³

Waitangirua/Cannons Creek

The Waitangirua/Cannons Creek community is located on the eastern side of Porirua City, just north of Wellington. It has a predominantly Pasifika population. Porirua East is an area that expanded rapidly from virtually nothing in the 1950s and 60s. A number of large industries—notably Todd (later Mitsubishi) Motors—were established in the area and became major providers of work for new immigrants. These industries have since closed down, with major consequences for the community. In its early development Porirua East was a major state housing area (6,000 or more new rental dwellings were built there during the 1950s and 60s). However, more recent government policies have resulted in large numbers of these units being sold to private sector buyers, and there are now far fewer HNZN-owned⁴ dwellings. Those that are left are rented at “market” rates: that is, at rates that are substantially higher than they were when the units were state houses. The first wave of Pasifika migrants to the area were from the Cook Islands, Niue, and Tokelau—as people from these nations are officially New Zealand citizens—but later Western Samoan and Tongan people were able to migrate via a quota system. Today Waitangirua/Cannons Creek is, like Otara in South Auckland, a major focus of the New Zealand Pasifika community.

According to the 2001 National Census, the total population of the Waitangirua/Cannons Creek community was 15,699 people (a 0.7 percent increase in the period 1996–2001). The area has a relatively high proportion of people in the younger age groups compared to the rest of the country—over a third of the population were aged 0–14 in the 2001 Census (as compared to 22.6 percent nationally). There is a very small proportion of people in the 65+ age group (4.7 percent, compared to 12 percent nationally). Fifty-eight percent of the population are of Pasifika descent (as compared to 6 percent nationally), 26 percent are European (77 percent nationally), and 24 percent are Māori (14 percent nationally).

Population movement trends are similar in Waitangirua/Cannons Creek to those in New Zealand as a whole. In 2001, 45 percent of the population had lived at their current address for 5 years or more (42 percent nationally). Seventy-one percent of households are one-family units (which is slightly more common than the national average of 67.6 percent), but 8.6 percent of households are two-family units, which is considerably higher than the national figure (2 percent). Thirty percent of Waitangirua/Cannons Creek families are classified in the “couple with dependent children only” category (39 percent nationally), and 27.6 fall into the “one parent with dependent children only” family type (13 percent nationally). The median personal income of people aged

³ Most of the information in this section was taken from profiles of the four case study areas that were prepared early in the Building Attachment project by members of the CRESA team (see Stevenson, Kiddle, Fraser, James & Saville-Smith, 2003a, 2003b, 2003c, 2003d). These profiles were compiled using information taken from the 2001 National Census and all figures quoted in this section are taken from the 2001 National Census data.

⁴ Housing New Zealand Corporation.

over 15 years was \$14,223 (\$18,545 nationally) in 2001, while the median annual household income was \$38,954 (\$49,343 nationally). Thirty-seven percent of the population aged 15 or over are in full-time work (46 percent nationally), and 20 percent are unemployed (7.5 percent nationally in 2001)⁵. Of those who are employed, most work in the retail and other service industries (45 percent) and in manufacturing industries (16.5 percent). The 2001 Census data locates the Waitangirua/Cannons Creek community at points 9 and 10 on the New Zealand Deprivation Index⁶.

There are 16 licensed early childhood education centres (including one a'oga amata and six kōhanga reo) in Waitangirua/Cannons Creek, four full primary schools (Years 1–8), five contributing schools (Years 1–6), one intermediate, and one secondary school (Years 9–13). Most of these schools are decile 1 schools⁷. In 2001, 32.3 percent of school leavers in the Porirua City area⁸ left school with no formal qualifications at all (compared to 17 percent of school leavers across the whole country). Thirty-two percent of Pasifika students left with no qualifications (25 percent nationally), 38 percent of Māori (33 percent nationally), and 23 percent of Europeans (12 percent nationally).

Home ownership patterns in Waitangirua/Cannons Creek differ markedly from the national pattern. In 2001, 36.4 percent of houses in the area were owned by the inhabitants (with or without a mortgage), compared to 68 percent nationally. The overall rate of home ownership dropped by about 3 percent between 1996 and 2001 (which is roughly in line with the trend for New Zealand overall in that period). The proportion of people renting their houses (62.2 percent) is double the national average (29.2 percent). The area has a wide range of social service organisations, many of which provide for the specific needs of different Pasifika groups (for example the Taeaomanino Trust, Wesley Porirua, and the Fanau Centre), and many churches.

⁵ Unemployed here means people who are not currently in paid employment but who are available for and actively seeking work.

⁶ The New Zealand Deprivation Index has a scale of 1 to 10, with 1 representing an area with the lowest levels of deprivation and 10 representing areas with high levels of deprivation.

⁷ A school's "decile" indicates the extent to which the school draws its students from low socioeconomic communities. Decile 1 schools have the highest proportion of students from low socioeconomic communities while decile 10 schools have the lowest proportion of these students. The school "decile rating" is worked out via a complex measure of the proportion of disadvantaged students at the school. Random samples of student addresses are referenced to national census mesh blocks of about 50 households. Mesh block scores on the following five factors are added: percent of households with a low household income; percent of households with employed parents in the lowest skilled occupation group; household crowding; percent of parents with no educational qualifications; and percent of parents relying on income support. The percent of Māori and Pacific students at the school is added from data provided by the school. This system was developed to provide a basis for determining the extent to which a school should be allocated supplementary funds to better meet the needs of its students (under the Targeted Funding for Educational Attainment, or TFEA, scheme).

⁸ The figures for Porirua City as a whole are given here as, using information in the public domain, it is not possible to disaggregate the figures for the Waitangirua area alone from those for this wider area. However, it is likely that the proportion of those leaving school with no qualifications in Waitangirua was higher than in the rest of Porirua City.

However, as a result of the impact of various government policies of the last 20 years or so, and the departure of the area's major employers, there has been a steady decline in the quality of the area's other facilities. There are no bank branches and only a small range of shops.

Amuri

Amuri is a rural area about an hour-and-a-half's drive north of Christchurch. It includes the towns of Culverden, Rotherham, and Waiau. The town of Hanmer Springs lies just outside the Amuri area on its north-western border. Traditionally a mainly sheep farming area, the introduction of widespread irrigation in the 1980s saw much of the land in Amuri converted to dairying. As a result many share-milkers and their families have moved into the district. In the same period the forestry sector was restructured and the former Rabbit and Pest Destruction Boards were dis-established. The rabbit shooters and tussock grubbers lost their jobs and moved out of the area, leaving many of their government-provided houses vacant. In recent years there has been some movement by beneficiaries into the area to take advantage of this cheap housing.

According to the 2001 Census, the Amuri area has a population of 2,013 (up by 0.7 percent on the 1996 Census). This population is primarily European, with a very low proportion of Māori and Pasifika peoples (6.6 percent and 1 percent respectively). The area's age structure is similar to that of the New Zealand population as a whole. Amuri people move slightly less often than other New Zealanders (47 percent of the population had lived at their current address for 5 years or more, as compared to 42 percent nationally). Seventy-one percent of households are one-family units (higher than the national average). Twenty-three percent of households are one-person households (about the same as the national average). The most common family type in the area is the "couple without children" category (43 percent), while 38 percent are "couples with dependent children only", and 6 percent are "one parent with dependent children only" families (lower than the national figure of 13 percent). The median annual personal income of people aged over 15 years was \$19,332 (\$18,545 nationally) in 2001, while the median annual household income was \$44,548 (\$49,343 nationally). Fifty-eight percent of the population aged 15 or over are in full-time work (46 percent nationally), and 2.9 percent are unemployed (much lower than the national average of 7.5 percent). Most people work in the agriculture, forestry, and fishing sector (60 percent overall but 72 percent of men). The second largest employers in 2001 were the hospitality sector (accommodation, restaurants, and cafes) and education (both 6.6 percent). The Amuri area is classified as 5 on the New Zealand Deprivation Index. Its home ownership rate (in 2001) was 67 percent (similar to the national average of 68 percent).

There are two playcentres, two contributing schools (Years 1-6), and one composite school (Years 1-13) in Amuri. These three schools have decile ratings of 7, 9, and 9. In 2001, 18.8 percent of school leavers in the Amuri/Hurunui district left school with no formal qualifications at all (about the same as the national average). Apart from these educational institutions, no other government agencies have a specific presence in the area. Work and Income representatives used to visit Hanmer Springs once a month (until mid 2002), but this service has since been discontinued. People need to travel to Rangiora to access government services. Buses operate

regularly between Christchurch and Culverden but to travel to Rangiora requires one to travel to Christchurch first to catch a connecting service. There is no public transport within the Amuri area. There are no banking facilities—the closest bank is at Amberley. Most health and social services are community-run: for example, the Amuri Community Trust runs the medical centre at Rotherham; the Hurunui Academy provides local work-based training programmes; and the Amuri Dairy Employers Group was set up to address local employment issues. The Waiau Community Project was recently set up to provide school holiday programmes and a locally based citizen's advice service, and to improve early childhood education services in the area. There are two churches, which together have set up Amuri Community Care (an organisation that assists the elderly and works with families in need) and Federated Farmers and Rural Women New Zealand have branches in the area.

Opotiki

Opotiki is in the eastern Bay of Plenty. The population is a fairly even mix of Māori (54.3 percent) and Pākehā (52.6 percent), with a few (about 2 percent) Pasifika people. There are three major iwi in the area: Whakatōhea, Te Whanau-a Apanui, and Ngai Tai. The town developed during the second half of the 19th century as a small port and farming service centre. At this time it was the main food producing area for Auckland. The economic policies of the late 1980s and 1990s had a major impact on Opotiki. Many local industries, including a dairy factory, a footwear factory, a clothing factory, and a bacon works closed, and unemployment in Opotiki is now considerably higher than the national average. Today agricultural production (dairying, beef, sheep, and horticulture) and (to a lesser extent) tourism are the mainstays of the local economy.

In 2001 the total usually resident population of Opotiki was 9,201 people (down about 2 percent from the previous Census). The area's age structure is similar to that of the New Zealand population as a whole. On average people move slightly less frequently than other New Zealanders (in 2001, 47.4 percent of the population had lived at their current address for 5 years or more, as compared to 42 percent nationally). Sixty-eight percent of households are one-family units (about the same as the national average). One-fifth of households in 2001 were one-person households (again about the same as the national average). The most common family type is the "couple without children" category (34 percent), while 29 percent are "couples with dependent children only", and 28 percent are "one parent with dependent children only" families.

The median personal income of people aged over 15 years was \$12,899 (\$18,545 nationally) in 2001, while the median annual household income was \$35,429 (\$49,343 nationally). Thirty-four percent of the population aged 15 or over are in full-time work (46 percent nationally), and 15.9 percent are unemployed (7.5 percent nationally in 2001). Most people are employed in the agriculture, forestry, and fishing sector (32 percent). The second largest industry is retail trade (14.2 percent), followed by education (13.4 percent). Opotiki District as a whole is classified as 9 and 10 on the New Zealand Deprivation Index: however, there are some pockets of relative wealth, particularly in the town area.

There are 19 licensed early childhood education centres (including 11 *kōhanga reo*) in Opotiki, 13 full primary schools (Years 1–8) including three *kura kaupapa Māori*, two composite (or “area”) schools (Years 1–13), and one secondary school (Years 9–13). Twelve of these 16 schools are decile 1 or 2, three are decile 3, and one is decile 4. In 2001, 33.6 percent of school leavers in the Opotiki District left school with no formal qualifications (compared to 17 percent of school leavers nationally). Forty-five percent of Māori left school with no qualifications, a figure that is substantially higher than the national average for Māori (33 percent).

In 2001, 67 percent of homes in Opotiki were owned by their inhabitants (similar to the national average): however, the number of people renting their houses seems to be increasing. Two percent of the area’s available housing is classified as “temporary”⁹ (compared to 0.4 percent of all dwellings in New Zealand). Work and Income is the only government agency with a full-time base in Opotiki. Other agencies (Child, Youth and Family, for example) operate from Whakatane. The area has four banks, a number of churches, and a range of iwi-provided health and social services (Whakatōhea Iwi Social and Health Services, Te Runanga o te Whanau-a-Apanui, and the Ngai Tai Iwi Authority).

Kawerau

Kawerau is at the foot of Putauaki (Mt Edgecumbe) on the Rangitaiki Plains in the Eastern Bay of Plenty. The *tangata whenua* in the Kawerau area are *Tuwharetoa ki Kawerau*. The town of Kawerau is a purpose-built mill settlement, designed to accommodate forestry workers and specialist workers in the forestry products processing plants. The pulp and paper companies Carter Holt Harvey, Norske Skog (formerly Tasman Pulp and Paper), and Fletcher Challenge continue to be the town’s main employers. In recent years these companies have developed processes that require a smaller workforce. As a result many families have left Kawerau and there has been an in-migration of beneficiaries and retired people attracted by the low housing costs. The town’s unemployment rate is much higher than the national average, and the town’s infrastructure, particularly its retail sector, is in decline.

In 2001 the total usually resident population of Kawerau was 7,278 people (a decrease of about 12 percent from the previous Census). Kawerau has a relatively high proportion of young people and a lower than average proportion of people in the 65+ age bracket. Its population is a mix of Māori (56 percent) and European (50 percent) with a very small number of Pasifika people (3.5 percent)¹⁰.

Kawerau people move slightly less frequently than other New Zealanders—in 2001, 48.3 percent of the population had lived at their current address for 5 years or more (42 percent nationally). Seventy-two percent of households are one-family units (slightly higher than the national

⁹ Temporary dwellings are defined as caravans (and other mobile dwellings), cabins, or tents—either in or out of a motor camp.

¹⁰ These percentages do not add up to 100 because people could classify themselves in more than one category.

average): however, the proportion of this kind of household is declining in Kawerau. One-fifth of households are one-person households (about the same as the national average). The most common family type is the “couple without children” category (31 percent). Twenty-nine percent of families are “couples with dependent children only”, and 25 percent fall into the “one parent with dependent children only” category. Kawerau’s home ownership rate is 71 percent (slightly higher than the national average). Kawerau District as a whole is classified as 9 and 10 on the New Zealand Deprivation Index. The median personal income of people aged over 15 years was \$13,602 (\$18,545 nationally) in 2001, while the median annual household income was \$40,888 (\$49,343 nationally). Thirty-four percent of the population aged 15 or over are in full-time work (46 percent nationally), and 20.1 percent are unemployed (7.5 percent nationally in 2001). Most people are employed in the manufacturing sector (36.7 percent overall—but 55.3 percent of men). This is much higher than the proportion employed in this industry for the country as a whole. The second largest industry overall is retail trade (11.7 percent), but for men alone it is agriculture, forestry, and fishing (8.8 percent). Third overall is education (10.1 percent).

In Kawerau there are nine licensed early childhood education centres (including five kōhanga reo), one full primary school (Years 1–8), three contributing schools (Years 1–6), one intermediate, and one secondary school. Most of the schools are decile 1. In 2001, 53.4 percent of the local high school’s leavers left with no formal qualifications (compared to 17 percent of school leavers nationally). This figure was 64.7 percent for Pākehā and 50 percent for Māori school leavers. These figures are obviously substantially higher than the national averages. Kawerau has a Heartland Community Services Centre that was set up to provide a presence for government agencies and community organisations. Current tenants include a health clinic, Housing New Zealand Corporation (HNZC), Plunket, the Rural Education Activities Programme (REAP), and the Safer Community Council.

2. The educational implications of frequent movement—what does the literature say?

For most educationists, frequent movement by students between schools is a problem—for the students and for the schools they attend. This section reviews recent New Zealand and international work on the educational implications of high levels of student mobility.

Frequent movement and “transience”—what *are* they?

In the international educational literature, a number of different terms are used to describe students who change schools frequently. These students are referred to as being “transient”, “itinerant”, “mobile”, “high turnover”, “turbulent”, or “nomadic”. In New Zealand education circles, the term “transient” is most commonly used. Here the term has negative connotations. It is usually used to refer to students who are moving schools often enough to disrupt their progress. Discussions of the transience “problem” have been more and more common in recent years: however, as yet there is no “official” nationally agreed-on definition of what this term actually means in educational contexts. Broadly speaking, the term “transient” seems to refer to *students* (and/or their families) who move frequently, while the term “transience” is used to describe overall patterns of student movement in and out of *schools*. However, what *is* frequent movement? *When* does it become a problem? *Why* is it a problem? *Who* is it a problem for?

Some definitions of *student* “transience”

In a research report commissioned by NZEI Te Riu Roa (New Zealand’s national organisation for primary teachers, early childhood educators, and school support staff) a few years ago, “transience” was defined as being where a student has attended two or more schools in the previous year (NZEI, 1999). In the international research literature there are many different definitions. *Student* transience is defined variously as: when a student has moved *more than once during the primary school years* (Kariuki, Nash, and College, 1999); when a student has been to *three or more schools in 2 years* (Edwards, 1997; Fields, 1997); when a child has moved *three or more times before the end of Year 4* (Whalen & Fried, 1973); or (in the UK context) where a student “joins the school partway through a key stage” (Strand, 2000, p. 8).

School “transience”

Because frequently moving students create issues for the schools they attend, researchers have tried to develop measures of the extent which students are moving in and out of particular schools. These measures are usually referred to as *school* transience: however *what* is actually measured

varies widely. Bruno and Isken (1996), for example, define school transience as the total number of children entering and leaving a school at a point *other* than the beginning or end of a school year. In the New Zealand context, Neighbour (2000, p. 111) defines it as the number of children joining or leaving a school at a point other than the normal entry or exit point for that school. Thus some measures try to account for all “non-standard” turnover, while others try to differentiate moves *during* the school year from moves at the beginning or end of the year.

Research on “transience” and schools is very much an “emerging” field. In general the goal has been to establish whether or not high mobility is a problem in educational contexts, and, if it is, its extent. However, there are a number of “muddy” areas. Firstly, the term “transience” is clearly a negative one, and it is common for it to be used in ways that conflate it with other issues thought to have negative educational consequences. Secondly, it is a term that has proved difficult to define and measure. As outlined above, a number of different measures have been developed—some that distinguish “normal” from “non-standard” movement in and out of a school, and others that don’t. Thirdly, there is a tendency to assume that *schools* with high “transience” rates (i.e. high overall student turnover at times other than the standard entry and graduation points), are populated by large numbers of *students* who are moving very frequently. This of course doesn’t necessarily follow (although it could). High movement rates could be the result of large numbers of students moving a small number of times, or they could be the result of smaller numbers of students moving very frequently. It is important to distinguish these two trends because, while both will probably be problematic for the school, one of the two situations (the second) is far more likely to produce problems for the students involved. Fourthly, frequent movement and transience are not generally distinguished. The term “transient” is widely used to refer to any student (or their family) who moves frequently, regardless of whether or not they are in fact transient—in the more general sense of this term (i.e. nomadic, impermanent or rootless; moving in an aimless or random way). People who move frequently are *not* necessarily “transients”.

The next section reviews New Zealand and international research on transience/frequent movement and schools.

Recent New Zealand work on frequent movement in schools

In 1996–1997 the Education Review Office carried out a study of 397 New Zealand schools¹¹ to investigate patterns of attendance, absenteeism, truancy, and student movement, and to look at the practices schools adopted to deal with these issues. According to the report on this study (Education Review Office, 1997), student movement rates vary markedly between schools. Many schools have very low levels, but others, especially in dairying areas and areas where seasonal

¹¹ 328 primary, 20 intermediates, 45 secondary schools, and 4 area schools.

work is available, have very high levels of student turnover¹². Schools in areas offering low-cost rental accommodation also have high student turnover.

The ERO study found that primary schools with a roll turnover of around 50 percent a year reported unsettled families, disrupted learning programmes, and high numbers of students with learning difficulties¹³. The teachers at these schools said that children who move frequently are more likely to have gaps in their learning—especially their reading ability—and many have already existing special learning needs that are made worse by their frequent moves¹⁴. Teachers said that settling these children into the school was often complicated by a lack of information on the child’s previous education and needs. Records from the child’s previous school either did not arrive, or were significantly delayed, especially where the child had changed schools more than twice already.

The ERO report points out that a high level of student movement is, for some schools, simply a part of the context in which they operate. Individual students cannot be held responsible for their family’s mobility, and schools cannot control the movement of families in their area. However, schools are responsible for developing programmes that meet their students’ needs—whatever these may be. The report says that schools need strategies to address the learning needs of their highly mobile students if they are to deliver a balanced curriculum and overcome barriers to achievement. Some schools apparently do this very effectively. Some have orientation programmes, buddy systems, peer support programmes, and so on, while others try to link the students’ families with local support services. Some schools develop an Individual Education Programme (IEP) for each new student, paying particular attention to any specific learning or social needs identified in an initial assessment¹⁵.

Reflecting the concerns of their members, the national education sector organisations have recently started to take a strong interest in the issues of “transience”—in particular, its implications for student achievement and school resourcing. A report presented at the 1999 annual meeting of NZEI Te Riu Roa, made the following recommendations:

- When a school enrolls a student who has previously attended two or more schools, they should assess the student’s learning needs as soon as practicable, and apply for extra teacher aide time to support the student to settle in as quickly as possible.

¹² This report used the term “turnover”, not “transience” (although it appears to deal with what other reports refer to as “transience”). The report doesn’t specify how “turnover” was defined, nor does it tell us how the turnover figures it quotes were arrived at. Apart from a reference to areas with low-cost rental accommodation (p. 13), the report doesn’t mention the association (in international research) between high turnover and low income.

¹³ The report doesn’t distinguish between within-year movement and beginning or end-of-year movement.

¹⁴ It is worth pointing out here that *schools* with high student turnover are not necessarily populated by *students* who have moved many times—these two separate questions are often conflated.

¹⁵ See Education Review Office (1997), pp. 12–14.

- An independent research programme should be set up to establish the size of the transience problem.
- The Ministry of Education should set up a national database for tracking frequent movers.
- The Ministry should also set aside a resource fund that schools could apply to for immediate assistance in meeting the needs of students who are moving frequently¹⁶.

It is interesting to note that, of these four recommendations, one is for schools to address, while the other three all have national resourcing implications. This probably accurately reflects the concerns expressed by NZEI's membership.

These two reports make it clear that educators are concerned about students who change schools frequently. This issue seems to be of particular concern to teachers and principals in primary schools, and resourcing issues appear to underpin at least some of this concern. However, very little New Zealand research has focused directly on this issue. There have been a few studies by people who are—or were—primary school principals, and some information has recently been collected as part of wider surveys of current issues for schools. What we know as a result of this work is summarised in the following section.

Measuring movement

New Zealanders are, on average, a highly mobile people. The 2001 Census reported that 20–22 percent of all New Zealand primary-aged children had moved house in the 12 months immediately prior to census night. However, from other studies, it appears that this national figure masks the fact that residential movement rates are not evenly distributed across all ethnic and income groups, or across all regions. If this is the case, then it is clear that some schools will have more student movement than others.

In 2000, Murray Neighbour (a Whangarei primary school principal) was awarded a grant to travel to the USA, the UK, and Australia to study “transience” in these countries. He reports the results of this study in Neighbour (2001). The following year, he analysed data collected by the New Zealand Principals' Federation¹⁷ in their November 2001 national survey¹⁷ of all primary and intermediate schools, with the aim of establishing some New Zealand figures for student transience. On the basis of data provided by 795 schools, he calculated each school's percent roll turnover and its transience.

For “roll turnover” (percent) Neighbour used the formula:

Figure 1 **Neighbour's formula for calculating “roll turnover”**

$\frac{[\text{no. of enrolments during the year}] + [\text{no. of withdrawals}]}{\text{the school's total roll}} \times 100$
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¹⁶ See Recommendations 2.9–2.10 of NZEI Te Riu Roa (1999).

¹⁷ The New Zealand Principals' Federation is the national organisation for primary school principals.

For “transience” (percent) Neighbour used the formula:

Figure 2 Neighbour’s formula for calculating school “transience”

$$\frac{[\text{no. of enrolments}] - [\text{new entrants}] + [\text{no. of withdrawals}] - [\text{no. of Year 6/8 graduates}] \times 100}{\text{the school's total roll}}$$

Neighbour’s “roll turnover” formula includes *all* students who enrol in or depart from a school in the year surveyed. However, his “transience” formula, on the other hand, is an attempt to separate “normal” movement from “non-standard” movement. It does this by excluding students who are starting school for the first time, and those who are graduating to the next level of education—that is, students who are moving between schools in the normal or expected way.

On the basis of the data provided by the principals who responded to the survey, Neighbour found average roll turnover to be about 43 percent and average school transience to be about 30 percent. An NZCER team later recalculated his figures using the same data. Their figures were very similar: 43.7 percent for roll turnover and 29.6 percent for transience. However, this team expressed some reservations about the quality of the original data: for example, it was clear that the questions had not been understood in the same way by all respondents (see Hodgen & Wylie, 2002).

Neighbour analysed roll turnover and transience rates in schools of different type, size, and decile rating, and in schools in different regions of New Zealand. The most obvious trend was that schools in poorer areas have much higher rates of roll turnover *and* transience. The decile 1 schools in Neighbour’s study had, on average, 57 percent roll turnover and 43 percent transience, while the decile 10 schools averaged 36 percent turnover and 23 percent transience.

Another recent New Zealand study (Lee, 2000) also collected data on interschool movement. Lee used information obtained from 10 Auckland intermediate schools, with a combined roll of 5,124 students. Five were decile 1 schools and five were decile 10 schools. She calculated the roll turnover for each of the 10 schools using the first of the two formulae cited above (that is, the one that does *not* factor out the school’s new entrants or its “natural” graduates). The average turnover in the five decile 1 schools was 77 percent (one school had a turnover of nearly 98 percent), while in the decile 10 schools it was 64 percent. However, it has to be said, because the schools surveyed were all intermediates (offering a 2-year programme) a turnover rate of 50 percent per year would be completely normal. The above figures should be interpreted in light of this.

Johnson (2002), in a study of interschool movement in South Auckland primary schools, reported similar patterns. Roll data from 59 schools (covering 85 percent of all South Auckland primary-aged children) were collected and school transience rates were calculated (for different areas of South Auckland) using the formula:

$$\text{Transience (percent)} = \frac{\text{enrolments during the year} - \text{increase in school roll}}{\text{average school roll for the year}}$$

This formula is different from the two used in the studies reported in Neighbour (2001) and Lee (2000): however it clearly measures roll *turnover*—as opposed to “transience” (as Neighbour defined it). Johnson’s study found an average turnover rate of 29 percent. The rate was highest in Manurewa (33 percent) and Otara (32 percent), and lowest in Papatoetoe (15 percent). Rates were higher in decile 1 schools. The Mangere rate was the second lowest (24 percent). Mangere is an area with a high number of Housing New Zealand Corporation-owned dwellings and this survey was completed just after the reintroduction of income-related rentals for these units. Johnson suggests that the more affordable rents and greater security of tenure that were the result of this policy could have produced the lower roll turnover rates found in Mangere schools. This trend was not, however, evident in Otara (another area with a high number of HNZA dwellings) in the same period. The survey asked respondents (school principals or their nominee) to rate the extent to which student mobility is a barrier to children’s learning at their school. Eighty-seven percent said that the situation at their school was “very serious” or “quite serious”. Johnson argues that frequent movement is a problem that can be addressed via better, more focused housing policies that allow low-income families to stay in houses they can afford.

Similar patterns of student movement were evident in the 1999 NZCER National Survey data (Wylie, 1999), where the average rate of non-standard movement was 26 percent. However, in the decile 1 schools surveyed, it was 39 percent (15 percent in the decile 10 schools). This survey also found that schools with high student turnover rates (more than 20 percent) were more likely to be low-decile schools (42 percent of low-decile schools as compared to 7 percent of high-decile schools). Turnover rates were also higher in schools with large rolls (over 120).

It is significant that the rates being reported here are a good deal higher than those found in overseas studies. For example, in the UK, Dobson and Henthorne (1999) report national average rates of between 10 and 20 percent for primary schools, and between 8 and 12 percent for secondary schools¹⁸. A recent OFSTED report found a median rate of 11 percent in a study of 3,300 UK primary schools (OFSTED, 2002)¹⁹.

Four years later, the 2003 NZCER National Survey (Wylie & Hodgen, in press) of primary schools asked principals to give the number of children transferring in and out of their school during 2002 (other than new entrants and those graduating to the next level of education) so that the schools’ rates of non-standard movement could be calculated²⁰. The average rate (for 170 schools) was 31 percent (slightly higher than the 1999 result of 26 percent). Thirty-six percent of the primary schools surveyed had rates of less than 20 percent and 38 percent had rates between

¹⁸ It is important to note here that Dobson and Henthorne used the *first* of the two formulae described above to calculate their mobility rates: that is, they used the “roll turnover” measure, not the “transience” measure. Thus their figures represent a count of *all* movement, not just “non-standard” movement. This obviously needs to be taken into account when comparing their mobility rates with those found in the work cited above.

¹⁹ OFSTED (Office for Standards in Education) is the UK equivalent of New Zealand’s Education Review Office.

²⁰ Using the same formula as the one used in Neighbour’s analysis.

20–39 percent. However, 27 percent had rates of 40 percent or more. Just over half the decile 1–2 schools fell into the latter category, compared with 26 percent overall, and 17 percent of the decile 9–10 schools. Full primary schools were the most likely to have high rates (33 percent, compared with 8 percent for intermediates, and 22 percent for contributing schools). Location and school size were not clearly associated with different rates.

In the 2003 survey, principals were asked to estimate the number of “boomerang” students (students who move in and out of the same school within the course of a year, often because they are moving between family members). Most schools had low numbers. The average overall was 4 percent (for 159 schools). However, the primary schools that had high rates of movement at “non-standard” times also tended to have high numbers of “boomerang” students. In half of the high movement schools, more than 10 percent of the students were “boomerang” students. (In comparison, 10 percent of the low movement schools, and 40 percent of the medium movement schools had this proportion of “boomerang” students.) The proportion of students remaining in the same school for the whole of their education at that level was low overall (177 schools). For the schools with high movement rates the mean proportion was 44 percent (s.d. 26.5), in the schools with medium movement rates it was 47 percent (s.d. 23.4), while in the schools with low rates it was 52 percent (s.d. 31.4).

The 2003 National Survey also explored whether or not there are links between high movement rates and other issues, by comparing principals’ views of their resourcing and staffing situation. Their views of the adequacy of their government funding and staffing entitlement, and their views of their ability to fund adequate support staff were looked at, as were the number of provisionally registered teachers they employed, their staff turnover rates, and the difficulties in finding suitable teachers to fill vacancies. Only the last item showed any links. Forty-two percent of principals of schools with medium and high movement rates said they had difficulty finding suitable teachers, compared with 30 percent of principals of schools with low movement rates. This is likely to be related to decile, since the proportion of those who had difficulty fell from 63 percent of principals of decile 1–2 schools to 26 percent of those in decile 9–10 schools.

This survey also looked at whether or not there was a relationship between high levels of movement and whether or not the school had problems engaging its parents and wider community. There was a relationship with respect to the board of trustees and the PTA, but not with respect to classroom assistance, school concerts, outdoor education, fundraising events, and maintenance of the school and its equipment. The two areas where there are difficulties could possibly be seen as indicators of the availability of parents willing to make a long-term or major commitment. The level of overall community support for schools was related to their movement rates, ranging from 77 percent of principals in low movement schools saying it was good or very good, to 58 percent of those in schools with high movement rates. There was no link between the proportions of parents discussing their child’s report with the teacher and the school’s movement rate.

The principals of primary schools with high movement rates were more likely than those with low rates to think they lacked sufficient knowledge about new students (from their early childhood education centre or primary school) to help them make a good transition to their school (31 percent compared with 20 percent of those in schools with low movement rates). The principals of the schools with high movement rates were more likely than the others to be working 60 or more hours a week (51 percent, compared with 33 percent of those with low movement rates). Again, this is likely to also be related to school decile. However, their overall morale appeared to be as high as for other principals.

Similar trends were evident in the secondary schools responding to the 2003 NZCER National Survey (Hipkins & Hodgen, in press). Movement rates of 10 percent or more were more likely in decile 1-2 schools (88 percent of these schools, decreasing to 18 percent of the decile 9-10 schools). There were no clear links between movement rates and school type, location, or size. High movement secondary schools (a rate of 10 percent or more) were slightly more likely to be employing provisionally registered teachers, and to have classes taught by teachers without appropriate curriculum expertise. They were also more likely to have unsatisfactory levels of parent help for outdoor education, school concerts, school and equipment maintenance, and the PTA (but, in contrast to the primary schools, not on the board of trustees). The level of overall community support was somewhat lower: 50 percent compared with 79 percent for the schools with low movement rates. In contrast to primary schools, fewer parents discussed student reports with teachers at the secondary schools with high movement rates. The principals of schools with high movement rates were more likely to say that the information they receive on new students is not sufficient to allow them to help these students make a good transition. These principals were working similar hours to their peers in schools with low movement rates, and their morale levels were similar.

In response to the “boomerang” question, half of the secondary school principals answering this question (n=72) said they had less than 1 percent in this category. However, 5 percent of the respondents said that 5 percent of their roll were “boomerang” students. These students were most likely to be in decile 1 and 2 schools, but small numbers were found in schools in all deciles. An interesting finding from the secondary responses was that students leaving school at Year 11 were, on average, less likely to have completed all their secondary schooling at one school than those leaving in Years 12 or 13. Students in decile 1 and 2 schools were, on average, also less likely to have stayed at the same school for their entire secondary school career. The connection between low-decile schools and frequent movement has been evident in other studies but, in this data, it appears that there is a connection between frequent movement and leaving school early.

These national survey results are consistent with the findings of the work done by Neighbour and Lee. These studies all found high movement rates and low socioeconomic circumstances to be linked. The survey results indicate that there are some effects for schools in terms of parental and community support, both financial and human. Principals in schools with high movement rates point to gaps in the information they receive about new students from other schools.

What does all this tell us?

While this body of data as a whole has some gaps and weaknesses (which, given that this is an emerging field, is to be expected), it does seem to indicate that the rate of movement between schools is very high in some New Zealand communities—quite a lot higher than rates found in overseas studies. Moreover, it appears that many of New Zealand’s very highly mobile students are moving in and out of the same schools—or other schools in the same general area. More robust data are needed, however. We need consistent and comparable measures of school movement and, in addition, we need ways of collecting data that do not rely on the completion of questionnaires by school principals.

Why are some children moving so often?—What principals think

The New Zealand Principals’ Federation survey analysed by Neighbour (2002) asked principals to report on the likely reasons for children’s withdrawal from their school. They could choose from the following: parents seeking employment elsewhere; family break-up or other difficulties; dissatisfaction with the school; housing issues; being chased by other agencies; or “other”, and it was possible to choose more than one reason. Employment, family difficulties, and housing issues were the most commonly reported reasons: however, the pattern differed markedly across the different school types. For example, in the decile 10 schools the most common reason for moving was a change in employment (74 percent), whereas in the decile 1 schools, employment was given as the reason in only 43 percent of cases. Family difficulties (39 percent), housing (47 percent), and being chased by other agencies (14 percent) were, according to the school principals, more important in the decision to move for these families²¹. By way of comparison, in the decile 10 schools, the figures were 4 percent for family difficulties, 12 percent for housing issues, and 1 percent for being chased by other agencies²². In all cases the figure for school dissatisfaction was never above 5 percent (but this could have something to do with the fact that the data were derived from principals’ views). Employment issues appeared to be more important in some regions of New Zealand (most notably Northland, Waikato, Gisborne, Wellington, and Southland), but the question did not distinguish between moving to take up a better job and moving in search of any suitable work.

In Lee’s study principals were also asked for their views on why children moved frequently. According to Lee, the principals of decile 1 schools tended to give “negative” social or economic reasons: the examples she gives are “keeping one step ahead of the law”; “rent increases/searching for cheaper housing”; and/or “moving to live with other members of the whānau”²³. The principals of the decile 10 schools, on the other hand, said that their families were moving because someone in the family had a job promotion, or because they had arrived from

²¹ These figures do not sum to 100 percent because respondents could choose more than one reason.

²² Here we have cited the recalculated figures from the NZCER re-analysis of the NZPF survey.

²³ Lee (2000, p. 30).

overseas²⁴. Interestingly she found that schools with low roll turnovers were more likely to have induction programmes for new students.

If these principals' perceptions are correct, it would seem that children moving in or out of schools in high socioeconomic areas are more likely to be moving as a result of a conscious choice made by their family, a choice that is likely to produce an improvement in the family's circumstances. In contrast, it appears that children moving in and out of schools in lower socioeconomic areas are much more likely to be moving for reasons that are beyond their family's control and less likely to improve the family's circumstances. As we have seen, schools in low-income areas are more likely to have higher movement rates. If these principals are right, and movement in these areas is, more often than not, the result of "unproductive"²⁵ difficulties in people's lives, then it seems likely that the movement *per se* is not the problem. Rather (if there are problems), it could be that frequent movement is simply a surface-level indicator of deeper problems, not a problem in itself. If this is the case, then strategies that focus on movement *per se* are unlikely to be helpful. We return to the question of whether or not frequent movement is a problem for the children concerned later: however, what is clear, from the comments made by school principals, is that frequent movement by students is very definitely a problem for *schools*. The next section looks at what principals had to say about this.

The effect on schools of high mobility

Neighbour interviewed principals of primary schools in high mobility areas in the USA, the UK, Australia, and New Zealand (see Neighbour, 2001, 2003).

The principals Neighbour interviewed said that students who move frequently²⁶ need a great deal of extra support for their learning, which in turn requires the school to set aside extra resources for them. They said that these students are commonly behind their peers academically and often do not function well at school (because their social skills are not well-developed, or because they are disruptive or withdrawn). This causes problems for the schools. Teachers have to work harder (planning, preparing, and revising work for these students), and schools have to commit more teacher aide or counselling time to these students—time which is then not available for other students—those who teachers see as their "natural" cohort. The principals said that moving many children in and out of classes during the year (which can require entire classes to be restructured) is very disruptive to learning programmes and damaging to teacher morale. There are significant administrative costs to the school (processing enrolments and withdrawals, and liaising with other

²⁴ The implication of this is that it is not the movement *per se* that is the problem, but the other factors that are associated with it.

²⁵ "Unproductive" in the sense that it doesn't result in "upward mobility".

²⁶ See comments on p. 10 above. Neighbour's research, like a lot of the work in this area, appears to assume that schools in areas with high movement rates will have large numbers of frequently moving students. This of course doesn't necessarily follow (although it could). A school with a high level of movement could have large numbers of students moving a small number of times. In future research it will be important to clearly distinguish these two different factors.

schools and other agencies that are involved with the child) and considerable tangible costs to the school (losses of books and other resources, for example). In addition, and importantly for the school's reputation, the principals say that the school's performance with respect to any given year group of students is likely to be lower than it should be when the school has more than one or two frequent movers. The principals think it is unfair that they should be held accountable for the performance of students who haven't been in their school very long. They say they don't keep many of these students long enough to "add value" to them, and, when large numbers are involved, many admit that they find this impossible.

Lee also asked her principals for their views on the impact high levels of movement have on schools—with similar results. The principals of intermediate schools with high roll turnover rates all thought this high turnover had a major effect on their school. According to these principals, students who change schools frequently have learning difficulties and behaviour problems, and commonly have difficulty settling in and making new friends. This, they said, was a major extra overhead for the schools concerned. In contrast, however, the principals of schools with a low roll turnover tended to see new students as a good thing—as adding new strengths and varied experiences to the school. Two other recent studies by New Zealand primary school teachers (both resource teachers/literacy) had very similar findings (Carter, 2002; Reinink, 2002).

What schools can do

In his report Neighbour (2002) offers some strategies for schools with large numbers of highly mobile children. On the basis of his interviews with principals, he concludes that the schools that are dealing successfully with this issue are those that have been able to fund specialist lead teachers to develop individual programmes for frequent movers, or an increase in administration staff hours. The employment of a social worker or attendance officer by clusters of schools was said to be an effective strategy, especially where there was good co-ordination between them, the school administration, and the children's teachers. Some schools had a full-time co-ordinator—usually a teacher released from classroom responsibilities. Sometimes this role was combined with other responsibilities—for example, special needs co-ordinator, RTLB (Resource Teacher—learning and behaviour), ORRS (Ongoing and Reviewable Resourcing Schemes) funding co-ordinator, or reading recovery co-ordinator. This co-ordinator role was most effective where the person was not a full-time classroom teacher.

Many schools had induction programmes designed to introduce new students to the school's routines and culture, and many provided new students with a trained buddy or mentor. Others reported success with a range of other strategies: for example, parent tutoring programmes for reading; streaming of maths classes; employing specialist teachers of music or physical education; being involved with the Books in Homes programme; providing worksheets, stationery, pens, and pencils; and/or encouraging students to maintain contact with their previous school. However, the principals said they were not able to demonstrate whether or not these initiatives made a difference to individual children as, in most cases (they said), the children weren't in the schools

long enough for useful information to be collected²⁷. Lee, following suggestions made by school principals in her study area (e.g. Fitchett, 1998; Joseph, 2000) offers a similar set of strategies. The success or otherwise of these strategies clearly needs to be evaluated at a level beyond the individual school.

Neighbour concludes his report by making a strong case for the development of a national electronic database that can track students as they move from school to school. He argues that we need to define “transience” (i.e. problematic frequent movement) and develop standardised ways of measuring roll turnover and “school transience”. Standardised definitions would allow us to establish the extent to which high mobility is a problem, and a national tracking system could improve the efficiency of information exchange between schools. He also makes a strong case for the funding of research looking at the effect of high mobility rates on student learning and staff morale (Neighbour, 2003)²⁸.

Measuring student movement

Unlike Neighbour, Lee (2000) collected data on individual *student* movement. Using the E19/22A cards (commonly known as “Progress” or “Record of Schools Attended” cards) from 2,238 students in 10 Auckland schools, Lee recorded information on the number of schools attended by these students. However, the figures she reports (see below) are taken from only 1,926 of these cards—576 were disregarded because they were obviously incomplete²⁹.

Lee classified students who had attended more than two schools as “transient”. However, given that all the students she studied were Year 8 intermediate school students, and so would, at a minimum, have attended two schools (their primary school and the intermediate they were at when the data were collected), this is a very conservative and not particularly sensitive measure. In addition, it counts *all* moves equally and does not distinguish multiple, frequent moves from single moves.

However, her key findings³⁰ were as follows. In the five decile 1 schools, 48 percent of students had attended only two schools. A further 32 percent had attended three or four. Thus 80 percent of students could be said to have had a relatively stable school career. Of the other 20 percent, 14 percent had attended between five and nine schools, and 6 percent had attended 10 or more. One had attended 17, one 18, one 19, while one had been enrolled in 23 schools in 8 years.

²⁷ However, it could be argued, achievement information is not the only useful data that could be collected here. Schools could, for example, collect information on the children’s engagement in learning, or their relations with peers, and so on—that would be useful in indicating whether or not the school’s strategies were making a difference.

²⁸ See p. 9 of his 2003 paper.

²⁹ This high number of incomplete records is an important piece of data in itself (however this is not discussed in Lee’s study). We found a similarly high proportion of incomplete or completely missing cards in our study.

³⁰ My calculations: the data were presented school by school in her report.

In the five decile 10 schools, 62 percent had attended only two schools, and a further 33 percent had attended three or four. In these schools 95 percent of students had had very little change. However, of the other 5 percent with a less stable background, there were one or two who had been to 10 schools.

Thus Lee's data show that a small percentage of students, in mainly low-decile schools, are moving *very* frequently between schools. As we have already seen, this is clearly an issue for the schools these students attend. Because of the way schools are organised and funded, higher than average student movement has budgetary implications for schools.

In addition, however, it is widely believed that moving frequently impacts negatively on the children involved. Is this in fact the case? *Do* highly mobile children achieve at a lower level than other similar children? *Do* they have behavioural and/or social problems as a result of their frequent moving? The short answer to this is that we just don't know. We don't yet have any direct evidence to support the claim that frequent movement reduces educational attainment, and, to date, there is a lack of New Zealand research that focuses specifically on mobility's impact on student achievement³¹. However, NZCER's Competent Children project provides us with some indicative data.

Does mobility affect children's educational achievement?—The *Competent Children at 12* study

The Competent Children project is a longitudinal study that has been following 500 Wellington region children through their schooling from age near-5³². Data on these children at age 12 have recently been published³³. It shows that at age 12, when the cohort was in Year 7 or 8, 25 percent remained in the school at which they had started. Fifty-one percent were at their second school, and 16 percent were at their third school. Eight percent had attended four or more schools. Because this cohort originated in the Wellington region, which has higher socioeconomic status than others, this general pattern is likely to be more stable than in other parts of the country.

Within this cohort, the children who were most likely to have attended four or more schools over their first 8 years of schooling were from low-income families. School stability was greatest for children who attended decile 9–10 schools. Children who had attended three or more schools were more likely to have attended all low-decile schools, or a mixture of decile schools.

Children's overall current attitudes to school, as reported by parents, were unaffected by the number of schools they had attended in their school career, perhaps because views of their current

³¹ This isn't to say that there isn't a problem: just that there is a lack of New Zealand data that actually show this.

³² Wylie, C., Thompson, J., Hodgen, E., Ferral, H., Lythe, C., and Fijn, T. (2004). *Competent Children at 12*. Wellington: New Zealand Council for Educational Research (available on www.nzcer.org.nz). See also Wylie, Thompson, & Lythe (2001).

The information in this section comes from pp. 232–234 of this report.

³³ August 2004.

teacher were much the same no matter how many schools they had attended. However, the proportion of children who had had teachers they did not like rose from 38 percent of those who had remained in one school since they started, to 61 percent of those who had changed schools. This could mean that difficulties in teacher-child interaction are sometimes behind a change in school. This raises the question of the reasons behind school change. If better relationships and a better learning environment can be established in another school, then school mobility *per se* may not be the issue. Parents of those children who had changed schools more than three or four times were just as satisfied with their child's overall progress as those whose children had stayed at one school, or had made only a single change.

Parental involvement in the school showed mixed associations with the number of times a child had moved schools. On the one hand, parents of those who had attended four or more schools were just as likely as others to have regular talks with their child's teacher, attend parent-teacher interviews, or be a board of trustees or parents' association member. On the other hand, it was the parents of children who had spent their entire school life in a single school who were more likely to undertake voluntary work in classrooms, though their overall rates are not high (14 percent compared with 6 percent of those whose children had shifted school at least once). Other volunteer work around the school was also more likely in this group: 42 percent, decreasing to 21 percent of those whose child had been to four or more schools by the time they were aged 12. Eight percent of this group were employed at their child's school, compared with 2 percent of those whose children had shifted school at least once.

There were a few relationships between the number of schools attended by children and their competency scores. On the whole, children who had attended a single school tended to have higher average scores than others for reading and writing, and children who had attended four or more schools by the age of 12 tended to have lower than average scores for mathematics. These associations remained after taking into account family income and maternal qualification, though they were somewhat diluted. However, high mobility did not disadvantage the Competent Children study children in terms of social and attitudinal competencies, including social skills with peers and perseverance.

Sixty-nine percent of the study children had moved house at least once by the time they were 12³⁴. Twenty-three percent had moved once, 15 percent, twice, 17 percent, three or four times, and 14 percent, five or more times (to a total of 14 shifts for one child). A number of associations were found with children's competency levels at age 12, generally favouring children who had either stayed in the same house, or moved only once or twice in relation to those who had moved five or more times (see the data in Table 1).

³⁴ However we don't know if this means that they also changed *schools*. We also don't know how many changed schools while continuing to live at the same address.

Table 1 Number of times child's family has shifted house since child's birth and children's competencies at age 12

Number of times of family changes of house since birth of child®	None	Once	Twice	3 or 4 times	5 or more times	Prob. Of F-value from ANOVA	Percent variance acct. for
	Mean (n=154)	Mean (n=115)	Mean (n=73)	Mean (n=86)	Mean (n=68)		
Age - 12 competency							
Curiosity	63.8	64.6	63.0	59.3 [^]	56.1	0.018	2.4
Perseverance	71.8	73.9	68.3	65.3 [^]	60.5	0.0003	4.3
Individual Responsibility	76.6	78.0	76.2	71.8 [^]	70.1	0.033	2.1
Social Skills with Peers*	72.0	72.8	71.6	69.9 [^]	65.5	0.014	2.5
Social Skills with Adults*	78.1	76.5	77.3	75.6 [^]	73.7	0.45	0.7
Communication*	71.2	70.5	68.0	68.3 [^]	64.0	0.056	1.9
Mathematics**	54.0	52.6	52.0	51.2	39.9	0.002	3.5
PAT Reading Comprehension	55.4 ^{^^^}	56.4	55.1	53.0 [^]	49.0	0.19	1.3
Burt Word Reading*	76.9	77.6	77.6	79.3	72.2	0.030	2.2
Writing	52.1	52.1	53.0	52.4	47.3	0.006	2.9
Reading Age (yrs, mo)	12.10 [^]	12.11	12.8	12.7 [^]	12.2	0.079	1.7
Logical Problem-Solving*	71.9	69.9	70.7	70.6	66.7	0.033	2.1
Composite Competency*	67.8^{^^^}	67.8	66.7	65.1 ^{^^}	60.4	0.0004	4.2
Composite Cognitive Competency	61.2^{^^^}	60.4	60.5	60.4 [^]	53.6	0.001	3.6
Composite Social & Attitudinal Competency*	72.3	72.7	70.7	68.4 [^]	65.0	0.004	3.0

* In these cases the squared model was a better fit. ** In this case the square-root model was a better fit.

[^] One fewer in this mean.

^{^^} Two fewer in this mean.

^{^^^} Three fewer in this mean.

The mean scores are percentages, not raw scores. The highest scores for each competency are in **bold** type, the lowest in *italics*.

Some associations became indicative or not notable once maternal qualification and family income were taken into account, suggesting that family resources may be protective for multiple shifts of residence. Significant contrasts remained (between those who had not moved or moved only once, and those who had moved five or more times) for Mathematics, for Perseverance, and for Social Skills with Peers.

These findings tell us that the relationship between mobility and school achievement is not a simple one. In this study there is an apparent connection between stability and higher reading, writing, and mathematics scores, and a possible link between high mobility and lower scores in mathematics and some social skills. These patterns are, in general terms, consistent with the findings of international research in this area—outlined in the next section.

International research on mobility and education

Concern about the effect of frequent movement on children's education is not a specifically New Zealand issue³⁵. Nor is it a new issue³⁶. However, it would appear that it is an issue which has only recently come to the attention of policymakers and researchers in the education sector.

Recently, UK researchers have explored mobility patterns in schools, the factors that produce high levels of mobility in schools, and various initiatives designed to address the effects of student mobility on schools and students (see, for example, Mortimore et al., 1988; Tymms & Henderson, 1995; Demie, 1998; Dobson & Henthorne, 1999; Mortimore, Sammons, Stoll & Ecob, 1988; Yang, Goldstein, Roth & Hill, 1999). The most comprehensive UK study of pupil mobility and schools is reported in Dobson, Henthorne, and Lynas (2000). The first part of this project involved a national survey of mobility rates in schools, in which it was found that average rates across the UK were between 10 and 20 percent for primary schools, and between 8 and 12 percent for secondary schools³⁷. The second part of this study was a more in-depth look at the trends in six case study schools. One of these schools had a mobility rate of 81 percent, a second had a rate of 57 percent, and a third of 35 percent (1998–1999 data)³⁸. The following are some of the main findings of the project overall. Most British schools have some mobility: however, there are large differences between schools (they found a range from nil to 175 percent per annum). Schools with mobility rates above 20 percent are in a minority, but in London and other large urban areas, between a quarter and a half of all schools have rates above 20 percent. In the UK, rates of over 30 percent are regarded as very high. The study found high mobility rates to be linked with certain kinds of residential movement: in particular they are common in areas with a lot of low-quality and/or short-term accommodation, and in areas where there are military facilities. High mobility schools, other than those with a high proportion of armed forces children, tend to have high numbers of disadvantaged mobile *and* non-mobile children. Highly mobile children often have attendance problems, and high levels of student movement were found to have adverse effects on schools (and their LEAs)³⁹. In some areas, home-school conflict⁴⁰ was found to be a reason for high mobility.

³⁵ Although, as mentioned earlier, some parts of New Zealand appear to have mobility rates that are very high by international standards.

³⁶ Dobson, Henthorne, and Lynas (2000) quote from reports written 30–40 years ago identifying pupil mobility as an issue.

³⁷ This data was compiled from 66 LEAs.

³⁸ See footnote 18 above. Dobson and Henthorne used the roll turnover (not the transience) formula to calculate their mobility rates. This needs to be taken into account when interpreting these figures.

³⁹ LEAs are Local Education Authorities—the UK term for a schooling “district” or administrative unit.

⁴⁰ This is an umbrella term for situations where parents are dissatisfied with the school *and* where children have been suspended from the school.

From this research and the earlier work, it would appear that high mobility rates are common in the UK. Rates are higher in primary schools than in secondary schools⁴¹, and they are very high in a small number of areas. These trends are broadly similar to those identified in the New Zealand work described in the previous section. However, the rates are in general significantly lower than those in New Zealand schools (given that “turnover”, not “transience”, was being measured).

However, in the UK as in New Zealand, very little research has specifically focused on the effects—if any—of frequent movement on educational achievement. A number of broadly focused studies have looked at the influence of a range of contextual factors on educational achievement, and found mobility to be one among many negative influences (see, for example, Alston, 2000; Strand, 2000). US research has produced similar findings (see, for example, Ingersoll, Scamman, & Eckerling, 1989; Lash & Kirkpatrick, 1990, 1994; Alexander, Entwisle, & Dauber, 1996; Nelson, Simoni, & Adelman, 1996; Vail, 1996; Williams, 1996; Kendall, 1997; Hanna, 2003; Kerbow, Azcoitia, & Buell, 2003; Rumberger, 2003).

In one of the few studies that directly examines the relationship between mobility and achievement, Demie (2002), investigated the educational performance of about 5,000 primary- and secondary-aged students⁴² in an inner London LEA, 21 percent of whom had been identified as mobile⁴³. The average performance of mobile students was found to be substantially below that of non-mobile students, sometimes by as much as 50 percent. This study found that high levels of student mobility depress the overall performance of schools, and that only a small minority of schools had similar achievement rates for mobile and non-mobile pupils⁴⁴. However, it also found strong links between high mobility and *other* factors—low income, poor accommodation, family break-up, and recent immigration to the country. In another study, Entwisle, Alexander, and Olson (1997), reporting on a large-scale study of children’s first few years at school in a Baltimore community, found clear links between low income, frequent movement, and reduced school performance. However, other studies show that many frequent movers *begin* school with low achievement levels (see, for example, Entwisle, Alexander, & Olson, 1997; Mantzicopoulos & Knutson, 2000; Strand, 2000).

⁴¹ Some researchers argue that this is because families with young children tend to move around more often, but settle as the children get older. Others point out that this is because the most frequently moving students are likely to have dropped out of the system before they reach secondary school. This is clearly an area for further investigation.

⁴² In three cohorts (one of 2,403 at Key Stage Two, a second of 1,479 at Key Stage Three, and a third of 1,225 at GCSE level).

⁴³ In this study, “pupil mobility” was defined as: “a child joining a school at a point other than at the start of the key stage” (p. 199): that is, a child who fits this definition is “mobile”, and all others are “non-mobile”. School mobility rates were calculated by dividing the number of pupils joining school other than in the first year of a key stage by the total number of pupils taking the end-of-key-stage test, and multiplying this by 100.

⁴⁴ Where this was the case, it didn’t seem to be a school effect. Rather, anecdotal evidence suggests that this occurred where schools were admitting particularly able mobile pupils.

Thus it seems that low income, high mobility, and reduced educational achievement are linked. This link is not, however, a straightforward one. It is not possible to conclude from this that high mobility lowers educational achievement, and, as some researchers have found, it is very difficult to disentangle the effect of frequent movement from the large number of other factors associated with low income that could influence educational attainment. Two researchers have made a strong case for exercising caution here. In a study of the links between mobility and attainment in 6,000 students in an English urban education authority, Strand (2002) found mobility in the early years of schooling to be strongly associated with significantly lower levels of attainment. However, when he took into account other factors (low income, ESOL, absence rates, and existing learning needs), the effect of mobility, while still statistically significant, was substantially reduced. He found that there was a significant effect on progress in mathematics only, and that, even there, the impact was low relative to other factors. Wright (1999), in a meta-analysis of studies of the relationship between student mobility and achievement in the USA, found that other “risk factors” (family income and ethnic minority status) had more influence, and that mobility is often confounded with these other factors.

While it is clear that schools are adversely affected when student movement is high, and high levels of mobility are associated with reduced educational attainment in low-income areas, it is far from clear that high mobility, on its own, is a negative influence on children’s educational progress. However, research reports commonly include a section on how schools, education authorities, and communities can mitigate the effects of high mobility on student achievement. Schools are encouraged to develop programmes that aim to build strong school-community links and/or to increase awareness of the impact of frequent movement on children (through parent brochures and/or support materials for teachers and school administrators). Communities and local government authorities are enjoined to “enhance stability”—through programmes designed to provide adequate and affordable housing, deal with poverty, support families, and so on. Two widely cited examples of such programmes are the Staying Put programme in Chicago (Kerbow et al., 2003), or the Langley Park programme in Washington DC (Hanna, 2003). Entwisle, Alexander, and Olson (1997) point out that, while moving frequently clearly adds to the problems already faced by poor children, it differs from some of the other problems in that it is an issue that schools *can* help with. They suggest a number of strategies schools could adopt to help transferring children adapt—including allowing them to commute to their old school until the end of the school year; providing extra counselling; educating parents about the hazards of within-year moves; and giving parents strategies for supporting their children as they make the transition. Other researchers make very similar suggestions (see, for example, Neuman, 1987; Lash & Kirkpatrick, 1990; Schuler, 1990; Bruno & Isken, 1996; Kerbow, 1996; Tucker, Marx, & Long, 1998; Dobson et al., 2000; OFSTED, 2002).

Fisher, Matthews, Stafford, Nakagawa, and Durante (2002) reviewed a number of school-based programmes designed to address the challenges of high mobility, and collected data on the perceived effectiveness of these programmes. They found that although many schools in the US are making strong efforts to build community links with the families of highly mobile children,

these attempts have not translated into greater involvement by these families. They argue that schools cannot be expected to do this alone. If they are to do this work successfully, they need support from the wider community, in partnership with government, at the “meso-system” level⁴⁵. Another similar study (Nakagawa, Stafford, Fisher, & Matthews, 2002) drew similar conclusions.

On the basis of all this it seems that frequent movement can affect a child’s educational achievement but, like a lot of things in education, the relationship between the two is not at all straightforward. Moving frequently is regarded negatively by educationists, largely because of its links with lowered educational achievement. However, schools are highly complex organisations that are, for all sorts of reasons, set up to deliver their services to *groups* of students. Because they are set up in this way, it is not easy for them to deal with children who don’t fit with conventional patterns, and these children (or, more properly, their families) tend to be seen as problematic. However, it could be argued that, because schools are organised in the way they are, these children are *produced* as problematic and/or deficient—that is, that it is the schooling *system* that needs to change, not individual children. We return to these ideas in the final section of this report. However, the next section describes the first phase of our investigation of the links between mobility, schools, and community attachment.

⁴⁵ The meso-system is a term developed by the psychologist Bronfenbrenner (1979) to describe the inter-relationships between different microsystems—such as family-school or school-community—that affect children’s development. Bronfenbrenner’s “ecological” model of human development is currently very influential among educationists.

3. The NZCER study

Background

As outlined in the previous section, students who move schools frequently are problematic for educationists. We know that high levels of student movement are linked with lower achievement in low-income areas, and that they are seen by schools as a significant burden. However, we don't know whether frequent movement has an effect on student achievement on its own, or whether it is one factor among many that together produce an effect. We also don't know very much about exactly how frequent movement might impact on achievement (if it does), nor do we know exactly why it seems to loom so large as an issue for schools.

In the education module of the Building Attachment project we set out to answer the following research questions:

1. What do individual student and school mobility rates reveal about patterns of familial attachment to the community?
2. What impact does individual student mobility have on student learning?
3. What impact does student mobility have on a school's ability to meet the educational needs of its more stable students?
4. What impact does student mobility have on a school's ability to contribute to its community's social capital?
5. Can any differences in student mobility rates between schools serving comparable communities be ascribed to differences in school policy and culture?
6. Does school movement contribute to variations in local housing and labour markets or variations in the social and cultural capital of one community compared to another—or does it simply reflect them?
7. Do school mobility rates change over time? Are any changes related to changes in policy or culture at individual schools, or are they related to community changes (e.g. changes in the local housing or labour market, or changes in the community's social and cultural capital)?

The first phase of the research project was designed to produce some baseline data. In order to answer these questions we need to know what school movement rates are in each of the four case study areas. We need information on how often students are moving in the four areas, whether or not this movement is problematic for schools, and whether or not there are links between frequent movement and reduced educational achievement. The data we have collected give us preliminary answers to questions 1, 2, 3, 4, and 6. In the second and third phases of the project we plan to

collect data that will build on these preliminary results, and allow us to address questions 5 (differences between schools) and 7 (the longitudinal dimension of the project).

Methodology and results

We collected data on student movement, achievement, and attendance, and interviewed principals in 20 schools in the four case study areas. In the two areas where there are six or fewer schools we planned to visit all of them. In the other two areas we visited a sample of six schools—chosen to represent the range of school types in the area.

In the Waitangirua/Cannons Creek area there are 11 schools altogether. We visited six—one full primary (Years 1–8), two contributing primaries (Years 1–6), one intermediate (Years 7–8), and one secondary school (Years 9–13). All of the schools we visited are decile 1 schools. In the Amuri district there are only three schools—two contributing primaries and one area school (Years 1–13). We visited all three of these schools. These three schools currently have decile ratings of 7, 9, and 9. We also visited a fourth school (a full primary with a decile rating of 5) that is just outside the Amuri area⁴⁶. Data from all four schools have been included in our results. The Opotiki district (a very large area) has 16 schools. We chose six of these schools—two full primary schools, two kura kaupapa Māori, one area school, and one secondary school. All are decile 1 schools except one, which is decile 2. Kawerau has six schools. We planned to visit all six, but one school did not want to participate in the project and one principal was hospitalised the day before the planned interview and subsequently withdrew from the project for health reasons. Data were gathered from four schools—three contributing primary schools and one secondary school. All are decile 1 schools.

The principal of each school was informally invited to participate in the project via a telephone call or email message. If they were interested we sent them a formal letter setting out exactly what we proposed to do. With this letter we sent them an information sheet about the wider project and a consent form⁴⁷. After they had signed the consent form and returned it to us, we contacted them again to arrange a convenient time for us to visit the school. We visited all the schools during October and November 2003. We interviewed the principal⁴⁸ and collected data from the following school records:

1. The school's attendance register and its records of all enrolments and withdrawals during 2002. This information allowed us to calculate the school's non-standard movement rate, and

⁴⁶ This wasn't part of our original plan: however, we did this on the recommendation of one of the other principals in the area.

⁴⁷ See Appendix 1 for a copy of the letter and consent form that were sent to schools, and Appendix 2 for a copy of the information sheet.

⁴⁸ See Appendix 3 for a copy of the principal interview schedule.

also to compare the attendance patterns of children who had moved frequently with those who had not.

2. The “Record of Schools Attended” or “Progress” cards (Form E19/22A) of all students in Years 5, 8, and 11⁴⁹. The information on these cards allowed us to work out which students in the school are highly mobile and what proportion of the school’s roll they form. We noted each student’s age, their gender, and their ethnicity, and collected information on their attendance during 2003.
3. The achievement records for all students in Years 5, 8, and 11. For the Year 5 and 8 cohort (primary) we collected the Progressive Achievement Test scores (for reading comprehension, reading vocabulary, and mathematics), the student’s estimated reading age, and their mathematics level. For the Year 11 cohort (secondary) we collected their 2003 National Certificate of Educational Achievement (NCEA) results.

All the interviews were tape-recorded and the tapes transcribed. All other information was entered on spreadsheets.

How often are students moving in or out of the case study schools?

As outlined in the previous section, there is currently no official or nationally established method of measuring the rate of non-standard movement in and out of a school (as distinct from overall roll turnover).

We used information from the 2002 attendance registers and the second of the two formulae suggested in Neighbour’s work (see p. 13 above):

that is:

$$\frac{[\text{total no. of enrolments}] - [\text{new entrants}] + [\text{total no. of withdrawals}] - [\text{no. of graduates}] \times 100}{\text{school's total roll}}$$

to calculate each school’s overall rate of “non-standard” movement.

Aggregating the figures for the schools in each case study area we obtained the following results:

⁴⁹ We chose Years 5, 8, and 11 as our sample cohorts: Year 5 is near the end of primary school; Year 8 to represent the “middle school” years and the end of intermediate; and Year 11 to represent the secondary school years. Students begin to leave school from Year 11 and they participate in nationally recognised forms of assessment (Level 1 of the NCEA).

Table 2 School movement rates in the four case study areas (2002)

	Mean roll movement %	Range	
		Highest %	Lowest %
Waitangirua/Cannons Creek (six schools)	31	44	12
Amuri (four schools)	26	44	9
Opotiki (five schools) ⁵⁰	36	45	23
Kawerau (four schools)	40	45	35

The Waitangirua/Cannons Creek result includes one intermediate school (unlike the other three areas). Because students only attend intermediate for 2 years, and we subtracted all those who entered the school at the beginning of Year 7 as new entrants, this result is quite a lot lower than that obtained for other schools in this area. Taking the figures for the three mainstream primary schools and the secondary school gives the Waitangirua/Cannons Creek schools area a mean non-standard movement rate of closer to 40 percent.

In the Amuri area there was also quite a range. One school had a movement rate of 44 percent, two others were between 20 and 30 percent, while the fourth had only 9 percent. There was a more consistent pattern in the schools in the Opotiki and Kawerau areas—particularly in Kawerau.

Overall movement rates in the Waitangirua/Cannons Creek, Opotiki, and Kawerau schools are similar to those found in schools in other low-decile areas—31, 36, and 40 percent, compared to 30 percent (Neighbour’s study), 39 percent (the 1999 NZCER National Survey), and 26 percent (the 2003 NZCER National Survey). The Amuri schools, on the other hand, had an average movement rate of 26 percent, which is higher than that found in high-decile schools in other studies (15 percent in the 1999 NZCER National Survey, and 23 percent in Neighbour’s study). Secondary school movement rates were on average lower than the rates found in primary schools⁵¹.

We also calculated the roll turnover for each school (using the 2002 figures)—so that we could compare the results with figures obtained in other studies. The results were as follows:

⁵⁰ The results reported here are from five schools—not six—as one school did not give us access to their records.

⁵¹ Anecdotally (we have no direct evidence of this) this difference is likely to be because the most highly mobile students are, by secondary school age, no longer “in the system”.

Table 3 **Roll turnover rates in the four case study areas (2002)**

	Mean roll turnover %
Waitangirua/Cannons Creek (six schools)	79
Amuri (four schools)	52
Opotiki (five schools) ⁵²	65
Kawerau (four schools)	73

Comparing these results to those obtained in other New Zealand studies, the roll turnover rates in the Waitangirua/Cannons Creek, Opotiki, and Kawerau schools are higher than those found in decile 1 schools in other areas (57 percent in Neighbour’s study). The Waitangirua/Cannons Creek figure is inflated by the presence of the intermediate school. (Because it is a 2-year school, 50 percent of its students “naturally” leave at the end of each year, and so it inevitably has a high turnover rate). The turnover figure for Waitangirua/Cannons Creek if the intermediate school data are removed is 73 percent.

The mean roll turnover in Amuri schools, like the non-standard movement rate, is higher than in other high-decile schools (36 percent in Neighbour’s study). However, like the movement rate, there was wide variation between the schools. One school had a turnover of 36 percent, but two others had annual turnovers in the region of 66 percent.

How many individuals in each school are frequent movers?

We used the Record of Schools Attended⁵³ cards to collect information on the total number of schools every student in Years 5, 8, or 11 at the study schools had attended during their school career⁵⁴. We did this for two reasons: first, we wanted to find out how often some children are moving, and second, we wanted to establish the proportion of frequent movers in each school. We had to decide how we were going to differentiate the frequent movers from the others. As with rates of movement in schools, there is no generally agreed on way of doing this. As noted earlier, there are many different definitions in the literature. We decided to look at movement patterns over the students’ entire school career (rather than year by year), and to define frequent movement in the following way:

If a child is in Years 1–6 at a primary school and has stayed in the same house, they would usually have only attended *one* school. If they are at an intermediate school (Years 7–8), they would

⁵² The results reported here are from five schools—not six—as one school did not give us access to their records.

⁵³ The Record of Schools Attended cards are officially known as E19/22A cards, but commonly referred to as “progress” cards.

⁵⁴ We also noted the names of their previous schools—because we plan to investigate whether or not there are community patterns of movement between schools: however, we have not yet done this.

usually have attended *two*, and if they are at secondary school (Years 9–13) they would usually have attended two or three⁵⁵ different schools during their school careers. Taking these figures as a baseline (n), we defined “stable” individuals as those who had attended n or n+1 schools, and frequent movers as those who had attended **n+2** or more schools. In other words, if a child had been to a total number of schools that was **two or more** than the baseline figure for their year, then we classified them as a frequent mover.

Table 4 **How we defined “frequent movers”**

	Baseline number (n)	Frequent movers (n+2)
Year 5 (primary)	1	3
Year 8 (intermediate, composite, full primary, or kura kaupapa Māori)	2	4
Year 11 (secondary)	3	5

It is important to say here that a large number of the Record of Schools Attended cards we looked at had obvious inaccuracies. There do not seem to be accepted conventions for entering the entry and withdrawal dates. Many children had gaps when it appeared they were not attending any school, attendance information is often omitted, and many children have no card at all. In three of the four secondary schools we visited, ROSA cards were held for 52 percent, 49 percent, and 64 percent of all Year 11 students who were currently enrolled and attending the school. Primary school records were better on the whole: however in one region, of the four primary schools we visited, in two a quarter of their students had no cards, in one there were no cards for 30 percent of the students, and the other held cards for only half of their students (for the year groups we looked at). As a consequence, the data presented in the tables below should be treated with caution (as in some cases it represents information from only about half of all the students in that year group).

The tables below show the numbers and proportions of frequent movers present in the study schools for each of the four areas.

⁵⁵ Depending on whether or not they went to an intermediate or a full primary school.

Table 5 Number of frequent movers in Waitangirua/Cannons Creek schools in 2003

	No of frequent movers/ total no of students in year group ⁵⁶	Percent of total number of students in year
Year 5 (attended 3 or more schools (4 schools) ⁵⁷)	<u>30</u> 117	27
Year 8 (attended 4 or more schools (3 schools))	<u>50</u> 201	25
Year 11 (attended 5 or more schools (1 school))	<u>13</u> 82	16
Total for area (6 schools)	<u>93</u> 400	23

Table 6 Number of schools attended by Waitangirua/Cannons Creek frequent movers in 2003

No of schools attended	3	4	5	6	7	8	9	10	11	12	13	14	15	Total no of frequent movers
Year 5	11	7	5	3	2	1	1	-	-	-	-	-	-	30
Year 8		26	11	3	4	1	1	3	-	-	-	-	1	50
Year 11			7	1	2	1	-	-	-	-	-	1	1	13

In the Waitangirua/Cannons Creek primary schools, about a quarter of the students are frequent movers (as we have defined them). At the secondary school, the proportion is lower.

Of the 30 Year 5 frequent movers, 18 had been to three or four different schools. However, two had been to seven, one to eight, and one to nine different schools in 5 years. Of the 50 frequent movers in Year 8, about half had been to four different schools. Four had been to seven, one to eight, one to nine, and three had been to 10 different schools in 8 years. Of the Year 11 students, one had been to 14 schools and another to 15 different schools during their 11 years of schooling.

Some of these students were moving in and out of the same schools—sometimes returning to a school they had previously been enrolled at, and sometimes moving from one school to another school within the Porirua basin⁵⁸. The 30 Year 5 frequent movers made a total of 103 moves. Of

⁵⁶ For whom we had full records (see above comment about the large number of missing Progress cards). This note applies to data in this column for all four case study areas.

⁵⁷ NB: The total “number of schools” in this column is not the same as the number of schools in the sample because some schools have more than one of the three year groups we looked at.

⁵⁸ These students are sometimes referred to in the literature and by teachers as “boomerang” students. Note that the Porirua basin is an area that is wider than the Waitangirua/Cannons Creek case study area—but within 10–15 minutes drive.

these, 10 involved the school they were currently enrolled at, and 28 involved another school in the Porirua East area. One Year 5 child had been to seven different schools, all in the Porirua East area. Of the 182 moves made by the 50 Year 8 frequent movers, four involved the school they were currently enrolled at, and 74 involved another school in the Porirua East area⁵⁹. Of the 13 Year 11 frequent movers, one had moved away and then returned to their current school: however, another 20 moves (out of a total of 68) by these students involved other schools in the Porirua area⁶⁰.

Table 7 Number of frequent movers in Amuri schools in 2003

	No of frequent movers/ total no of students in year group	Percent of total number of students in year
Year 5		
(attended 3 or more schools)	<u>11</u>	18
(4 schools)	60	
Year 8		
(attended 4 or more schools)	<u>12</u>	25
(2 schools)	48	
Year 11		
(attended 5 or more schools)	<u>2</u>	10
(1 school)	20	
Total for area	<u>25</u>	20
(6 schools)	128	

Table 8 Number of schools attended by Amuri frequent movers in 2003

No of schools attended	3	4	5	6	7	8	9	10	11	12	13	14	15	Total no of frequent movers
Year 5	2	4	3	-	2	-	-	-	-	-	-	-	-	11
Year 8		3	5	1	1	1	1	-	-	-	-	-	-	12
Year 11			-	1	-	1	-	-	-	-	-	-	-	2

In the Amuri schools, about one-sixth of Year 5 children, a quarter of Year 8 children, and about a tenth of Year 11 students are frequent movers.

Of the 11 Year 5 frequent movers, six had been to three or four different schools. Three had been to five, and two to seven different schools in 5 years. Of the 12 Year 8 frequent movers, eight had been to four or five different schools. One had been to six, one to seven, one to eight, and one to nine different schools in 8 years. Of the Year 11 students, one had been to six schools, and one to eight.

⁵⁹ This figure does not include “normal” moves—from primary school to intermediate.

⁶⁰ As above: not counting their first enrolment at secondary school.

The pattern of movement in this area is very different from that in the other three areas. There is very little movement between schools *within* the area: almost all movements are to or from schools in all parts of New Zealand. Of all the moves made by the frequent movers (a total of 241 for all three year groups), only nine were to or from another school in the Amuri District, and only one involved a school the student had been to before.

Table 9 Number of frequent movers in Opotiki schools in 2003

	No of frequent movers/ total no of students in year group	Percent of total number of students in year
Year 5 (attended 3 or more schools) (3 schools)	<u>10</u> 53	19
Year 8 (attended 4 or more schools) (4 schools)	<u>14</u> 57	25
Year 11 (attended 5 or more schools) (2 schools)	<u>11</u> 125	9
Total for area (6 schools)	<u>35</u> 235	15

Table 10 Number of schools attended by Opotiki frequent movers in 2003

No of schools attended	3	4	5	6	7	8	9	10	11	12	13	14	15	Total number of frequent movers
Year 5	4	2	2	-	1	1	-	-	-	-	-	-	-	10
Year 8		3	2	4	3	1	1	-	-	-	-	-	-	14
Year 11			3	5	-	2	-	1	-	-	-	1	1	11

In the Opotiki schools, 20–25 percent of the students in the primary schools are frequent movers, but, as in the other areas, there are fewer in the secondary schools.

Of the 10 Year 5 frequent movers, six had been to three or four different schools. One had been to seven schools, and one to eight different schools in 5 years. Of the 14 Year 8 frequent movers, three had been to four different schools. Two had been to five, four had been to six, three to seven, one to eight, and one to nine different schools in 8 years. Of the Year 11 students, one had been to 14 schools and another to 15 different schools during their 11 years of schooling.

A great deal of this movement is within the Opotiki District, often backwards and forwards between the same schools. Of the 10 Year 5 frequent movers, six had been enrolled at their current school at least once before, and most of their other moves had been within the Opotiki

District⁶¹. Of the 82 moves made by the 14 Year 8 frequent movers, five involved schools in the District and 11 involved the school they were currently enrolled in (six of these 11 moves involved the same three children). “Boomerang” students appeared to be less frequent at the secondary schools. Of the 11 Year 11 frequent movers, two had been enrolled in their current school at least once before, and three had made moves involving other schools in the Opotiki District⁶².

Table 11 **Number of frequent movers in Kawerau schools in 2003**

	No frequent movers/ total no of students in year group	Percent of total number of students in year
Year 5 (attended 3 or more schools) (3 schools)	<u>30</u> 107	28
*Year 8	-	-
Year 11 (attended 5 or more schools) (1 school)	<u>13</u> 97	13
Total for area (4 schools)	<u>43</u> 204	21

*NB we don't have data for Year 8 because the Year 8 school didn't want to participate in the project.

Table 12 **Number of schools attended by Kawerau frequent movers in 2003**

No of schools attended	3	4	5	6	7	8	9	10	11	12	13	14	15	Total no of frequent movers
Year 5	14	8	2	6	-	-	-	-	-	-	-	-	-	30
*Year 8														
Year 11			5	2	1	4	-	1	-	-	-	-	-	13

*NB we don't have data for Year 8 because the Year 8 school didn't want to participate in the project.

About a third of the Kawerau Year 5 cohort were frequent movers and about an eighth of the Year 11 cohort. Of the 30 Year 5 frequent movers, 22 had been to three or four different schools. Two had been to five schools, and six had been to six different schools in 5 years. Of the Year 11 students, four had been to eight schools and one to 10 different schools in 11 years.

As was the case in the Opotiki schools, a lot of this movement seems to take place within the district, often between the same schools. Of the 95 moves made by the 30 Year 5 frequent movers, 29 involved schools in Kawerau, and 12 involved their current school. The 13 Year 11 frequent movers had made 73 moves altogether, 45 of which had involved a school in the Kawerau area. None had left and come back to their current school.

⁶¹ The Opotiki Year 5 frequent movers had made a total of 35 moves.

⁶² These 11 students had moved a total of 124 times between them.

How do these figures compare to the findings of other studies?

The only other study involving the collection of information from the Records of Schools Attended cards for a specific cohort of New Zealand school students is the one by Anna Lee. She counted the number of schools attended by 1,926 students at 10 Auckland intermediates, classifying those who had attended three or more schools as “transient”. The table below compares her results with those obtained from the schools in this study⁶³.

Table 13 **Table comparing numbers of Year 8 frequent movers found in this study with those found in Lee (2000)**

	2 schools	3–4 schools	5–9 schools	10+ schools
	%	%	%	%
Lee’s Auckland Year 8s (decile 1 & 10)	48	32	14	6
Waitangirua/Cannons Ck Year 8s (all decile 1)	58	30	10	2
Amuri Year 8s (decile 5–9)	65	16	19	-
Opotiki Year 8s (decile 1 or 2)	66	17	17	-
*Kawerau Year 8s (all decile 1)	-	-	-	-

* No data for Kawerau Year 8s – see note under Tables 11 and 12 above.

From this comparison it would appear that Waitangirua/Cannons Creek has about the same—or slightly fewer—frequent movers than were found in Lee’s study of 10 Auckland intermediate schools overall (five decile 1 and five decile 10). This is interesting because it is highly likely that, in comparison with similar decile Auckland schools, Waitangirua/Cannons Creek schools will have considerably fewer frequent movers⁶⁴. This is consistent with the widely held view (in education circles) of South Auckland as New Zealand’s “problem” area for high student mobility. On the other hand, however, our data show that schools in the Amuri and Opotiki areas, while they have fewer medium-level movers (3–4 schools), have higher proportions of very frequent movers (students who have been to 5–9 schools) than the Auckland schools. However, while these trends are interesting, it has to be remembered that these two studies were small in scale and exploratory. Both have data from only one year in a small number of schools, and should thus be treated cautiously.

In the four case study areas, around a fifth to a quarter of the total number of students in each of the sample year groups appear to be frequent movers—as defined here. A small number of these students are moving very frequently. In three of the four case study areas (Waitangirua/Cannons Creek, Opotiki, and Kawerau), there appears to be a pattern of local circulation (movement between schools in the district—as opposed to movement to or from schools in other parts of New

⁶³ Because we decided to classify as “highly mobile” only those Year 8 students who had attended four or more schools, the figures in this table are different to those elsewhere in this report for Year 8 students because they include those who have attended *three* schools.

⁶⁴ We didn’t disaggregate Lee’s data to check this.

Zealand). This trend has important implications for the local communities. The Amuri data did not follow this pattern. It appears that there is very little movement between schools in this area: most moves involve a shift to or from another completely different part of the country.

Does frequent moving affect a child’s educational performance?

We compared the achievement of the stable students with that of the frequent movers across the different year groups, using PAT⁶⁵ scores and teacher-estimated reading and maths levels for the primary students and NCEA⁶⁶ results for the secondary students. The data we were able to collect were problematic for a number of reasons. Firstly, the overall number of students we had data for in each year group was quite small (for statistical analysis). Secondly, we did not have the same kinds of information for all students (different schools collect different kinds of information), and thirdly, except for the PAT tests, the information we had cannot be standardised. Consequently we had to make a number of decisions about what to use and how to present it. These decisions are explained below.

Primary school achievement information

Our aim was to collect PAT scores for reading vocabulary, reading comprehension (in English), and mathematics for all students in Year 5 and Year 8 at each of the study primary schools. A PAT score for each of the three tests has three parts: “age percentile”, “class percentile”, and “equivalent age measure”. We recorded all of the results collected by the schools. However, not all of the study schools recorded PAT test scores. Of the schools that did, the most commonly recorded score was the “age percentile”. Where we have this standardised data, we have used it first (because scores can meaningfully be compared across different schools). However, the information most commonly recorded in the study schools was, not PAT test scores, but (teacher-estimated) reading age and (teacher-estimated) mathematics level. This made comparison of the results across different schools and across different communities rather difficult. In the sections below, for each area and year group we indicate the data that were available and the proportion of children who were classified as frequent movers. We then present all data for which an adequate number of scores were available.

⁶⁵ Progressive Achievement Tests. These tests are nationally standardised measures of a child’s performance in reading and maths relative to all other children of the same age in New Zealand. The scores are percentiles.

⁶⁶ The National Certificate of Educational Achievement is now the main form of assessment in the senior secondary school. It provides information on students’ performance on a set of “standards” at three levels: Level 1 (which is usually—but not necessarily—completed in Year 11), Level 2 (Year 12), and Level 3 (Year 13).

Waitangirua/Cannons Creek Year 5 students

We have Year 5 data on 102 children from three schools. Twenty-six of these children had been to three or more schools, and so were classified as frequent movers⁶⁷. The achievement data we have for these schools is as follows:

Table 14 Available achievement data for Waitangirua/Cannons Creek Year 5s

	PAT reading comp	PAT reading vocab	Teacher-est reading age	PAT maths	Teacher-est maths level
Stable	73	73	75	23	47
Freq movers	23	23	26	9	17

One of the schools organises its mathematics achievement information using the Numeracy Project levels (rather than the mathematics curriculum levels), so we do not have enough data to compare the teacher-estimated maths level across all schools in this area. However, we have nearly complete records for the PAT reading comprehension and vocabulary tests, and nearly complete data for the teacher-estimated reading ages. The results of our comparison of PAT reading records and the teacher-estimated reading age are presented below as “box-and-whisker” plots (Figures 3 and 4). Note that, while we have included the PAT mathematics scores in Figure 4, the numbers of students we had scores for were very small (only 9/26 of the frequent movers and 23/76 of the stable children).

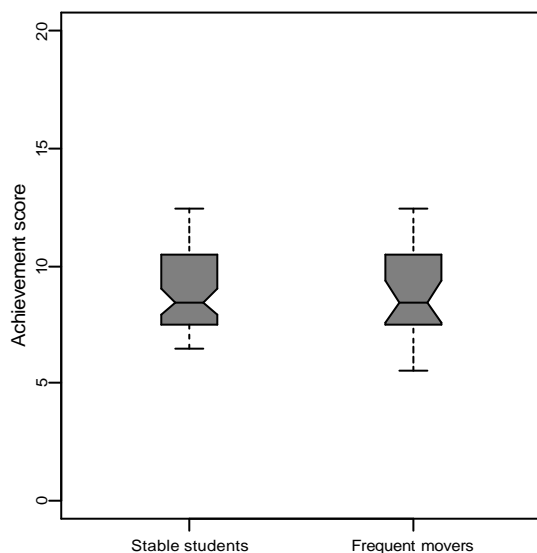
In reading these plots, it is important to note the following:

- The horizontal bar in the middle of each shaded area represents the median score (half the students scored above this, and half below).
- The upper limit of each shaded area represents the first quartile (i.e. a quarter of the students had higher reading ages than the age indicated by the top of the box). The lower limit of each shaded area represents the third quartile (i.e. a quarter of the students had lower reading ages than that indicated by the bottom of the box, and half of all the students had reading ages in the range indicated by the scores between these limits).
- The notched area in the box indicates an approximate 95 percent confidence interval for the median. If the notched areas on the two boxes do not overlap, then it is probable that there is a statistically significant difference between the groups represented by the boxes.

⁶⁷ Note that the numbers of students identified as frequent movers here may differ from the numbers given in our earlier analysis (see Tables 5-12). We were not able to collect achievement data for some students—from both groups. Some schools (the kura kaupapa Māori in particular) collect data that cannot be compared with the PAT scores, reading ages, and maths levels collected by other schools. We had *some* achievement data for between 96–100 percent of all stable students, and between 88 and 100 percent of all frequent movers, but it was common for there to be gaps in the PAT scores (where these are collected) for frequent movers.

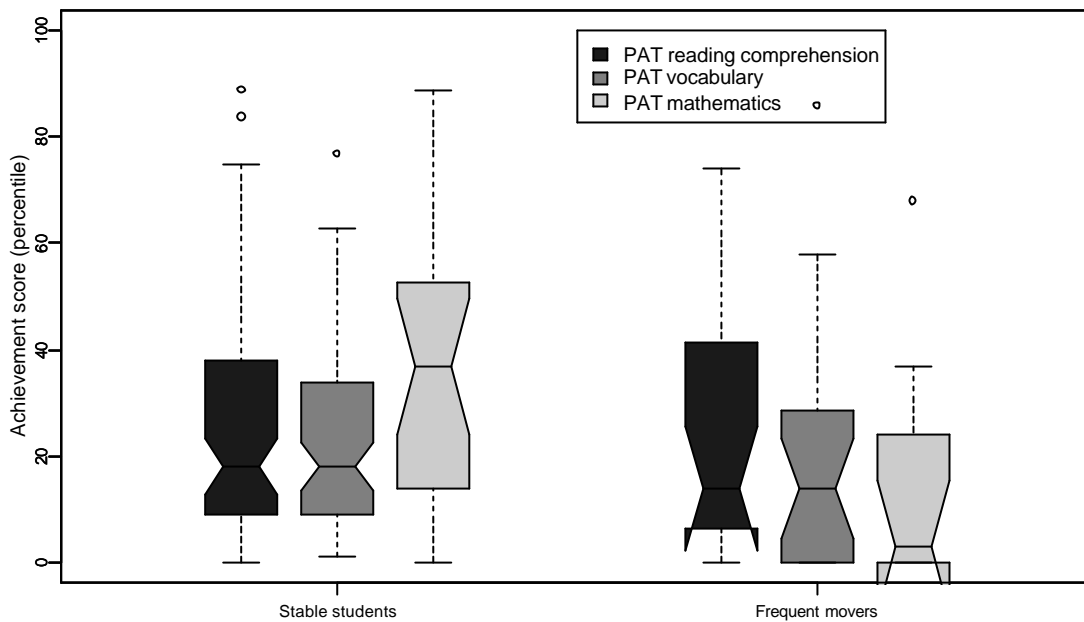
- The horizontal lines at the end of the dashed “whiskers” represent the highest and lowest scores observed—so that half of the students achieved scores in the ranges that are represented by these “whiskers”.
- Where the notched box has “wings” (as on the plots for the Amuri Years 5 and 8 frequent movers), this is because the upper or lower confidence limit is above or below (respectively) the upper or lower quartile. For example, in the Amuri Year 5 plot, the 10 frequent movers’ scores were such that the lowest quartile was equal to the lowest reading age (the lowest two or three reading ages would have been equal—there were only 10 scores from which to estimate the median and quartiles), so there was no lower “whisker”, and the lower confidence limit for the median was less than this score (its value is shown by the lowest point on the “wings”).

Figure 3 Teacher-estimated reading age (n=101) for Waitangirua/Cannons Creek Year 5s



This plot shows that there was very little difference between the reading ages of the two groups (stable and frequent movers), and there were no statistically significant differences.

Figure 4 PAT reading comprehension (n=96), reading vocabulary (n=96), and mathematics (n=32) age percentile scores for Waitangirua/Cannons Creek Year 5s



There are no differences between the frequent movers and the stable group on the PAT reading tests. However, both the box-plots and a *t*-test of the PAT mathematics age percentiles indicate that the mathematics results for the frequent movers may be lower than those of the stable students ($p = 0.04$, mean percentiles of 16 and 36 for frequent movers and stable students, respectively). However, as noted above, the number of children we had PAT mathematics scores for was small.

Waitangirua/Cannons Creek Year 8 students

We have Year 8 data on 193 children from two schools. Forty-four of these children had been to four or more schools, and so were classified as frequent movers. The achievement data we have for these schools is as follows:

Table 15 Available achievement data for Waitangirua/Cannons Creek Year 8s

	PAT reading comp	PAT reading vocab	Teacher-est reading age	PAT maths	Teacher-est maths level
Stable	146	147	148	113	105
Freq movers	43	43	44	38	37

As for the Year 5s, because one school's data was based on Numeracy Project levels, it cannot be compared with data collected from the others. Also, because the teacher-estimated maths level data we have all came from one school, we decided not to use this measure.

Thus we have complete records for all the reading measures (PAT reading comprehension, PAT reading vocabulary, and teacher-estimated reading age), nearly complete records for the PAT maths scores, and incomplete records for the teacher-estimated maths levels. Figure 5 shows the results of our comparison of the teacher-estimated reading age data. There were very slight differences between the two groups (not statistically significant).

Figure 5 Teacher-estimated reading age (n=192) for Waitangirua/Cannons Creek Year 8s

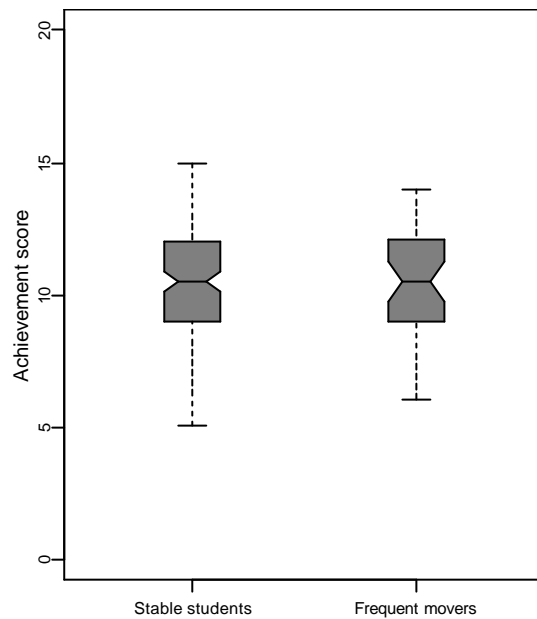
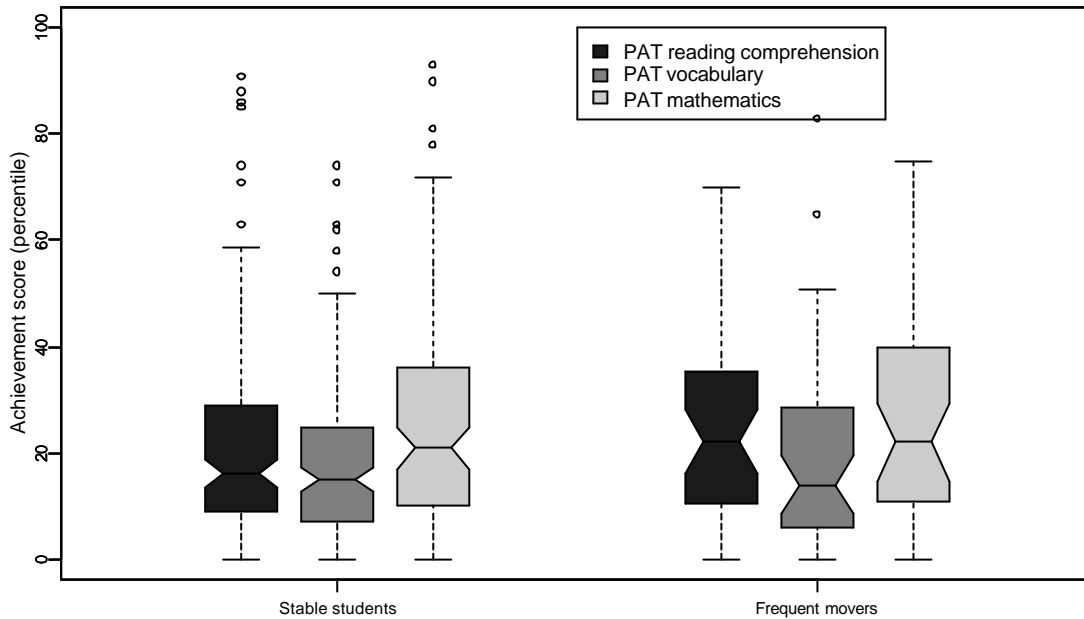


Figure 6 (below) shows the results of our comparison of the PAT reading and mathematics scores. While there were small differences between the PAT reading and mathematics scores of the two groups, these differences were not statistically significant.

Figure 6 PAT reading comprehension (n=189), reading vocabulary (n=190), and mathematics (n=151) age percentile scores for Waitangirua/Cannons Creek Year 8s



Amuri Year 5 students

We have Year 5 data on 57 children from four schools. Ten of these children had been to three or more schools, and so were classified as frequent movers. The achievement data we have for these schools is as follows:

Table 16 Available achievement data for Amuri Year 5s

	PAT reading comp	PAT reading vocab	Teacher-est reading age	PAT maths	Teacher-est maths level
Stable	25	25	43	26	47
Freq Movers	1	1	8	1	10

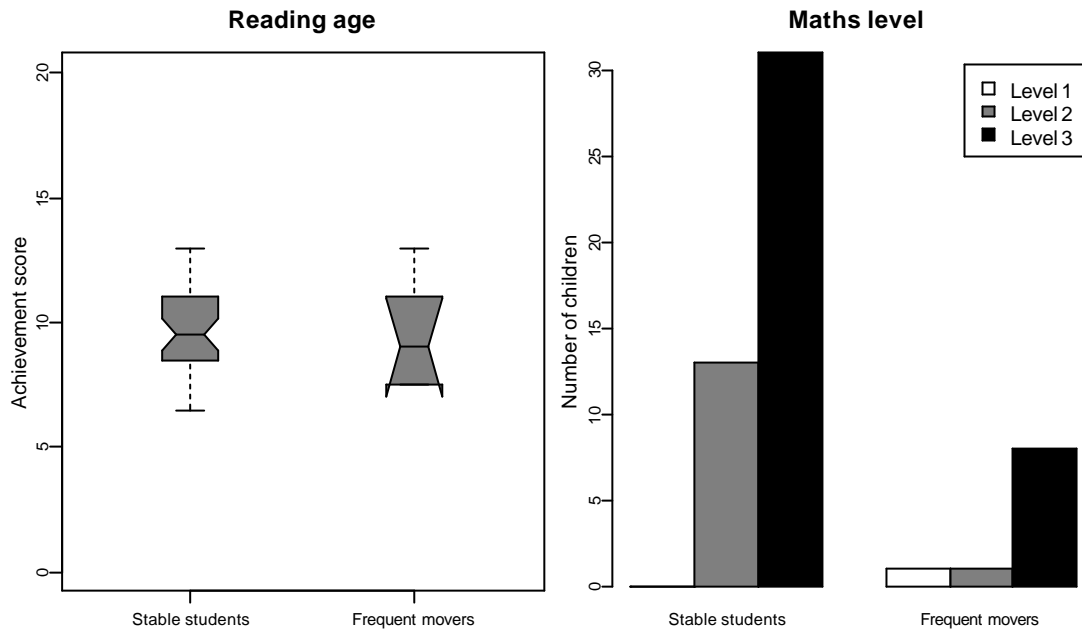
We have nearly complete records for the teacher-estimated maths levels and reading ages. For the three PAT scores, however, we have data for only one or two frequent movers⁶⁸. Thus, only the teacher-estimated data (maths and reading) are presented below.

Because the teacher-estimated maths level has only a small number of possible values (1, 2, or 3), a bar plot has been used instead of a box-and-whisker plot to compare the frequent movers to the stable group. The sizes of the two groups are very different, and it is tempting to use percentages to compare the maths-level distribution. However, as the number of frequent movers is so low, it is misleading to show that 80 percent of them were classified at level 3 compared to 66 percent of

⁶⁸ This in itself is an interesting piece of data (see also Amuri Year 8s, and Opotiki Year 5s and 8s).

the stable students (small differences in the number of frequent movers at a particular level would result in large changes in the percentages). For this reason, the vertical axis shows the number of students in each maths level.

Figure 7 Teacher-estimated reading age (n=51) and maths level (n=57) for Amuri Year 5s



There is no apparent difference between the reading ages of the two groups (the student with the lowest reading age was in the stable group). The student with the lowest maths level classification was a frequent mover, but the other students in that group showed little difference to those in the stable group.

Amuri Year 8 students

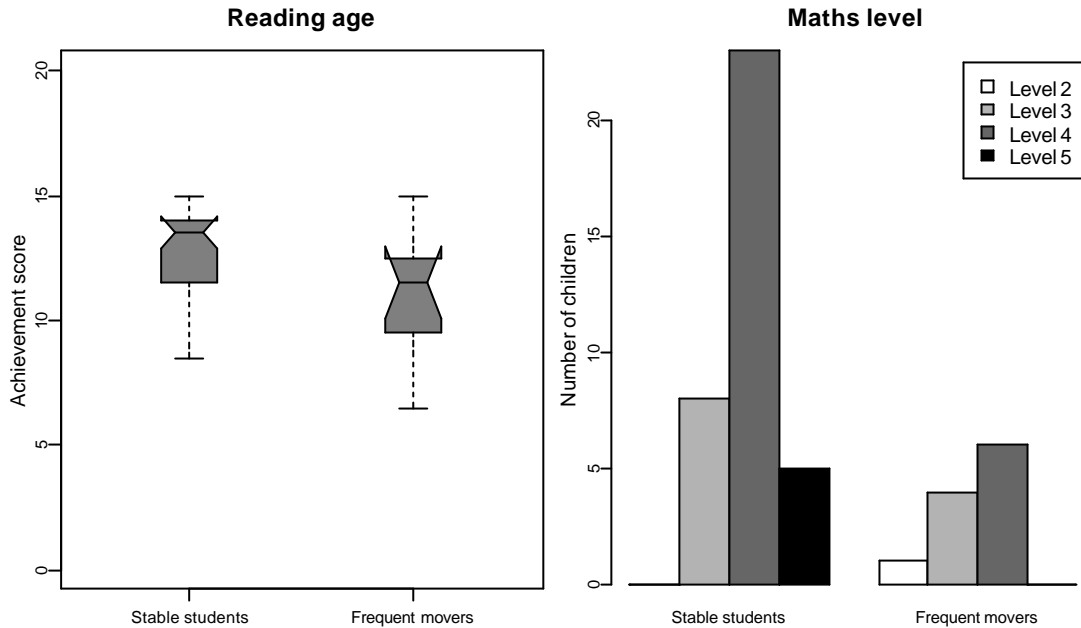
We have Year 8 data on 48 children from two schools. Twelve of these children had been to four or more schools, and so were classified as frequent movers. The achievement data we have for these schools is as follows:

Table 17 Available achievement data for Amuri Year 8s

	PAT reading comp	PAT reading vocab	Teacher-est reading age	PAT maths	Teacher-est maths level
Stable	10	10	34	10	36
Freqmovers	2	1	11	2	11

We have nearly complete records for the teacher-estimated maths levels and reading ages. For the three PAT scores, however, we have data for only one or two frequent movers. Thus, only the teacher-estimated data is presented below.

Figure 8 Teacher-estimated reading age (n=45) and maths level (n=47) for Amuri Year 8s



The Year 8 students show very slight (not necessarily statistically significant) differences between groups. The highest reading age was approximately equal in the two groups: however, the median for the frequent movers was lower than that for the stable group. The location of the lower extreme of the notch in the stable group in relation to the upper limit (top of the “wing”) in the frequent mover group indicates that there may be statistically significant differences between the groups. A *t*-test made without the assumption that the groups have equal variance indicated that the difference in mean reading age (13.0 years for the stable group and 11.14 for the frequent mover group) was just significant at the 5 percent level ($p = 0.043$).

The most common maths level was 4 in both groups. The only student working at level 2 was a frequent mover, and the only students working at level 5 were in the stable group. However, a chi-square test for differences between the groups was not significant.

Opotiki Year 5 students

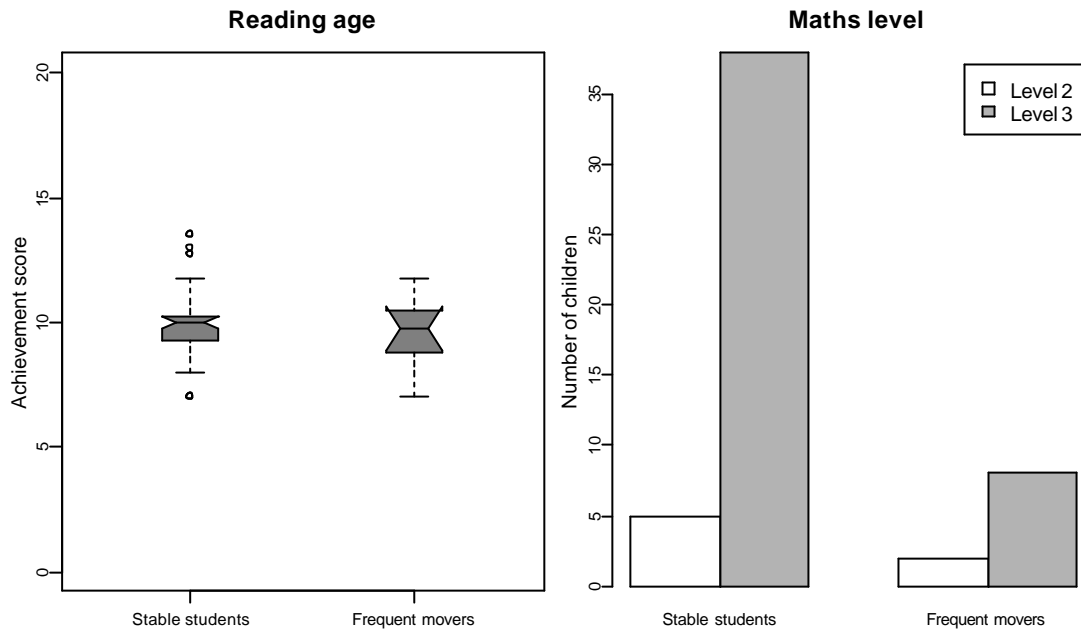
We have Year 5 data on 53 children from four schools. Ten of these children have been to three or more schools, and so were classified as frequent movers. The achievement data we have for these schools is as follows:

Table 18 Available achievement data for Opotoki Year 5s

	PAT reading comp	PAT reading vocab	Teacher-est reading age	PAT maths	Teacher-est maths level
Stable	13	13	40	0	43
Freq movers	1	1	10	0	10

We have the most complete records for the teacher-estimated maths levels and reading ages. For the three PAT scores, however, we have data for at most one frequent mover. Thus only the teacher-estimated data are presented below.

Figure 9 Teacher-estimated reading age (n=50) and maths level (n=53) for Opotiki Year 5s



The circles above and below the “whiskers” for the stable students represent individual students with extremely high or low reading ages relative to the rest. The plotting algorithm has a cut-off point defined in terms of relative distance from the upper or lower quartile (relative to the difference between the two quartiles). Individuals falling beyond this point are shown as outliers.

There is very little difference (and no statistically significant difference) between the achievement scores of stable students versus the frequent movers.

Opotiki Year 8 students

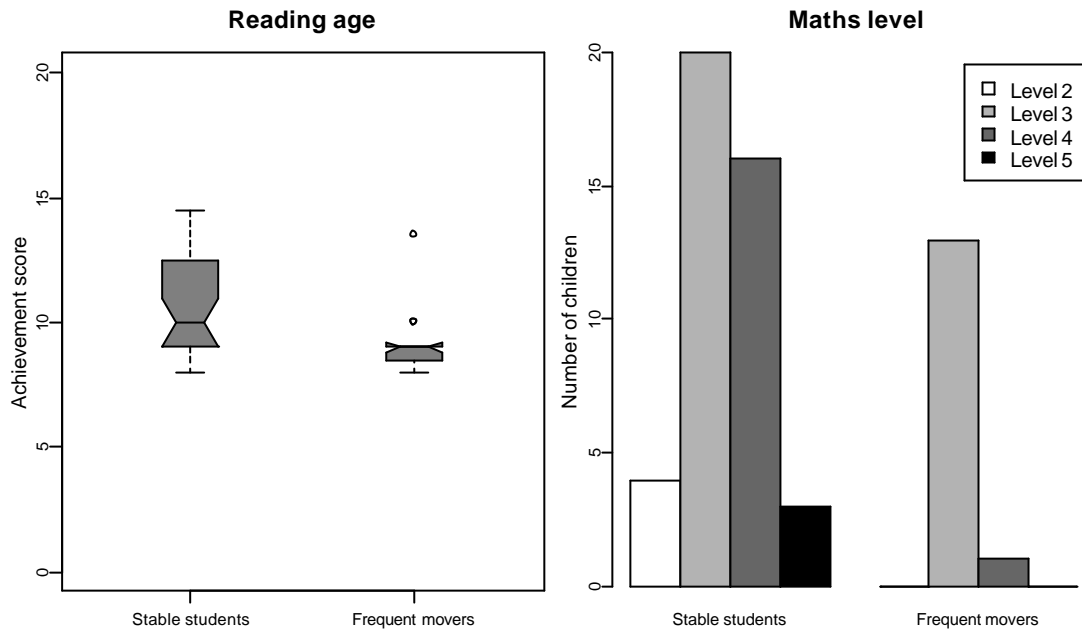
We have Year 8 data on 57 children from four schools. Fourteen of these children have been to four or more schools, and so were classified as frequent movers. The achievement data we have from these schools is as follows:

Table 19 Available achievement data for Opotiki Year 8s

	PAT reading comp	PAT reading vocab	Teacher-est reading age	PAT maths	Teacher-est maths level
Stable	28	21	35	5	43
Freq movers	4	2	13	1	14

We have the most complete records for the teacher-estimated maths levels and reading ages. For the three PAT scores, however, we have data for only one, two, and four frequent movers. Thus only the teacher-estimated data are presented below.

Figure 10 Teacher-estimated reading age (n=48) and maths level (n=57) for Opotiki Year 8s



The Year 8 students show very slight differences between groups. The highest reading age was almost equal in the two groups. However, the median for the frequent movers was lower than that for the stable group. The location of the lower extreme of the notch in the stable group in relation to the upper limit (top of the “wing”) in the frequent movers indicates that there may not be statistically significant differences between the groups. A *t*-test made without the assumption that the groups have equal variance indicated that the difference in mean reading age (10.6 years for the stable group and 9.2 for the frequent movers) was significant at the 5 percent level ($p = 0.015$)⁶⁹.

The most common maths level was 3 in both groups. The only students working at level 2 were in the stable group, as were the only students working at level 5. A chi-square test for differences in the group was significant ($p = 0.024$). A comparison of the mean maths levels shows that the

⁶⁹ This apparent conflict in the results is due to the differences between the tests. We can perhaps conclude that there is some evidence of a slight difference.

mean for the stable group was 3.4 and for the frequent movers it was 3.1, and a *t*-test of the differences⁷⁰ was statistically significant ($p = 0.014$).

Kawerau Year 5 students

We have Year 5 data on 93 children from three schools. Twenty-eight of these children had attended three or more schools, and so were classified as frequent movers. The achievement data we have for these schools is as follows:

Table 20 Available achievement data for Kawerau Year 5s

	PAT reading comp	PAT reading vocab	Teacher-est reading age	PAT maths	Teacher-est maths level
Stable	8	9	82	8	82
Freq Movers	10	10	27	10	27

We have the most complete records for the teacher-estimated maths levels and reading ages. However, for 18 or 19 students, equally distributed between the stable and the frequent movers, we also have PAT age percentile data. These are presented first. As there were only 8–10 students in each group, a strip-chart has been used to represent these data. Each symbol represents the score of a single student. There appears to be very little difference between the age percentile scores of the stable group and the frequent movers for both reading comprehension and vocabulary. Where there is a possible slight difference is in the mathematics age percentile. Here, none of the frequent movers were above the 40th percentile, but three of the stable students were (two scored above the 80th age percentile). However, a *t*-test for difference between the groups (which was not really appropriate given that the results are percentiles) was not significant.

⁷⁰ A *t*-test is not the most appropriate test, given the nature of the data. But as the chi-square test merely tests for the difference in distribution of the levels, the question remains to some extent as to whether the level for the stable group was on average higher than that for the mobile group. The fact that both tests were significant, and that the *t*-test confirmed the presence of a difference in a particular direction can, when put together, be taken to indicate a slight difference in achievement level between the two groups.

Figure 11 PAT reading comprehension (n=18), reading vocabulary (n=19), and mathematics (n=18) age percentile scores for Kawerau Year 5s (one school)

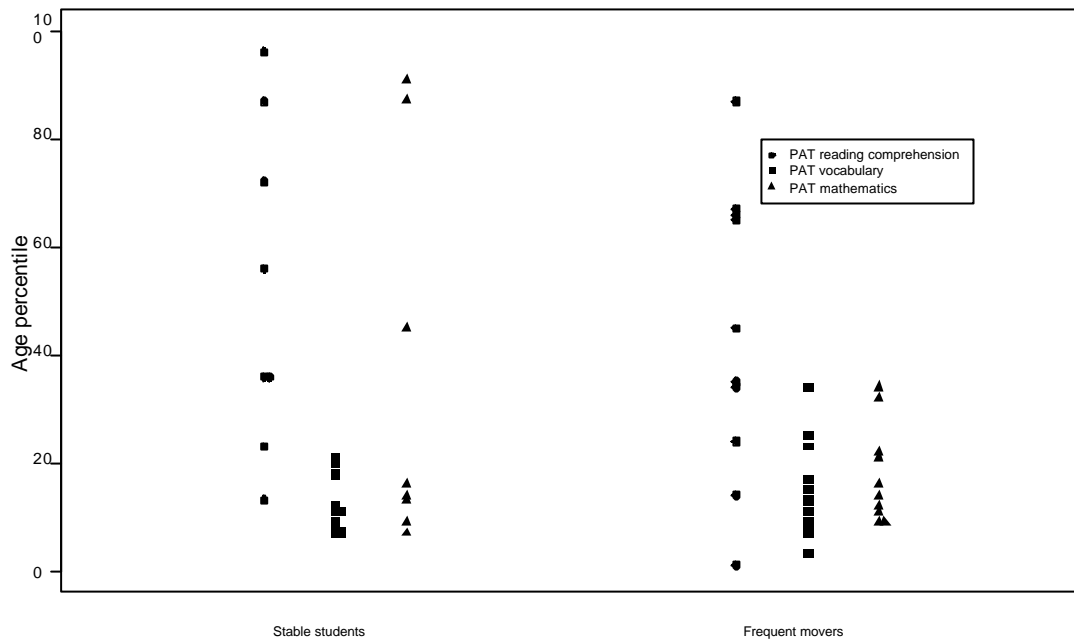
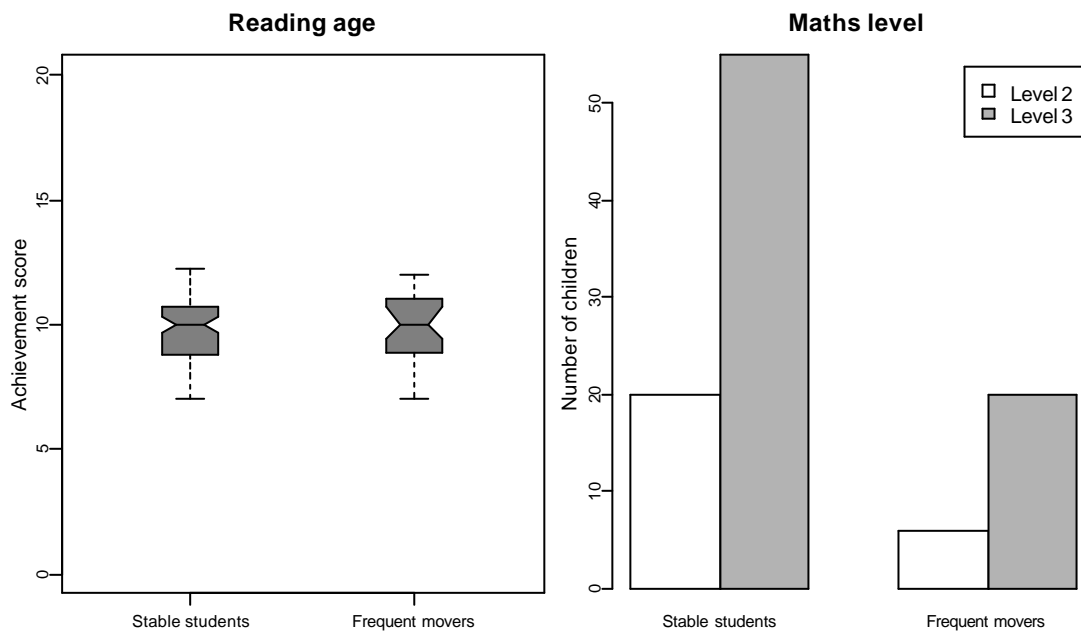


Figure 12 Teacher-estimated reading age (n=109) and maths level (n=109) for Kawerau Year 5s



There are no differences between the groups using these measures of achievement.

Kawerau Year 8 students

We were not able to collect any achievement data for Year 8 students in Kawerau (as the Year 8 school didn't participate in the study).

What does this tell us?

For a number of reasons, it is very difficult to draw robust conclusions from these data. Firstly, the achievement information collected by primary schools varies, and, in most cases, it is not standardised. Thus it is difficult to meaningfully compare information collected in one school with information collected in another. Secondly, the number of students for whom we have data is, from a statistical point of view, very small. Thirdly, many of the frequent movers have only a small number of achievement scores recorded—which reduces the possibilities for making meaningful comparisons.

Taking all this into account, the information presented above tells us that, where there are differences in achievement between the frequent movers and the “stable” group of students, the differences are in general small and not statistically significant. The exceptions are mathematics (Waitangirua/Cannons Creek Year 5s and 8s; Opotiki Year 8s; and Kawerau Year 5s), and reading (Amuri Year 8s and Opotiki Year 8s), where there were differences that could possibly be significant.

The achievement information for the secondary (Year 11) students is presented next. The issues involved in trying to draw meaningful conclusions from the information that is available are probably even greater at this level.

Secondary school achievement information

We were only able to collect NCEA data from three of the five secondary schools in the study (in two of the four case study areas)⁷¹. These three schools—two area schools and a secondary school—had NCEA data for 8, 18, and 65 students respectively; 91 students in total. Twenty-five of the students had attended five or more schools, and so were classified as frequent movers (one of the two area schools had no Year 11 frequent movers).

We had no NCEA results for about a third of the Year 11 students in these three schools. One school had NCEA results for 57 percent of its Year 11s (none were frequent movers). A second had results for 90 percent of its Year 11s (88 percent of stable students and 100 percent of frequent movers), and the third had results for 67 percent of its Year 11s (66 percent of the stable group and 69 percent of the frequent movers). From this it would appear that frequent movers

⁷¹ NCEA results are formally sent to schools in January, several months after we visited. We thus had to rely on the schools to send us this data (which is highly complex and involves hundreds of pages of information) later.

were no more likely than students from the stable group to have no results recorded: however, we have no way of knowing why the results were missing⁷².

When the data from the three schools were compared, there were no common patterns, and when the data were aggregated, the picture is obviously dominated by the school with 65 students.

The NCEA is a standards-based assessment system—as opposed to the norm-referenced School Certificate, University Entrance, and University Bursaries examinations of the past. Students’ results take the form of an assessment of whether or not they have achieved certain pre-set “standards” for the various components of the subjects—not, as was the case in the past, a global percentage that has been scaled to fit with a national norm. There are two sorts of standard: *unit standards*—that students either “achieve” or “do not achieve”, and *achievement standards*—that students can “achieve”, “achieve with merit”, “achieve with excellence”, or “not achieve”. These four possibilities have introduced a grading component into what is primarily a standards-based system. The number of students achieving a given standard can—and undoubtedly does—vary from year to year.

The introduction of this system, with its emphasis on pre-set standards designed to show what students can do (not what they can’t do), is a deliberate attempt to move away from the nationally normed “pass/fail” assessment systems of the past. However, it makes things difficult for researchers. Using NCEA data to provide information on the extent to which an individual has been successful in the education system is not a straightforward matter. Some assumptions and decisions have to be made. Here we outline the assumptions it was necessary for us to make to allow us to use this data.

At Year 11, most students are assessed by standards drawn from Level 1 of the New Zealand Qualifications Framework (NQF). Level 1 achievement standards were designed to replace the old School Certificate and are generally considered to be of similar difficulty. Level 1 achievement standards assess work being done at Level 6 of the New Zealand Curriculum Framework⁷³. This is also the case for many of the unit standards available⁷⁴. However, there are a great many unit standards that are set at Level 4 or 5 of the New Zealand Curriculum Framework (that is, at a lower level). These unit standards were, in the early days of the development of the

⁷² Year 11 students are all supposed to be entered for the NCEA. However, it is possible for a student in Year 11 to *not* be entered—because they didn’t pay the fee, because they arrived at the school too late in the year to be entered, or because (in some schools) the school has advised them not to enter, usually because it doesn’t expect them to achieve any credits. Alternatively, if the student transferred from another school late in the year (after about August), it is possible that their NCEA entry (and the result) was processed by the other school. Because we collected roll data in November, it is unlikely that the lack of results is because the student left school before the end of the year. It is also possible that the schools did not send us some of their results, or that a mistake was made (but this doesn’t seem very likely).

⁷³ Where Level 1 is (primary school) new entrant level, and Level 8 is the final (secondary) school level.

⁷⁴ Unit standards designed early in the NQF reform process may assess similar material to achievement standards that were subsequently designed.

New Zealand Qualifications Framework, designed to contribute to the awarding of the National Certificate in Employment Skills (NCES). However, when the NCEA was introduced, it became possible for credits gained on unit standards developed for the NCES to be counted towards Level 1 NCEA totals.⁷⁵ At the other end of the spectrum, some Year 11 students may be working on unit (or achievement) standards set at Level 2 or higher on the NQF.

The upshot of this complexity is that if one wants to develop a picture of a student's overall educational achievement it is necessary to look, not just at the total *number* of credits a student has gained, but at the *nature* of those credits.

In a recent study of the implementation of the NCEA and its effect on student subject choice, NZCER researchers found that, in the six medium-sized secondary schools studied, students with different "learning needs" were being offered different courses of study⁷⁶. English and mathematics are compulsory at Year 11. All students have to gain at least nine "literacy" credits and nine "numeracy" credits before they can be awarded a Level 1 NCEA. Students identified by their teachers as being unlikely to successfully complete a "traditional-discipline" English or mathematics course (Hipkins, 2004) are, the research found, doing courses assessed via a mixture of unit standards and internally assessed achievement standards. Some of these unit standards are those that were developed for the NCES (at Level 4 or 5 on the Curriculum Framework). Students considered academically "able", on the other hand, are taking "full" English and mathematics courses that are assessed by achievement standards that include external examinations. There is a similar pattern of differentiated courses in science (science is not compulsory but most students take it in Year 11). This research shows that English, mathematics and science are still regarded as "core" school subjects, and that performance in them is still taken as a proxy for general "ability". In addition (and importantly for this analysis), it also shows that, in the minds of educators, all NCEA credits are not equal. Given this, we decided that, for the purposes of this project, it would be appropriate to report on students' combined results for English, mathematics, and science, and to differentiate between credits gained in unit standards and achievement standards in these three subjects.

However, students obviously choose a range of other subjects in addition to these three "core" subjects. The Learning Curves research found some interesting patterns with respect to student choice of their "non-core" or optional subjects. One of these patterns was that students who are enrolled in the "traditional-discipline" versions of English or mathematics are more likely to also be enrolled in *other* "traditional-discipline" subjects (like history or accounting). On the other hand, students enrolled in the "alternative" English and mathematics courses are more likely to also be enrolled in "applied" courses (like information management, technology, health, or home economics). Thus the "traditional" senior secondary school pattern, in which most students take

⁷⁵ Students must achieve 80 credits to be awarded a Level 1 NCEA.

⁷⁶ The Learning Curves project (Hipkins, Vaughan, Beals & Ferral. 2004).

either predominantly “traditional-discipline”, “academic” courses or predominantly “applied”, “non-academic” courses, is apparently alive and well.

Taking this into account, in this analysis we decided to also look at the number of NCEA credits attempted by the case study students in a cluster of optional “applied” courses—as another possible indication of their overall educational achievement. We chose the following four courses: information management, technology, visual arts, and health and life sciences—because these were subjects that were taken by 20 or more of the students whose results we had.

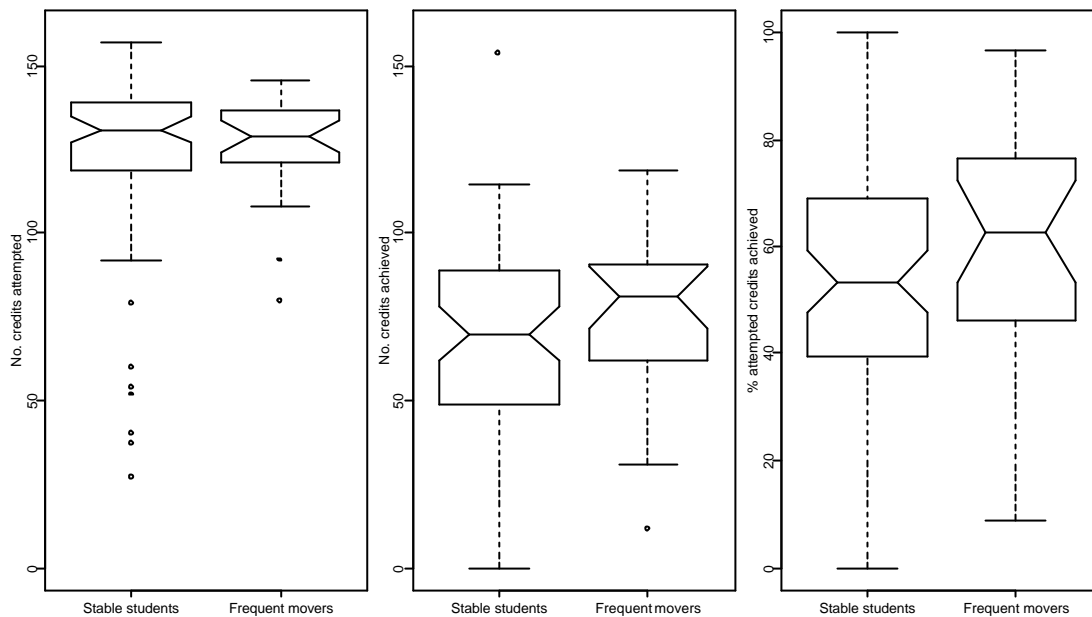
The analysis

We analysed the students’ results for each subject (45 different subjects were taken by them). For each student, we looked at the total number of credits attempted (across all subjects), the total number of credits achieved (across all subjects), and the proportion of credits attempted that were achieved. We then did the same thing taking their “core subject” credits (English, mathematics, and science) as a unit, and then the four most popular “optional” subjects (information management, technology, visual arts, and health and life sciences) as a unit. We looked at whether or not there were differences between the subjects taken by the stable group in comparison to the frequent movers. For each student, we investigated the number of credits achieved, and whether or not they had met the Level 1 requirement of at least 80 credits overall with a minimum of nine English and mathematics credits. In addition, we also looked at the number of *unit standards* modules attempted, achieved, and not achieved in English, mathematics, and science; the number of *achievement standards* modules attempted, achieved, achieved with merit, achieved with excellence, and not achieved in English, mathematics, and science; and the total numbers of unit *and* achievement standards modules attempted and achieved across the three main subjects.

We found that overall there were no differences between the number of credits attempted, the number of credits achieved, or the percentage of credits achieved by the stable group and the frequent movers. At the individual subject level, there were only a few subjects taken by enough students to allow meaningful comparisons. Of those that had sufficient numbers (English, mathematics, and science), there were no differences between the stable group and the frequent movers in either the number or proportion of credits achieved. Almost all students attempted at least 80 credits (seven of the stable students did not).

Figure 13 shows the total *number* of credits attempted and achieved, and the *percentage* of attempted credits achieved by 91 NCEA students, 25 of whom had been categorised as frequent movers.

Figure 13 NCEA credit totals as indicators of educational achievement

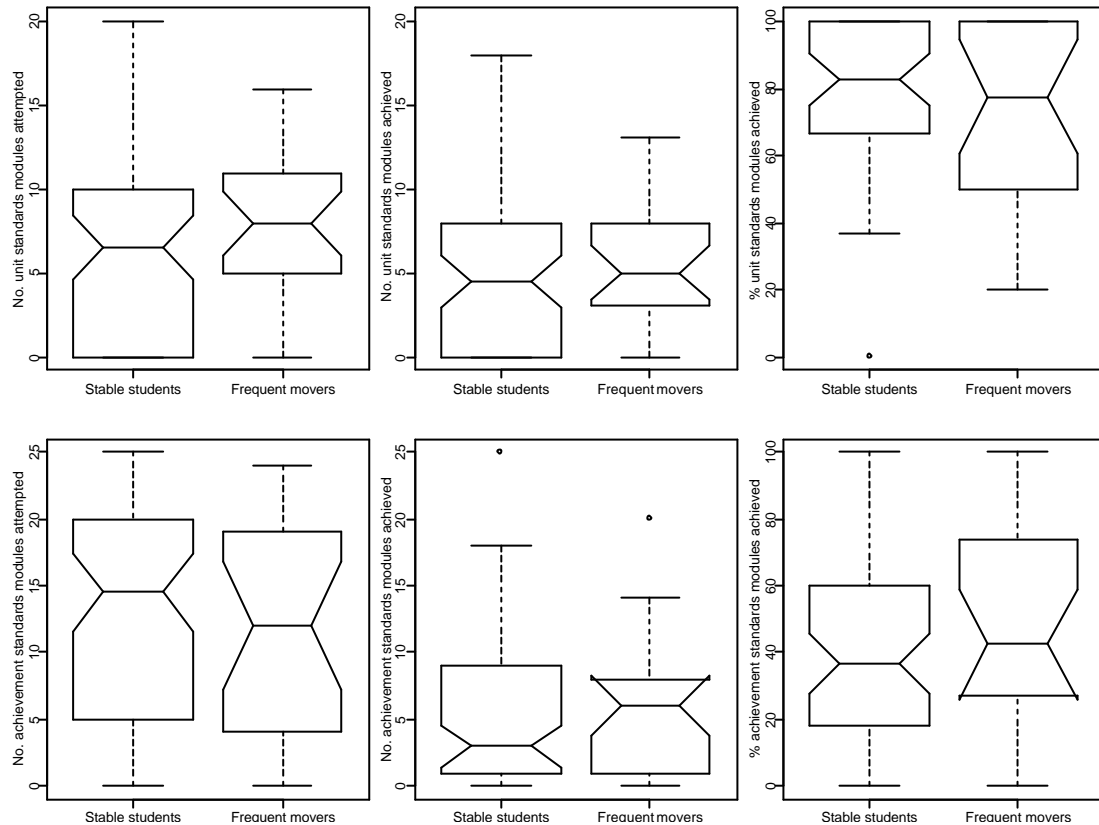


All of the students attempted far more credits than they actually needed, a pattern that is very similar to that found in the Learning Curves research (Hipkins, Vaughan et al., 2004). It seems students take a “just-in-case” view, enrolling in more credits than they need as a cushion against possible failure. All of the students we had data for appeared to be doing this: that is there were no differences between the stable group and the frequent movers. Moreover, since students appear to be gaining, on average, around half of the credits they attempted, this strategy could be interpreted as having contributed to their educational “success”. However, less than half the students in either group actually gained the full 80 credits they needed to be awarded a Level 1 NCEA (36 percent of stable students and 52 percent of the frequent movers). In addition, approximately half of the students in the two groups achieved the required minimum of nine credits in each of English and mathematics. Overall, the levels of achievement are not high in either of the two groups. However, given the different pathways by which Level 1 credits can be gained, it is possible that credit totals alone are not a very sensitive measure of overall achievement. Given this, we thought it important to also look at the nature—and mix—of standards on which those credits were gained.

For English and mathematics *unit standards* there was a consistent tendency for a larger proportion of those in the frequent mover group to attempt one or more standards. This difference was statistically significant in mathematics ($p = 0.03$), where 62 percent of the stable group attempted one or more unit standards modules compared with 88 percent of the frequent movers. For *achievement standards* there was no real difference in English or mathematics between the stable group and the frequent movers. There was a slight tendency in science for the stable students to be more likely to attempt achievement standards modules (67 percent of stable students, 44 percent of the frequent movers; $p = 0.08$).

Overall, as Figure 14 shows, there was no real difference in students' achievement of these standards when these subjects were combined.

Figure 14 **Number and percent of "core subject" achievement standards and unit standards attempted and achieved by students in the two groups**



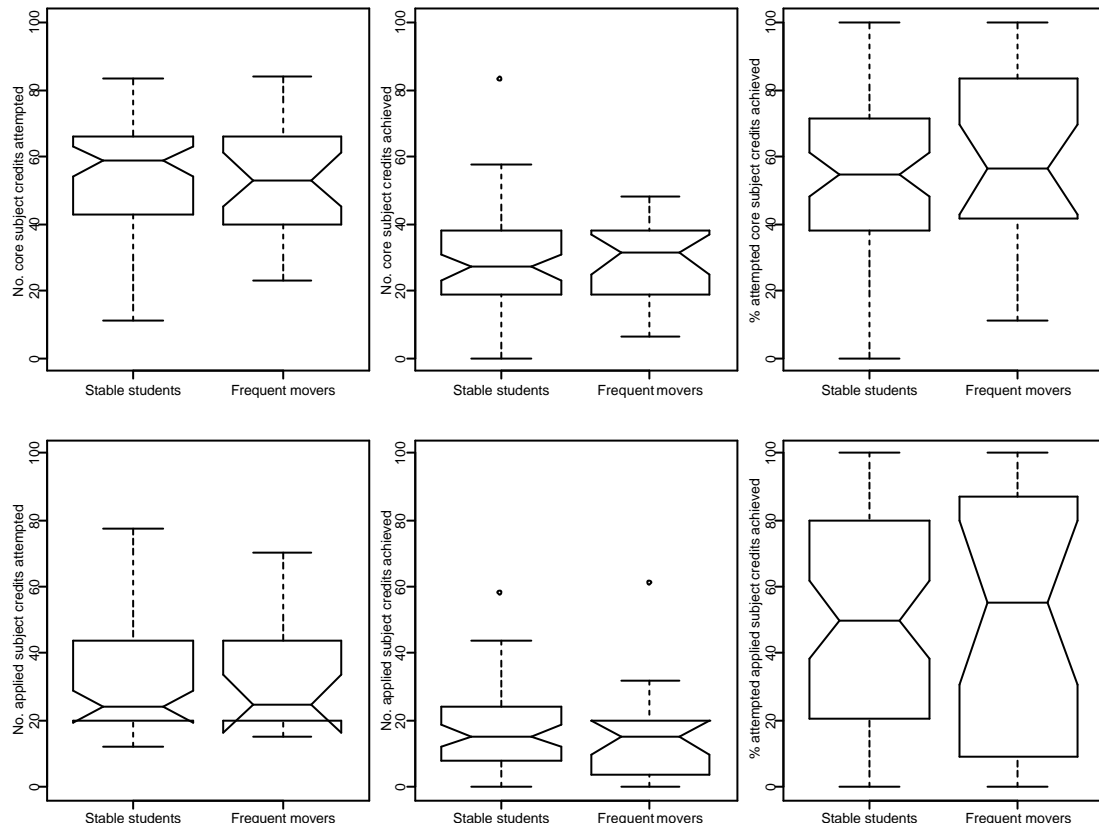
Both stable students and frequent movers were more successful in gaining credits from unit standards than from achievement standards, although they attempted rather more achievement standards in the overall assessment mix. Again, this pattern is not unexpected since all unit standards are internally assessed whereas around half the achievement standards attempted will have been assessed by an external examination⁷⁷.

The higher number of achievement standards being attempted in the overall mix suggests that none of these students is taking the types of "alternative" courses being studied by some students in the larger Learning Curves schools. Instead, it seems likely that students are attempting both unit and achievement standards that cover similar ground, and that students are being advised to take this strategy as a "cushion" against possible non-achievement.

⁷⁷ Students are often allowed to re-sit internally assessed standards if they are not achieved at their first attempt, whereas an external examination usually involves a one-off attempt.

We also found very little difference in patterns of achievement when groupings of “core” and optional (applied) subjects were compared.

Figure 15 **Number and percent of core subject⁷⁸ achievement standards attempted and achieved by students in the two groups compared to the number and percent of applied subject achievement standards attempted and achieved**



As outlined earlier, English and mathematics are compulsory for all Year 11 students, and most schools also make science compulsory. Since most students study no more than six subjects in total, we could expect around half of students’ overall credits to be obtained from these three subjects. That proportion would obviously be higher for students who are only taking five subjects in total, but would be lower where science was optional and not taken.

The graphs show that both the stable group and the frequent movers have achieved more than half of their total credits from their “core” subjects. While they are attempting similar credit numbers in both “core” and “applied” subjects, both groups are experiencing more success in the core subjects. This is an interesting finding. It is possible that the teachers in the study schools are

⁷⁸ “Core” subjects here means English, mathematics, and science, and “applied” subjects means the package of information management, technology, visual arts, and health and life science we chose to investigate (see above for why we used these four subjects).

emphasising these subjects, especially English and mathematics, as a way of increasing their students' chances of meeting the basic literacy and numeracy requirements. The overall similarity of patterns for both the frequent movers and the stable group suggests that the same learning support, curriculum, and assessment mixes are being provided for all students, and that the pattern of differentiated courses found in larger secondary schools does not apply in the study schools.

There were some differences between the two groups in terms of their optional subject choices. More frequent movers attempted credits in health (32 percent, compared to 15 percent of the stable students), physical education (24 percent, compared to less than 2 percent of the stable students), and geography (32 percent, compared to 15 percent of stable students). Three students studied service sector skills, all of whom were in the frequent mover group. More of the stable group of students attempted credits in science (74 percent, as compared to 44 percent of the frequent movers), and more of the stable group attempted credits in history (18 percent, as compared to 4 percent of the frequent movers). History, geography, and science are "traditional-discipline" subjects while health, physical education, and service sector skills are usually thought of as "applied", "vocational", or "non-academic" subjects. These data show that the frequent movers are more likely to choose the applied subjects. However, we have no way of knowing whether this was their choice or whether their teachers had guided them in that direction. Moreover, the numbers involved are too small to draw any firm conclusions⁷⁹.

What does this achievement information tell us?

As with the primary achievement information, it is difficult to draw robust conclusions from these data. We had information from only 91 students (28 percent of the Year 11 students in all the study schools) in only three schools. We had no achievement information for about a third of the students in the three schools that sent us information. Moreover, the information was derived from the results of an assessment system that is new and not fully "bedded in". Consequently, there is, as yet, no established way to use the material it generates to compare one student's overall performance with another, or to indicate an individual's overall "success" in the education system.

Given all this, the information we do have appears to be telling us that, by Year 11, there are few differences in the educational achievement of the frequent movers compared to the stable group. In the schools for which we have data, overall achievement levels are not high. These schools seem to be emphasising the "core" subjects (English, mathematics, and science) more than is the case in larger urban schools. The only difference we found was that, in the three schools for which we have data, the students in the stable group appear to be choosing "traditional-discipline" subjects (like science and history) more often than the frequent movers, and, conversely, the frequent movers appear to be taking more "applied" subjects (like health and physical education) than students in the stable group. However, because of the limitations of this data set, this information should be interpreted with caution.

⁷⁹ However, we intend to explore this trend more fully in the next phase of this research.

Are the frequent movers absent from school more often?

We collected attendance information for all of the Year 5, Year 8, and Year 11 students at the schools we visited. We used this to compare the attendance rates of the frequent movers with those of the stable students in each year group.

The data we obtained from all but one of the schools was similar and so could easily be compared. We looked at the number of days each student was present in the 11 weeks of Term 1, 10 weeks of Term 2, and 9 weeks of Term 3 (in 2003), as well as the number of days the school was open in each week. The total number of school days at each school was between 143 (in one school that had data missing for one week of Term 3) and 148 days. The attendance information for all students was aggregated and a mean absentee rate for each year group in each area was calculated (percent days *absent* out of the total number of possible school days).

The figures below show the results of these calculations for each year group.

Figure 16 **Percent days absent for Year 5 frequent movers compared to stable students in the four areas**

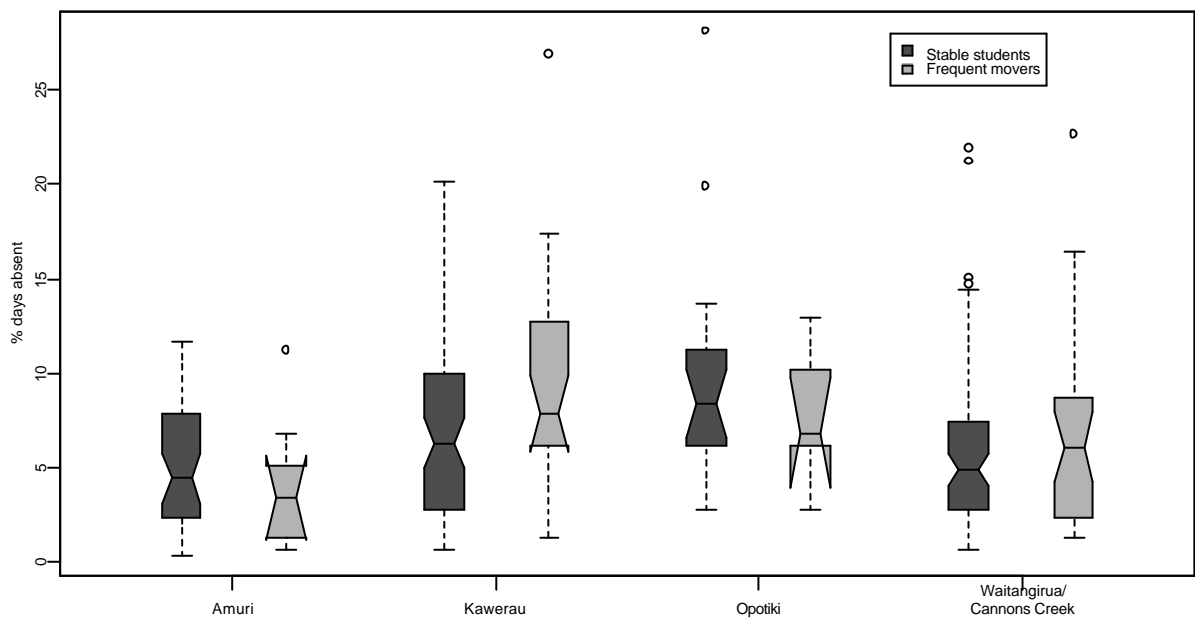


Figure 17 Percent days absent for Year 8 frequent movers compared to stable students in the four areas

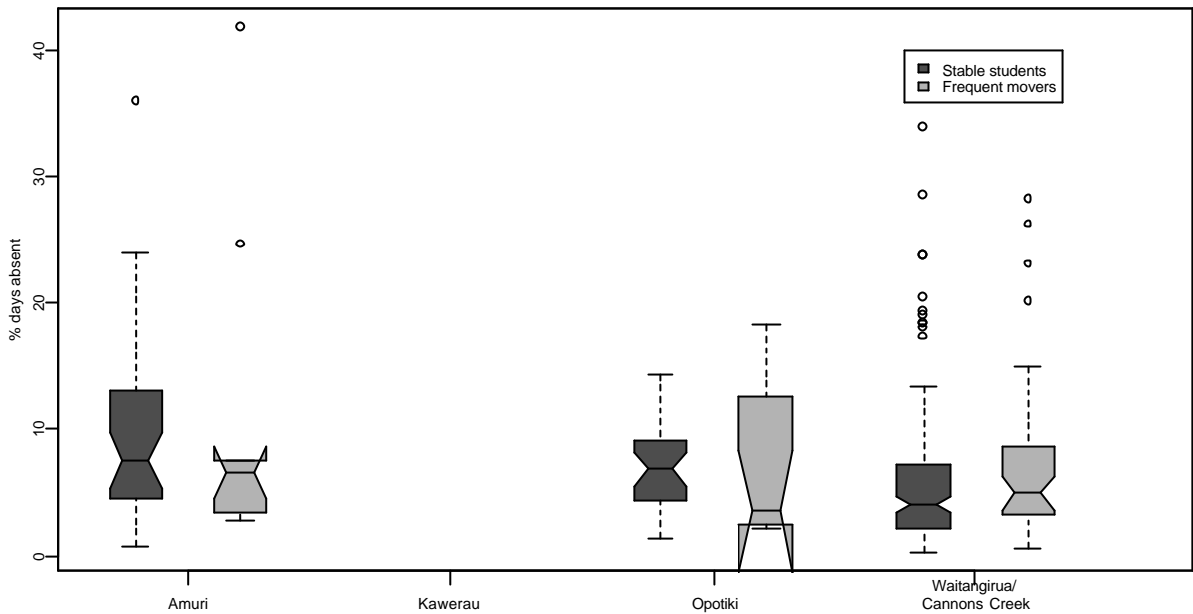
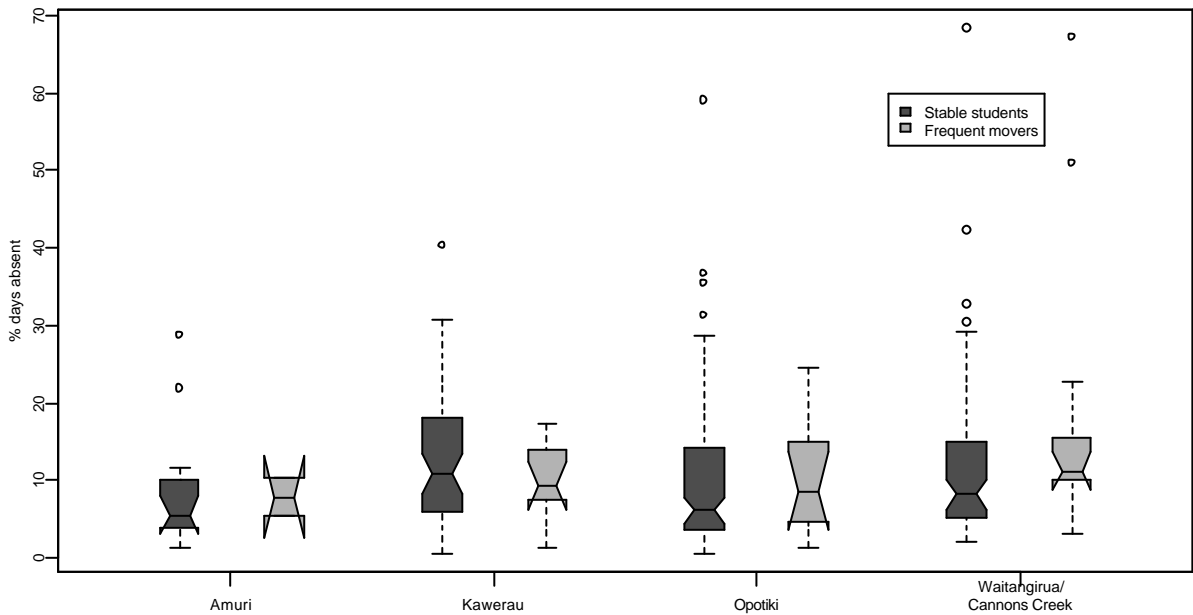


Figure 18 Percent days absent for Year 11 frequent movers compared to stable students in the four areas



Overall there was a tendency for absenteeism to increase with increasing age (for both the frequent movers and the stable group). In some schools, particularly those in the Waitangirua/Cannons Creek area, absenteeism was slightly higher among frequent movers: however, the differences were not statistically significant. This tendency was not seen at all in some areas, and in some groups (the Amuri and Opotiki Year 5s and the Kawerau Year 11s, for

example), absenteeism was higher among the stable students. Overall, there were no statistically significant differences in the rates of absenteeism of frequent movers compared to stable students.

Do school leaders see frequent moving as a problem? If they do, how do they deal with it?

We interviewed the principals of all except one of the study schools. Each interview took about an hour. One or two were shorter than this, particularly when the principal was clear that high student mobility was not a problem in their school, and one or two were much longer. The interview was semi-structured in that we had a series of questions (which had been sent to the principals in advance), but in most cases, when the principals were invited to talk about this issue, they did so, answering all our questions without needing to be asked explicitly. The prompts were rarely needed. A copy of the schedule of questions we used is included as Appendix 3. The principals' responses are outlined below, arranged broadly by the questions we asked.

Is frequent movement an issue?

According to most of the principals we interviewed, high student mobility is very definitely an issue—for their school, for the school's local community, and for the students involved. Where student mobility levels are problematic, movement tends to be referred to as "transience".

The principals told us that schools with large numbers of students moving in and out of them have a great deal of extra administrative work that they cannot budget for. One primary principal said that, on average, she enrolled four or five new students a week, and dealt with about three or four withdrawals. On one day immediately prior to the interview (in October) she had enrolled seven new children. This would have involved about four extra hours work for her alone—and this was before the children have been assessed, assigned a class, and given programmes of work designed for them by their new teacher⁸⁰. This extra work, the principals said, is especially noticeable in schools where there are large numbers of what they called "boomerang" students or "revolving transients": that is, students who move away and then come back—again and again.

All the principals said that frequent movement by students disrupts school programmes and routines. Each time a new child comes into a class, the class teacher has to re-establish routines and standards of behaviour that include and fit with the new child. According to the principals, teachers find this stressful, but it is also highly stressful for the new child and for the children who are already in the class. They said that children who have moved a lot often take a long time to settle into their new school's "culture" or "ethos". They also said that, because it is difficult for teachers to set and achieve targets, and to monitor the progress of a class of children that is constantly changing, it is very common for teachers in this situation to lose motivation and enthusiasm and become, as one put it, "demoralised". Several principals said teachers commonly

⁸⁰ In addition (although she didn't point this out), these new children would not have generated extra funds for the school (because they were enrolling after the July 1st roll return to the Ministry of Education).

have strong feelings that they personally are not meeting the needs of “transient” children, but worse, that *nobody* is, and these children are falling by the wayside very early in their educational careers. The principals in rural areas commented that children moving into—or back to—their area from urban schools came with “way different attitudes” that were not “on the same wavelength as us around here”. This was especially apparent at secondary level with students who had gone out of the area to boarding school and were returning because this “hadn’t worked out”.

Many principals think it is unfair that the overall performance of their school is measured in ways that include the results of frequent movers. They think that because these children haven’t been in their school long, their performance doesn’t accurately reflect the school’s efforts. Some think these children’s results should be presented separately from those of the school’s “natural” cohort.

For one of the study schools, student mobility was very definitely *not* an issue. This school, a kura kaupapa Māori in an area that has high levels of movement, has strict protocols for enrolling new students. An important part of the school’s kaupapa is that it requires a strong commitment by the parents to their child’s education. This commitment includes regular attendance at whānau hui and participation in sports days, kapa haka, wānanga, and so on. This kaupapa, the principal says, requires families to commit to staying in the area so their children can have strong connections to one school, and a secure education. As she put it (in Māori), she tells parents that “If you’re not on this waka we’re on, then get off!” This philosophy is widely supported by the other parents, and is, she says, critical to the success of the children. Some children travel up to an hour each way each day to attend the kura, and, according to the principal, the school has only lost one family since it became a kura kaupapa Māori (and this was for an unavoidable, valid reason)⁸¹.

In general, the primary school principals were more concerned about highly mobile students than the secondary school principals⁸².

Why do some students move frequently?

In general, schools do not collect specific information on people’s reasons for moving into or out of an area. Some try (e.g. when enrolling new students) but, because it is quite common for children to leave without formally withdrawing, it is not usually possible for them to do exit interviews. Most of the information schools have is anecdotal—local, “institutional” knowledge that develops through the collective experience of the school’s teachers.

Several Waitangirua/Cannons Creek and Opotiki principals said that their school had three distinct (and roughly equal) cohorts. First, there is a group of “stable”, “settled” students who stay at the school for the whole of their schooling at that level. The principals see this group as being their school’s “natural” cohort. Second, there is a group of students who move around a lot

⁸¹ We did not collect enrolment and withdrawal data from this school’s records, or information on the numbers of schools its children had attended, so we can’t easily verify this (see footnote 46).

⁸² And, as our data show, it is more obviously an issue for primary schools.

between the schools in the local area (and in and out of the same schools). The principals see these students as a “nuisance”: however, most acknowledge this kind of movement as a simple “fact of life” for the people in their area. The third group is made up of students who move from school to school around the country in, it seems to the principals, a largely “random” way.

According to these principals, it is common for families to “house hop”—to shift around within the area, usually to get a better house or cheaper rent. Some commented that when Housing New Zealand introduced its “market rents” policy in the late 1980s this practice became widespread. They said that two or three families often move into one house to save money, but such arrangements are usually short-lived (because of overcrowding and/or conflict). The result of this, they said, is that one family has to move somewhere else to live—probably with some other relatives—and then the same thing happens again. Then, the principals say, the parents will move their children to the school that is closest to their new house—even when the new school is (as it is in many cases) only 5 or 10 minutes walk from their old one. People don’t seem to use the local bus service: as one Waitangirua principal put it, “Nobody will catch a bus to come to the same school.” Another also commented on this, saying that she thought the fare of \$1.20 a day was beyond most local families. Many mentioned the use by one school in the area (not one of the study schools) of taxis to bring children to the school. All the principals who mentioned this saw it as unethical (because most of the schools in the area have declining rolls and the taxis are being used as a roll maintenance strategy). However, they also pointed out that the taxi strategy works very well as a way of keeping children at the school. It is expensive for the school, and a “logistical nightmare” for the teacher who organises it, but it works. Some mentioned that a free bus or mini-van service could serve the same purpose—so that, as one put it, “there could be at least one constant in the children’s lives”. This situation raises some interesting issues. The principals we interviewed were strongly opposed to the taxi strategy. To them it unfairly uses resources to give one school a competitive advantage in a situation where each school’s survival depends on its ability to attract and keep students. At the same time, however, they could see that this strategy was likely to benefit the children involved—by giving them stability and connectedness in at least one aspect of their lives. From this, it seems that the current funding model has some unintended effects—that are working against the best interests of many children in the case study areas.

Several of the principals commented that many parents in their area move around “with the wind” or to “suit their own needs” (as opposed to the needs of their children). Some (especially in Waitangirua/Cannons Creek and Opotiki) said that while a small number of their families were moving to pursue seasonal work, movement in their area had very little to do with the labour market. They said that most of their families “did not work” (were beneficiaries), but moved to and from areas where their relatives lived.

Others said that people tend to move because of housing, health, or family issues. If people are moving very frequently, the principals said that this is probably because they are “being chased”

by someone—usually a government agency (CYFS⁸³ or the IRD⁸⁴ for example), someone they owe money to, or, as one put it, “a dysfunctional family member”. One principal said that people sometimes move because “they seem to have a call home so they go back to where they actually came from”. Another said that frequent movement began to be a problem for schools when people could get the unemployment benefit no matter where they lived⁸⁵. Still another said that people move when parents change partners⁸⁶.

Some principals said that students (not families) are often moved when a family is having difficulty with a child. They say that it is common for children—or, more usually, adolescents—to be sent to live with another family member (in the local area or somewhere else in the country). However, the principals say, this often doesn’t work out, and the child is either sent back or shifted again to live with another relative. Some schools refer to these children as “parcel children”. These children, they say, are always “on probation”, always under threat of being sent away somewhere else. One principal commented that these “parcel children” are often “CYFS cases” (i.e. children who are CYFS clients). This principal had a great deal to say about what, in her view, are the “inhuman”, “Dickensian”, “damaging”, and “abusive” ways these children are “ripped” out of school to be relocated in other schools with, as she sees it, no regard for their educational or emotional security. Another principal said that, while he didn’t usually want to know every detail of a child’s past—he thought it was important to let them “have a new start”—“if they’re bloody CYFS [clients] I want to know!” One principal mentioned a case he had dealt with recently involving a Year 8 child in his school who had been to 27 schools and, in the 6 months he was at their school, had lived with five different CYFS caregivers.

Others commented on the tendency for Māori and Pacific Island children to be regularly moved around between different family members, often in quite different parts of the country. Several said that this is just a normal feature of extended family life in Māori and Pacific Island culture, and that it is something that schools in areas with many Māori and/or Pacific Island families just have to accept as a fact of life. All of the principals said that it was very uncommon—although not unheard of—for children to be moved because the families are dissatisfied with the school.

Several of the Waitangirua/Cannons Creek and Opotiki principals commented that the parents in their area seem to think that one school is more or less the same as another, something they all wanted to dispute. Schools can have very different programmes and routines, and can have a very different climate or “ethos”. More importantly, however, a sense of “belonging”—to a *particular*

⁸³ CYF (Child, Youth and Family) is New Zealand’s child care and protection agency.

⁸⁴ The Inland Revenue Department.

⁸⁵ In fact, there hasn’t been a change in policy with respect to where people on the unemployment benefit can live.

⁸⁶ It is important to note here that these comments represent the views of the principals we interviewed and are based on their day-to-day experience in the case study areas. Because we did not collect information from parents or students, we have no way of establishing whether or not people are in fact moving for the reasons given by the principals. However, the wider Building Attachment project should eventually have data against which these views can be checked.

school, class, and teacher (or group of teachers) is, they think, a very important prerequisite for educational success. Two principals said that it was possible for children to adapt to a second school (although *really* “belonging” could take a year or more). However, expecting a primary-aged child to successfully adapt to three or more different schools was, they thought, just too difficult. According to them, many of their parents simply do not know how important it is for the child to stay in the same school.

The picture seems to be a bit different in the Kawerau and Amuri areas. In Amuri, several of the principals talked about the local community as being divided into three quite distinct groups. One group, referred to by one of the principals as “the landed gentry”, consists of the (mainly) sheep farming families who have farmed the same land for four or more generations. According to him, these families are well-established, strongly networked, secure, and highly supportive of their local community. The second of the three groups identified by the principals is made up of the more recently arrived dairy farming families—mainly share-milkers—who moved into the area when major irrigation schemes allowed the lower-lying land to be converted to large, multi-unit, dairy farming operations. These people, the principals say, are “on the way up”. Many (not all) stay in the area for 2–3 years before moving on to another contract on another farm in another area of New Zealand. (However, some stay a lot longer.) This second group also includes shearers.

The third group of people are those who are, as one principal put it, “at the bottom of the social heap”, people, usually beneficiaries, who have moved into the area because housing is cheap. According to the principals, these people don’t usually stay very long. Although housing might be cheap, other living costs are not, and it is very hard to make a living from the kind of unskilled part-time work that is available in the area. Also, the principals say, these people are often being “chased” by CYFS (or other government agencies), the law, or a violent ex-partner. There are tensions between these three groups of people: as one principal put it, “They don’t mix.” Others in the community have clearly not welcomed the third group’s presence in the area. One primary principal said that the “influx” of this group had “just about killed the school” a few years ago. She said that the school suddenly had major behaviour issues with some children, a situation they were not well prepared for, that led to a major teacher turnover problem. Another principal was clear that, in his experience, students from this third group were getting less learning support than comparable students in other parts of the country. Some in this group are Māori, but, according to him, they are “dislocated” Māori—Māori without strong iwi affiliations and no connections with the area’s established Māori families.

In Kawerau the issues seem to be different again. Roll decline is clearly a major issue for some schools in the area but not for others. One principal said that some of the schools in the area are perceived as “nicer to be in” than others. Others are “getting a wee bit old” or are in areas where the housing is “not as wonderful as it could be”. The issue of “white flight” was also mentioned. Several principals said that one of the main problems of the area is that people who do well tend to move to other nearby towns. Many continue to work in Kawerau, but commute each day, a trend that has obvious implications for the town’s schools.

However, according to the principals, there have been some recent changes in people's perceptions of schools in the area. The secondary school has experienced a recent roll surge through the return of students who had been travelling outside the town to schools in other areas. One primary school recently introduced a uniform, which has apparently significantly reduced the number of "itinerant" enrolments (because, the principal said, if people know they are only going to be there a short time they are unlikely to want to invest in the uniform, so they choose another school).

In one of the Opotiki kura kaupapa Māori, the tūmuaki said that their families move around the country for many reasons (being in jail was mentioned) but they always come back here because they're whānau ("he whānau katoa ēnei"). She commented that the school would like to be more selective ("we've got places to go here, and our kids are ready—these other ones hold us up"), but "we have to take them because they're whānau".

Does frequent movement affect children's educational achievement?

All the principals said that frequent moving definitely affects children's educational achievement. Almost all commented that the children are also affected socially—they have a reduced sense of belonging and being part of a stable network of friends and the school community.

All said that learning was affected. When a child transfers from one school to another in the middle of the school year, there is almost always a delay in assessing them, putting them into an appropriate programme, and arranging any support they might need in their new school. Some said that when a child moves several times, these delays quickly add up to a point where it is very hard for the child *not* to get behind. Eventually, according to the primary school principals, this impacts on the child's behaviour.

All of the primary principals commented on the issues involved if the child is reading below their age level. Children are put into Reading Recovery programmes when they are 6 years old if they have been identified as being in the lowest group in their school. Places in Reading Recovery are a scarce commodity and most schools have waiting lists. Schools are allocated funding for Reading Recovery on the basis of need. However, the level of their need—and the funding they receive—is assessed via the Six Year Net test results of the children from the previous year: that is, on the assumption that the school's level of need will be much the same from year to year. The principals of schools in high mobility areas see this system as unfair because, they say, the group of children in their school this term will have very different needs from those of the group they had a year ago. According to the principals we interviewed, most schools deal with this by delaying the placement of children identified as highly mobile in Reading Recovery until they have been in the school for at least a term. To them, giving Reading Recovery places to children who are likely to move on is not an effective use of resources. If they use one of their places for a highly mobile child, that place is then not available for one of "their" children. As one principal put it:

If kids come in and they are behind in their learning, we are not going to do something until we see how stable they are, because what about the kids at our school who have stayed here a long time? They might be at low levels too, but we know that they're still going to be here, so we are going to put our efforts into them, rather than putting it into some kids who we don't know how long they will be here.

In deciding who will be offered places in their Reading Recovery programme, this principal said:

We will take a child who has been in our school since they were 5 in preference to a child who might have a bigger need but has only been here with us for 6 weeks.

Another principal said that the children:

Have to be here for a term before you start putting huge effort into getting outside agencies to help, because the number of times you get bitten by, you know, getting all the paper work done, getting the agency involved, getting the Resource Teacher Literacy to look at the child, and assess the child, and then they go....

If a child transfers to another school having started Reading Recovery at their first school, they are highly unlikely to be able to continue this programme at their new school. There will usually be a delay while they settle into their new school. They might then be put on a waiting list, but, if they move again before taking up that place, they will have to start the whole cycle again at another school. Given the importance of basic literacy to all other aspects of education, such a start obviously does not augur well for a child's future. The primary principals all commented on this issue and said very similar things (the exceptions were the kura kaupapa Māori and area school principals, who had much less to say about Reading Recovery).

At secondary level, the issues are slightly different. Although most secondary schools offer the same broad range of subjects, the way these subjects are organised can be quite different in different schools. As the secondary principals pointed out, the "package" of achievement standards and unit standards one school uses to frame the teaching of a subject can be quite different to that used in another. The result of this is that, when a student moves schools halfway through the year, the new school might not be able to offer the student a full programme. Alternatively, the student might be forced to repeat work they have already done, or miss work that has already been done at the new school.

Do schools find the information received from other schools useful?

Overall it seems they don't. According to the principals in the study schools, when information on a transferring student is requested from their previous school, there is usually a substantial delay before it is received (about 3 weeks seemed to be the average). When these records arrive, they are usually inaccurate, incomplete, not up-to-date, and not especially useful. As one put it, the quality of these records is, at best, "patchy". One commented that the records are especially slow in coming when the move takes place around March or July (when the school's annual roll returns

are due with the Ministry of Education)⁸⁷. When children leave, it is apparently common for schools to never receive a request for their records: as one principal put it “We can’t just send it to where we *think* they have gone.”

All of the principals said they keep everything sent by other schools, but because the information schools collect is not standardised, they commonly find that what is sent is not compatible with their records system. Most said that, in general, they didn’t take a great deal of notice of the information sent by other schools. They have more trust in their own systems and prefer to do their own assessments on new children. Most said that they looked for any information on the child’s health, for attendance information, and for the number of schools a child has been to. They also said they looked for information on any special needs, and for information on support programmes the child has been involved in (Reading Recovery, for example).

Several of these principals said that secondary schools are not as good as primary schools at forwarding students’ records⁸⁸.

Do schools have successful strategies for dealing with children who move frequently?

Some schools have programmes that aim to address this issue. These usually take the form of induction programmes that attempt to establish and build a sense of connection between the child (and their family) and their new school. There is usually an attempt to be explicit about the school’s rules and expectations (its “kawa”, as one principal put it). Some schools use “buddy” or mentoring systems. Some have developed “clusters” of schools in a given area that aim to co-ordinate and standardise their learning programmes and assessment systems. (The ICAN group of schools in the Waitangirua area is one example of this.) One school tries to build relationships with new families in its area through its links with a community drop-in centre (run by the school chaplain on a volunteer basis). Many of the Waitangirua principals mentioned the success of the taxi scheme run by another school in their area in keeping children at that school. One school had tried a subsidised bus service, but even the subsidised bus fare of 65c a day had proved to be prohibitive. One kura kaupapa Māori (in a rural area) said that their strategy for dealing with high mobility children was to make it known in the community that they didn’t take any new children after March or July⁸⁹. This, they said, was accepted by the community, and it worked. One primary school has instituted a school uniform specifically to deter “itinerant” families from enrolling their children there for short periods.

⁸⁷ Schools are funded on a per capita basis, so these roll returns are very important documents.

⁸⁸ This is supported by what we found (see the methodology section above)—that, on average, the secondary schools held progress cards for only about half of their students, while (in most cases) most primary schools held cards for most of their students.

⁸⁹ See footnote 87 above. Schools are required to send their roll returns to the Ministry of Education in March and July of each year. Students who are not counted in these roll returns do not generate funds for the school.

When asked how they knew whether or not their strategies worked, most of the principals said that they didn't really know. Most didn't collect any specific information to help them evaluate the success of their strategies. All schools collect achievement data for their students but none analyse it for the effects of mobility⁹⁰. None reported involvement by their staff in professional development relating to this issue. In the responses to this question there was a lot of discussion of truancy, and the issues involved in dealing with "difficult" or "high needs" (but not necessarily frequently moving) families.

Are schools satisfied with the way they deal with frequent movers?

Most weren't, but as one principal put it, "the sheer bulk of the very high needs students we have", "the sheer numbers of kids coming and going", and "the number of different issues we are dealing with—all at the same time" means that, despite their best efforts, they are often simply "defeated". It is obviously difficult to separate frequent movement from all the other issues in their students' lives, and to develop programmes designed to deal specifically with this issue. As in the previous question, the principals talked about student mobility in ways that enmeshed it with a whole host of other issues—truancy, poverty, unemployment and family, health, and housing issues, for example. It was common for the term "transience" to be used as a kind of proxy for a whole complex of issues that are likely to affect student engagement in learning.

Recommendations schools have for government and community agencies to help them deal more effectively with highly mobile children

The principals we interviewed had a great many ideas for improving the way schools work with highly mobile children. Some said that all new principals needed to attend an induction course that taught them how to fill in the E19/22A ("Progress") cards accurately. There does seem to be a need for at least some standardisation in the way these cards are filled in—if they are to be used as the official record of a child's progress at school. As noted earlier, we found a large number of obvious inaccuracies on the cards we examined.

Several principals argued for the replacement of the paper "Progress" card system with a national electronic database for tracking students. They said that the information held on children: the number of schools attended; health, attendance, and achievement information; and any special needs, should be standardised, and principals should be required to keep it up-to-date. Then as one primary principal put it:

...the *day* a kid like [...] enrolls at the next school, the secretary there can just plug in to some sort of Ministry website, or whatever, and say, oh he's doing this, this, and this, and so the teacher straightaway knows exactly about this child, and what kind of support they have

⁹⁰ A Christchurch high school has, at the time of writing this report, just received a grant to support some research on student mobility at that school.

been having, or what levels they are operating at, and *straightaway* the office could say to the Ministry, this child is now at *our* school, so we need this and this to follow him, please.

All thought that, if this information is to be of any use at all, it has to be delivered *speedily* to the next school. Schools should be able to get it without having to contact—and chase—other schools, and schools should be required to keep the information up-to-date.

The principals were also very clear that roll-based funding does *not* support their efforts to meet the needs of these students. Roll-based models assume that schools work with reasonably stable cohorts of students who progress in an orderly way through the school. The principals say that they make decisions on an annual basis as to how best to meet the needs of each cohort using the funds they have available. They say that if 30 percent or more⁹¹ of the children in that cohort is “turning over” each year, this is very difficult to do.

Some of the principals said that, in the case of highly mobile students with special needs, the funding model should be different. For these children they said it would be more appropriate if the funding was “individualised” so that it went with them as they moved. This, they said, was especially important in the case of early intervention programmes (like Reading Recovery) and other extra support. This way, their entry into a new school would not disadvantage the children who are already there (as, they say, it does now), and the school would have some chance of being able to address the new child’s needs appropriately. Many argued that spending money on these children now is a much better use of resources than spending a great deal more money on them later when, they said, they end up in prison.

Some principals argued for better communication systems between schools in a given area, especially in Opotiki and Waitangirua where there is a lot of movement between schools in the area. Many made a very strong case for better communication between different sectors of government—especially between the various welfare agencies (CYFS, WINZ, and SWIS)⁹² and schools. Several (in all four case study areas) were highly critical of CYFS in particular. They said that the fostering arrangements made by CYFS for children in their care take no account of the children’s educational needs and there is no co-ordination between the activities of CYFS and those of the school. The principals said that when they ask CYFS for help with children in their care, their experience is that CYFS is “totally overloaded” and “absolutely useless” in helping them, even when the issues are “really serious”. The principals in the rural areas said that they deal with many families who are being chased by CYFS, but that CYFS is “completely ineffective” at finding them.

⁹¹ A figure that was commonly cited.

⁹² CYFS is the New Zealand Children Youth and their Families Service; WINZ is the name for the former Work and Income New Zealand (the organisation responsible for administering the unemployment and other welfare benefits), now part of the Ministry of Social Development; and SWIS is the Social Workers in Schools scheme.

One principal had a lot to say about a WINZ policy that, she said, required families to move to other parts of New Zealand for work in a way that took no account of the effect this would have on the family as a whole. Families are, she said, being sent to areas of New Zealand they are unlikely to fit in to, or settle in, for temporary, low-paid “dead-end” work.

Another principal said that the decile rating system for schools is completely inappropriate for schools in rural areas, where the population of a given census mesh block is far less homogeneous than would be the case in an urban area. This “sledgehammer” approach, he says, strongly disadvantages schools in areas like his, where there are pockets of affluence side by side with pockets of extreme need, when they try to apply for funding for innovative programmes that are designed to meet genuine need in the area. According to him, it also disadvantages area schools in general. These schools commonly have primary and secondary departments that are very different demographically (because many of the children are sent to boarding school for their secondary years): yet the school is given a “global” decile rating.

The principals’ views: key themes

With one exception, the principals we interviewed very definitely saw student mobility as a problem. In their view, frequent movement disadvantages children and impacts negatively on schools. The principals we talked to said that children need a strong, long-term attachment to a school “family” if they are to benefit from going to school. Where children have learning difficulties or other special needs it is, according to the primary school principals, very unlikely that these will be adequately addressed if they move schools. Several said that many parents simply do not understand how important it is for their child to stay in one school.

Children who move a lot between schools (particularly within the school year) are seen to disrupt the school’s rhythms. The principals all talked about the administrative overheads of large numbers of enrolments and withdrawals at “non-standard” times of the year. Many talked about the disruption to class routines caused by non-standard movement, and the primary school principals emphasised the funding difficulties that are created when children with “extra” special needs arrive in the middle of the year. While none of the principals said this explicitly, it is clear that it is difficult for schools to deal with high levels of mobility because they are organised and funded in ways that assume a stable cohort of students. In the interviews it was common for the term “transience” to be conflated with a range of other issues that might negatively impact on children’s learning. The effectiveness of the strategies schools use to ameliorate the effects of high mobility is not at all clear—partly because very little evaluative information is collected, and partly because high mobility tends to be mixed up with other issues. Schools in general do not seem very confident that they are dealing effectively with this issue.

Many suggestions were made for improving the way the education system deals with highly mobile children. Among these were: better information exchange between schools, and between schools and other agencies (especially CYFS); greater standardisation of student information; and more flexible funding arrangements for schools (especially for “special needs” children).

4. Discussion

Residential mobility rates in New Zealand are high by world standards. In some areas of New Zealand and in some sectors of the population, these rates are very high indeed. This has recently become an area of concern for schools. However, to date we have very little empirical data that can tell us how high student mobility affects schools and how, if at all, frequent movement affects the education of individual students.

In the first phase of this study we collected data on student movement and achievement in 20 schools in four case study areas. In analysing this information we looked at the overall pattern of movement in the schools, and the frequency of movement by individual students. We looked at the effect of this movement on schools, on student achievement, and student attendance. We plan to collect more data in 2006 (when the 2003 Year 5s are in Year 8, and the Year 8s are in Year 11) to investigate changes over time. Our overall aim is to investigate the extent to which high rates of residential mobility impact on schools (particularly their ability to meet their community's needs) and on individual learners. We also want to look at school mobility's relationship to local labour and housing markets, and its relationship to patterns of family attachment to the local community.

Schools, movement, and communities

We found school movement rates of between 9 and 45 percent in the study schools. The highest mean rate was 40 percent in one of the four areas and the lowest was 31 percent. All of the schools in three of the four areas are low-decile and these rates are similar to those found in other low-decile New Zealand schools. Movement rates in the Amuri schools (which have decile ratings of 9, 7, and 5) are, however, higher than those found in other medium-high-decile New Zealand schools. Rates were higher overall in primary schools than in secondary schools, and primary school principals were in general more concerned about this issue than secondary school principals.

Thus the study schools had “turnover” rates (over and above their “normal” or expected turnover)⁹³ of a third or more. (For a few schools this rate was nearly a half.) These high rates of student movement affect the schools' ability to meet their students' immediate needs. They also

⁹³ That is, these figures do *not* include the schools' new entrants, or students who are graduating to the next level of education.

affect the schools' ability to contribute, in a longer-term sense, to the social capital of their local community.

Schools are resourced according to the number of students on their roll in March and July of each year. They also receive "top-up" funding through a variety of different schemes designed to target specific needs⁹⁴. However, the level of a school's need (and thus its overall funding) is determined via information provided by the school in advance (often a year in advance). If the school has a high turnover rate then the number of students in it (and the characteristics of those students) is likely to change significantly in the time between when the school's needs are identified and when the funds to meet those needs are received. In this situation it is highly likely that the funds, when they arrive, will no longer "fit with" the school's actual needs at that time. The principals we interviewed made it clear that schools make the best of what is, for them, a very unsatisfactory situation through the use of various *ad hoc* strategies. It would appear that different funding models are needed if schools with high rates of student movement are, as the Education Review Office puts it, to "deliver a balanced curriculum and overcome barriers to achievement" for *all* their students, including the highly mobile ones.

Some of the principals we interviewed suggested that funding should follow students on an individual basis. They said that a student identified as having special needs should have the extra funding they attract "attached" to them, and it should follow them if they move to another school. Others disagreed, saying that such a system would significantly increase their administrative load without producing a better service for special needs children. For these principals, more flexible funding arrangements, perhaps including a contingency fund that schools could call on in situations of major and unexpected roll fluctuation, would improve their situation.

In her review of *Special Education 2000* and a subsequent paper, Cathy Wylie makes a strong case against individually targeted funding packages (Wylie, 2000, 2002). In the various overseas jurisdictions where such systems are used, schools and parents are required to identify and legally *prove* a child's need (a process that can take a very long time and be very expensive) *before* programmes can be put in place to meet the need. She argues that support is much more effectively provided via systemic approaches that allocate funds to districts rather than individuals. This wider targeting allows districts to plan and sustain services to students with special needs without having to waste resources establishing an *a priori* legal entitlement. It also allows them to build the infrastructure needed to support whole-school and community-based systems for meeting student and teacher needs as and when they occur.

We think that many of the issues identified by the principals we interviewed arise from a "lack of fit" between the funding models applied to schools and what actually happens in some schools on a day-to-day basis. These issues are obviously complex and are not the focus of this study.

⁹⁴ For example TFEA, Reading Recovery, Special Needs, ORRS, RTLBs, RT(Literacy) and so on.

However, given the findings of another recent study on school resourcing issues⁹⁵, we should not be surprised at the level of concern expressed by school leaders about an issue that clearly disrupts their ability to fund their school's core activities.

Schools are supposed to play an important role in building “social capital”—both nationally and in local communities⁹⁶. They do this by building certain kinds of knowledge, skills, and dispositions: however, this is not all they do. They also play an important role in building relationships and a sense of society. They build on the connections children have with their family, extending these to other relationships—with their classmates and their teachers, with others in their school and its community, and then later with the wider society. This social function of schools is important (and is a key justification for the state funding of education).

The principals we interviewed told us that it is difficult for schools to fulfil this function in areas with high levels of mobility. While they talked explicitly about the disruption to the development of children's basic skills (in literacy and so on), implicitly there was a deep concern for the long-term effects when schools are not able to lay down the other, more intangible, foundations of social capital.

Schools are thus community resources. They serve their community, they are often a focal point for community activities, and they are funded on a community-based model. The children of a community belong to that community's school. They become connected to the school and the school becomes connected—and committed—to them. Schools—in particular primary schools—are widely thought of as being like families. Each “year group” of children has certain needs. These needs are identified (by people who know and care about them, and who have a long-term commitment to them), and will systematically be met as they move through the school. Teachers feel they have done a good job when they can see the results of their efforts in a group of children as they develop over time.

The family metaphor is, it seems to us, important here. An interesting trend in the interviews was the way many of the principals distinguished between the school's “natural” cohort (who are part of their “family”) and its “imports” or “transients” (who are not). Schools clearly see their “core business” as being to do the best they possibly can for their natural cohort. This is widely seen as best done in a family-like context where children and teachers (and their individual strengths and weaknesses) are well-known to each other, and can be worked on. However, the “family” model starts to fail when significant numbers of children are moving in and out of the school⁹⁷. It is

⁹⁵ This study (Wylie & King, 2004), on the financial management practices of 18 effective schools, found that these schools needed to top up their operational grant (through local fundraising and international students) in order to provide the quality of education required by their communities.

⁹⁶ “Social capital” is a term that is used frequently in the policy literature to mean a “resource” that develops from relationships between individuals. All the relationships that individuals, groups, and organisations are part of, taken together, build our collective ability to act together for mutual benefit or a common purpose (Spellerberg, 2001).

⁹⁷ Schools are also negatively affected when there are high rates of *teacher* mobility. Teacher mobility, like student mobility, is much higher in low-decile schools (see Ritchie, 2004).

difficult for the school to meet the needs of the children who are moving, and it becomes increasingly difficult for it to meet the needs of its natural cohort. Given this, it is not surprising that, for the principals we interviewed, transience was clearly *not* a neutral term. For them, “transient” children are a “nuisance”. They are interlopers who disturb a school’s equilibrium, they siphon scarce resources away from other children in the school, and they disrupt a school’s ability to fairly monitor its progress. Thus, it seems to us, if schools are to be able to meet the needs of all the children in them, they need to think of themselves as a slightly different kind of family—a looser, more extended kind of family perhaps—and they need different, more flexible, funding arrangements that can support this.

One of the goals of this study is to look at whether school movement patterns *reflect* or *cause* other community trends. Later in the project we will have access to data collected by researchers in other modules (investigating labour market, housing, and health issues in the four areas), and it will be possible to look for relationships here. However, in this first phase the anecdotal information collected via the principal interviews would suggest that school movement patterns reflect—rather than cause—other patterns. The principals in three of the four areas were clear that people in their area were not moving in search of work, but to resolve—or escape—family or housing issues. In Amuri, it seems that some people are moving for work reasons (the share-milkers and shearers in particular), while others (the beneficiaries) are following the pattern found in the other three communities.

From the information provided by the principals, it would seem that *family* attachment takes precedence over school or community attachment for many of the families in these four communities. From the principals’ point of view, the strategies used by families in their area to deal with family and housing issues involve a significant cost to their children’s *school* attachment.

Student movement patterns

In this study we found that between 15 and 23 percent of the students at the schools we visited were frequent movers. A small number of students are moving very frequently and, in three of the areas, a significant proportion of all movement takes place within the local area. When we compared the educational attainment and attendance rates of the frequently moving students with those of the other students in the study schools, we found very few differences. There were differences in mathematics achievement and secondary school subject choices: however, overall these differences were small.

We were, however, working with small numbers of students. There were gaps in the data available to us, and, in many cases, the data obtained from different schools were not comparable. Given these limitations, our findings are, however, very similar to those of other overseas studies. While high mobility rates clearly have implications for school management, planning, and resourcing, the direct effects of mobility on student achievement appear to be small. Other studies

have found some effects, especially in the early years, but when the relative impact of other factors (low income in particular) is taken into account the effect is much smaller (see, for example, Strand, 2002; Wright, 1999). Where it is “upward”⁹⁸ and children are well-supported in other ways, it seems that mobility is not, in and of itself, a disadvantaging factor.

These findings do *not* necessarily mean that frequent moving has *no* educational effect. In the first phase of this project our main goal was to collect baseline data. In the next phase we plan to collect data that will allow us to investigate whether or not high mobility reduces a community’s ability to build social capital. While we will continue to collect the achievement data held by schools, we plan to also develop measures of students’ engagement with learning, their relations with peers, and their sense of connection to their school and its community.

It was clear from the principal interviews that many of the children identified as frequent movers have multiple needs. It is highly likely that their frequent movement is a surface-level indication of deeper problems rather than a problem in itself. It is thus important that support strategies address the source—not the symptoms—of these problems. In North America, there are a number of initiatives that are designed to discourage people from moving (see, for example, the Staying Put programme described in Kerbow et al., 2003), and the Langley Park programme described in Hanna, 2003). However, studies that have focused on the mobility experiences of specific marginalised populations have found that such programmes can be actively *disempowering* (see for example, Skelton, 2002).

The first phase of this project has been mainly a scoping exercise. We have collected some baseline information and identified some trends, but it is clear that more work is needed. In the next phase (2005–2006) we plan to collect data that will allow us to tease out, in a little more detail, some of the complexities that clearly underlie this issue.

⁹⁸ For example, where the family is moving because someone in the family has a promotion or a better job. Studies of military families have not found high mobility to have a disadvantaging effect.

5. Postscript: The Ministry of Education's Student Management System Project

Several of the principals we interviewed argued strongly for the replacement of the “progress card” system with a national electronic database that can track moving students and store their records in a way that can be accessed by their new school. The interviews for this study took place in late 2003. Since then (April 2004) Cabinet has approved—and allocated funds for—the development of a national Student Management System that should eventually address these concerns. The development of this project, known as SMS, is now well underway⁹⁹.

Most schools (76 percent in March 2004) now have some form of electronic student management system in place (often via packages like Integris). However, some have in-house, one-off systems while others have large-scale multi-school systems. These different systems are not always “inter-operable” (able to communicate with each other). The SMS project’s goal is to support more schools to develop such systems: however, it also aims to support data exchange (and inter-operability) within schools, between different schools, and between schools and other agencies, and to improve the quality of the data being exchanged (i.e. greater standardisation)¹⁰⁰. The data that are to be exchanged are student records (between schools when a student moves, and between schools and NZQA or the Ministry in the case of assessment information), and aggregated data such as roll returns and other data collection exercises (between schools and the Ministry).

A related development is the Unique Student ID project that, it is envisaged, will assist in improving data accuracy. Once these projects are fully operational the administration costs associated with student movement between schools should be reduced, and schools should have better information on their new students. It should also be able to identify non-enrolments—students who leave a school but fail to enrol at another, thereby dropping out of the system.

⁹⁹ The *Student Management Systems Strategy 2004–2008* document sets out SMS’s aims and its workplan. This document can be downloaded from the Ministry of Education’s website (its URL is <http://www.minedu.govt.nz/index.cfm?layout=document&documentid=9800&data=1>). On 30 September 2004, the Minister of Education announced a \$1.2 million pilot project to trial an accredited student management system in schools. (If a system has been “accredited”, it means that the software company and its product have met certain minimum standards for effective operation and proper support for schools.) (The press release is available from the Minister’s website: www.beehive.govt.nz)

¹⁰⁰ The SMS’s mission statement is: “The Right Data for the Right People at the Right Time” (see the cover of the above document).

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Appendix 1: Letter to school principals

date

[name of principal]

[name of school]

[address of school]

Dear [name of principal]

This letter is to formally invite you and your school to participate in the research project on school movement that I discussed with you when we met at [name of school] on [date].

PROJECT INFORMATION

The project's full title is: **Building Attachment in Families and Communities Affected by Transience and Residential Movement**. The project is funded by the Foundation for Research Science and Technology (FoRST) through a grant to the Centre for Research, Evaluation and Social Assessment (CRESA). The project leader is Kay Saville-Smith of CRESA. The New Zealand Council for Educational Research (NZCER) is sub-contracted to CRESA to carry out the education part of the project. The project as a whole also involves research in a number of other areas that impact on movement – including health, housing, labour market and employment issues.

The project aims to investigate the causes of high levels of mobility and the impact it has on individuals, on families, and on community infrastructures. We will be looking in particular at the effect it has on schools. The research will be carried out in four 'case study' communities: Waitangirua/Cannons Creek in Wellington; Kawerau and Opotoki in the Bay of Plenty; and Amuri (a rural area in North Canterbury). It is hoped that the results of this work will be used by government – particularly the Ministries of Social Development, Education, Health, Labour and Youth Affairs, and Te Puni Kokiri – and community organisations to develop strategies that are designed to reduce the negative effects of mobility on individuals, families and communities.

To help us with the education part of this project, we would like your permission to collect three types of information from your school.

- (1) We would like to look at your school's **attendance registers** so that we can calculate the percent movement in and out of your school as a whole for the year 2002.

- (2) We would like to collect information on **individual student mobility rates** and **individual student achievement data**. In the project as a whole we plan to look at students in Years 5, 8 and 11 in 2003. In the case of your school, this will involve us in looking at the information your school holds on its **Year 5/8/11** [delete the one that is not applicable] students. We plan to repeat this work in 3 years time (in 2006), when the current Years 5 and 8 will be in Years 8 and 11.
- (3) We would like to interview you about your experiences with respect to this issue, focussing in particular on how – if at all - you think mobility affects your school's ability to meet the needs of its student population as a whole.

This work will be carried out by a team of researchers from NZCER: Jane Gilbert, Linda Sinclair and Pauline Waiti (see below for their contact details) at a time that is convenient to you.

Apart from brief communications with us, participation in this project should not involve you or your school in any additional work.

Your school's participation in this project is of course entirely voluntary and you are free to withdraw from participation at any time (up until the time we are putting our final report together). It is highly unlikely that participation in this research project will have any detrimental effects on your school or on any of the children in it – the project's aim is obviously to produce data that will be used to benefit your school and its community in the future.

Our investigation of individual student mobility rates and individual student achievement data (no. 2 above) will obviously involve us looking at records your school - and other schools - have collected that will contain personal information about students in your school. We undertake to keep any such information entirely confidential to the members of our research team, and to destroy any records of students' names or other information that could allow any individual to be identified once the initial data collection is complete. All information will be aggregated in such a way that it will not be possible to identify any particular student - or any particular school – in the reports we will produce about this research. All raw data will be stored in secure facilities at our NZCER offices and will be destroyed when the project is completed.

We will discuss the results of the research with you as they emerge, and provide you with a draft copy of the results for you to comment on before we produce our final report. We will also send you a copy of the final report on this research when it is complete (in 5 years time).

If you agree to allow us to do this work in your school, could you please sign the attached consent form and return it to Jane Gilbert at NZCER in the enclosed reply-paid envelope.

On behalf of the research team I would like to thank you very much for the time you have taken to talk with us about this project and to read this information. We hope you will agree to allow your school to participate.

Yours sincerely

Jane Gilbert (Education module co-ordinator)

Contact details for Jane Gilbert (NZCER):

Postal:	E-mail:	Tel:	Fax:
NZCER	Jane.Gilbert@nzcer.org.nz	(04) 802 1459	(04) 384 7933

P O Box 3237

Wellington

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SCHOOL AGREEMENT TO PARTICIPATE IN THE BUILDING ATTACHMENT IN FAMILIES AND COMMUNITIES AFFECTED BY TRANSIENCE AND RESIDENTIAL MOVEMENT PROJECT

I give my permission for NZCER to carry out the research described in the attached information letter. I have been given an explanation of the nature and purpose of this project and an explanation of the procedures that will be used, and I have had sufficient opportunity to ask any questions I might have about the project.

NAME _____

SCHOOL _____

SIGNATURE _____

DATE _____

Appendix 2: Information sheet

Information sheet

Information on the *Building Attachment* project for schools

The full name of the project is: BUILDING ATTACHMENT IN FAMILIES AND COMMUNITIES AFFECTED BY TRANSIENCE AND RESIDENTIAL MOVEMENT.

The project is funded by the Foundation for Research Science and Technology through a grant to the Centre for Research, Evaluation and Social Assessment (CRESA). The project leader is Kay Saville-Smith of CRESA (see below for contact details).

The research will take place in four 'case study' communities. These are:

- Waitangirua/Cannons Creek in Wellington;
- Kawerau and Opotoki in the Bay of Plenty; and
- Amuri (North Canterbury).

The project aims to investigate the causes of high levels of mobility and the impacts it has on individuals, on families, and on communities.

The project as a whole has several parts. Some parts look at the impact of high levels of mobility on individuals (especially children) and families, while others look at its impact on community infrastructure. For example, one module looks at housing issues, another looks at health issues, another looks at labour market and employment issues, and another looks at education issues.

Its aim is to try to find answers to questions like these:

- do high levels of mobility de-stabilise communities?
- do they threaten a community's ability to provide basic services for its members?
- do they reduce people's sense of attachment to the community they live in?

The module you have been asked to participate in is the EDUCATION module. CRESA has sub-contracted this part of the research to the New Zealand Council for Educational Research (NZCER). The NZCER researchers who will be involved in this part of the research are: Jane Gilbert, Linda Sinclair and Pauline Waiti (see below for contact details).

In this module we will be looking at the movement of students in and out of schools. We will try to find answers to questions like these:

- is an individual's educational achievement likely to be affected if they change schools often?
- how do high rates of student mobility affect the schools they attend?
- do high rates of student mobility affect a community's ability to provide the kinds of education its members need?
- are there any differences in mobility rates between schools in a given community?
- are differences in mobility rates between schools the result of community patterns (changes in the local labour market, or availability of suitable housing); the result of family issues; or are they the result of individual school policies and/or culture?
- what strategies have schools developed for coping with high levels of mobility and/or helping students adapt quickly?
- do school mobility rates change over time? If so are these changes related to community patterns or are they the result of changes in school policies or culture?
- what do school mobility rates reveal about the patterns of family attachment to the school's local community?

We plan to collect three kinds of data to help us answer these questions:

- data on mobility rates for the school as a whole (percent movement in and out of the school as a whole not including new entrants or those going on to the next level of schooling)
- data on mobility rates and achievement data for one complete year group in the school (or two year groups in some schools - our plan is to choose the 2003 Years 5, 8 and 11 cohorts as our sample). We plan to re-visit two of these groups in 2006 (i.e. when the first two groups of students are in Years 8 and 11).
- data obtained through interviews with school principals.

We would also like to interview a 'case study' group of about 6 students chosen from each of the year groups, and to possibly also interview teachers and other community members who know these students and their families. However, at this early stage of the research we are not yet sure whether or not this will be practical. We would welcome your views on this.

We hope the above information is useful to you. If there is anything else you would like to know about the project, please contact Jane Gilbert. Thank you for the time you have spent talking to us about this project so far.

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Kay Saville-Smith (Programme Leader and Leader of Objectives 1 & 3 of the project)

Bev James (Leader of Objectives 2 & 4 of the project).

Appendix 3: Principal interview schedule

Principal Interview schedule

Questions

General

1. Is high student mobility an issue – in this area? – in your school?
2. [If yes] Why do you think it is an issue?
3. What, in your experience, are the main *causes* of family movement in this area?
4. When would *you* classify a student as highly mobile?
(e.g. more than two schools, more than five...?)

Issues for students:

5. How – if at all – do you (or other teachers at your school) think students who move a lot are affected by it?
6. Are these things caused by their mobility alone, or could there be other causes?

Issues for Schools

7. How – if at all – do you think that schools are affected when they have many highly mobile students?
8. When students enrol at your school from other schools:
 - (i) Is it, in your experience, usual for their records to be forwarded to you reasonably quickly?
 - (ii) Is it, in your experience, usual for the information in their records to be accurate?
 - (iii) Is the kind of information contained in these records helpful to you in deciding where to place the student?
9. Has your school developed any particular official strategies or processes for dealing with high levels of student mobility?
10. If it does, are particular teachers (or other staff) involved with this process, or do all teachers do it?

11. Does your school have any 'unofficial' strategies for dealing with high levels of student mobility?
12. How **effective** do you think these strategies (the official ones) are? (if you have any)
[OR how **satisfied** are you with these strategies?
OR do you think these strategies **work**?]
13. How do you know this?
[i.e. do you collect any information - or anything at all - to help you evaluate whether or not whatever you do 'works'?]
14. Has your staff had any professional development or training that is connected with this issue in, say, the last 5 years?
15. Do you have any ideas or suggestions for how the schools in your area could be helped to deal with this issue more effectively - if you think that is necessary....
16. Is there anything else you'd like to say on this issue that we haven't asked?
17. Do you have any questions?

If you do think of anything else later that you'd like to add to what you've said here please feel free to contact Jane Gilbert – contact details on the information letter.

We'd really like to hear anything extra you'd like to add.

Thank you very much for your time.